

I Test Suite Overview

Test Suite Structure					
Suite Name	: SMSv520				
Standards Ref	:				
PICS Ref	:				
PIXIT Ref	:				
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Detailed Comments :		·				

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Detailed Comments :					

II Declarations Part

	Simple Type Definitions				
Type Name	Type Definition	Type Encoding	Comments		
BCDN	OCTETSTRING [110]		BCD numbers, 3G TS 24.008, cl. 10.5.4.7, 3G TS 24.011, cl. 8.2.5		
ITC_Int	INTEGER (0,1,2,3)		Type of ITC 0 -> UDI 1 -> RDI 2 -> Other		
PktFlowId	OCTETSTRING[1]		This can take values as per 24.008, section 10.5.6.11		
RP_MsgRef	OCTETSTRING [1]		SMS RP message reference 3G TS 24.011, cl. 8.2.3		
RP_MsgTypeInd	B3		SMS RP message type indicator 3G TS 24.011, cl. 8.2.2		
TP_Cmd	OCTETSTRING [1157]		TP command data		
TP_FailCause	OCTETSTRING [1]		TP failure cause 3G TS 23.040, cl. 9.2.3.22		
TP_MsgRef	OCTETSTRING[1]		SMS TP message reference 3G TS 23.040, cl. 9.2.3.6		
TP_MsgTypeInd	B2		SMS TP message type indicator 3G TS 23.040, cl. 9.2.3.1		
TP_ParamInd	B8		TP parameter indicator 3G TS 23.040, cl. 9.2.3.27		
TP_UD_Len	OCTETSTRING [1]		TP user data field length 3G TS 23.040, cl. 9.2.3.16		
TP_UserData	OCTETSTRING [1140]		TP user data 3G TS 23.040, cl. 9.2.3.24		
TP_ValPeriodAbs	HEXSTRING [14]		TP validity period (absolute format) 3G TS 23.040, cl. 9.2.3.12.2		
TP_ValPeriodRel	OCTETSTRING [1]		TP validity period (relative format) 3G TS 23.040, cl. 9.2.3.12.1		
AccessPtN	OCTETSTRING[1100]		This is the DNS name. This can take values as per 24.008, 10.5.6.1		
AddressInfo	OCTETSTRING[016]		Address information, this is the DNS server name. this will be converted into		
AM_SeqNum	BITSTRING[12]		Sequence number for an AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.3		
AuthRsp	BITSTRING [32]		Authentication Response Prarameter 3G TS 24.008 cl. 10.5.3.2		
B1	BITSTRING [1]		Generic type for 1 bit value		
B128	BITSTRING [128]		Generic type for 128 bit value		
B16	BITSTRING [16]		Generic type for 16 bits value		
B18	BITSTRING [18]		Generic type for 18 bits value		

	Simple Type Definitions				
Type Name	Type Definition	Type Encoding	Comments		
B2	BITSTRING [2]		Generic type for 2 bits value		
B20	BITSTRING [20]		Generic type for 20 bits value		
B3	BITSTRING [3]		Generic type for 3 bits value		
B4	BITSTRING [4]		Generic type for 4 bits value		
B48	BITSTRING [48]		Generic type for 48 bit value		
B5	BITSTRING [5]		Generic type for 5 bits value		
B6	BITSTRING [6]		Generic type for 6 bits value		
B7	BITSTRING [7]		Generic type for 7 bits value		
B8	BITSTRING [8]		Generic type for 8 bits value		
B80	BITSTRING [80]		Generic type for 80 bit value		
Bitmap	OCTETSTRING[116]		The bitmap within a Bitmap super–field. Ref 3G TS 25.322 clause 9.2.2.11.5		
BitmapLen	BITSTRING[4]		The length of a bitmap super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.5		
BitRate	OCTETSTRING[1]		Maximum bit rates supported		
CauseValue	OCTETSTRING[1]		SM Cause Value		
CMServType	B4		CM Service Type 3G TS 24.008 cl. 10.5.3.3		
CtrlPDU_Type	BITSTRING[3]		PDU type for AM STATUS PDUs. Ref 3G TS 25.322 clause 9.2.2.2		
CTSPerm	IEI8		CTSPerm 3G TS 24.008 cl. 10.5.3.10 value "10100010"B		
CW_NumberPart	BITSTRING[3]		The number part (X1X2X3) of a codeword in an RLIST SUFI. Ref 3G TS 25.322 clause 9.2.2.11.6		
DC_Field	BITSTRING[1]		Control / Data type indicator for AM RLC PDU. Ref 3G TS 25.322 clause 9.2.2.1		
FlowControl	INTEGER (0,1,2,3,4)		type of flow control. 0outband flow control 1inband flow control 2 no flow control		
FollowOnProceed	IEI8		Follow On Proceed 3G TS 24.008 cl. 10.5.3.7 value "10100001"B		
Fresh	BITSTRING[32]				
GSM_CipheringKey	BITSTRING [64]				
IEI4	B4		information element identifier, type 1		
IEI8	B8		information element identifier,type 2–4		
IntegrityKey	BITSTRING[128]				
KeySeq	B3		ciphering key sequence 3G TS 24008 cl. 10.5.1.2		
Length	OCTETSTRING [1]		IE length		

Simple Type Definitions				
Type Name	Type Definition	Type Encoding	Comments	
LIST_Len	BITSTRING[4]		The length of a LIST super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.4	
LogicChGERAN	IA5String		Logical channel (used for Interworking with GERAN)	
MaxBitRate	OCTETSTRING[1]		Gaurented Bit rate	
MaxSDU_Size	OCTETSTRING[1]		Maximum SDU size	
MM_RAND	BITSTRING [128]		Authentication parameter RAND 3G TS 24.008 cl. 10.5.3.1	
MRW_Len	BITSTRING[4]		The length of a MRW super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.8	
MsgType	B8		Message Type 3G TS 24.008 cl. 10.4. This type is also used by the BMC protocol.	
N_Length	BITSTRING[4]		The N_Length field within an MRW superfield. Ref 3G TS 25.322 clause 9.2.2.11.8	
O0_8	OCTETSTRING[08]		Generic type for 0 to 8 byte value	
O3	OCTETSTRING [3]		Generic type for 3 byte value	
Padding PDP_TypeNo	HEXSTRING[28192] OCTETSTRING[1]		Padding for RLC UM or AM PDU. Ref 3G TS 25.322 clause 9.2.2.10 Note that this type should ideally be an OCTETSTRING[14096], but since TTCN does not have a predefined operator for INT_TO_OCT, a HEXSTRING is used instead. PDP Type number, this will take values 00000001: PDP Type PPP 00000010: PDP Type IHOSS 01000001: IPv5 01010111: IPv6 This can take values as per 24.008, clause 10.5.6.4	
ProtocolDiscriminator	B4		Protocol Discriminator 3G TS 24.008 cl. 10.2	
ProtoIdContents	OCTETSTRING[1251]		3G TS 24.008 cl. 10.5.6.3	
RejCau	OCTETSTRING[1]		Reject Cause 3G TS 24.008 cl. 10.5.3.6	
RLIST_Len	BITSTRING[4]		The length of a RLIST super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11.6	

	Simple Type Definitions			
Type Name	Type Definition	Type Encoding	Comments	
SapId	OCTETSTRING [1]		SAP Identifier ??? defined in several places GERAN 04.06 and 3G TS	
Services	IA5String ("Telephony", "EmergencyCall", "31kHz", "V110", "V120", "PIAFS", "FTM", "X31", "BTM", "MmediaCall", "Alternate Speech/Facsimile")		24.008 as bitstring[2] ?	
SkipIndicator	B4		Skip Indicator 3G TS 24.008 cl. 10.3.1	
SS_CN_DomainIdentity	INTEGER (01)		CN domain identity type in TTCN tabular format	
SS_RB_Identity	INTEGER (-3132)		RB identity type in TTCN tabular format	
SUFI_ListLi	BITSTRING[4]		Number of consecutive PDUs not correctly received following PDU with sequence number SNi. Used in List super field. Ref 3G TS 25.322 clause 9.2.2.11.4	
SUFI_SN_MRWi	BITSTRING[12]		SN_MRWi field to be used within move receiving window super fields. Ref 3G TS 25.322 clause 9.2.2.11.7	
SUFI_Type	BITSTRING[4]		The type of a super field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.11	
TP_ServCentreTimeSt	HEXSTRING [14]		TP service centre time stamp	
			3G TS 23.040, cl. 9.2.3.11	
TZONES	INTEGER (-7979)		time zones in 15 minute steps	
UTRAN_GERAN	IA5String ("UTRAN and GERAN", "UTRAN only")			

Type Name : SMS_DELIVER_REPORT

Encoding Variation:

Comments : SMS DELIVER REPORT contained in the RP ERROR or RP ACK PDU, ue -> n.

3G TS 23.040, cl. 9.2.2.1a

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		1 spare bit
tP_UD_HeaderInd	B1		TP User Data Header Indication, O
spare4	B4		4 spare bits
tP_MsgTypeInd	TP_MsgTypeInd		TP message type indicator, M BITSTRING [2]
tP_FailCause	TP_FailCause		TP failure cause, M/O (1.) OCTETSTRING [1]
tP_ParamInd	TP_ParamInd		TP parameter indicator, M OCTETSTRING [1]
tP_ProtId	TP_ProtId		TP protocol identifier, O
tP_DataCodingScheme	TP_DataCodingScheme		TP data coding scheme, O
tP_UD_Len	TP_UD_Len		TP user data length, O OCTETSTRING [1]
tP_UserData	TP_UserData		TP user data, O OCTETSTRING [0158] rsp. OCTETSTRING [0159] (2.)

Detailed Comments: 1. The TP failure cause is MANDATORY for SMS-DELIVER-REPORT type for RP-ERROR, and it

is OPTIONAL for RP-ACK

2. The max. TP User Data length is 158 for RP–ERROR, and it is 159 for RP–ACK

Type Name : SMS_SUBMIT_REPORT

Encoding Variation:

Comments: SMS SUBMIT REPORT contained in the RP ERROR or RP ACK PDU, n - > ue.

3G TS 23.040, cl. 9.2.2.2a.

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		1 spare bit
tP_UD_HeaderInd	B1		TP User Data Header Indication, O
spare4	B4		4 spare bits
tP_MsgTypeInd	TP_MsgTypeInd		TP message type indicator, M BITSTRING [2]
tP_FailCause	TP_FailCause		TP failure cause, M/O (1). OCTETSTRING [1]
tP_ParamInd	TP_ParamInd		TP parameter indicator, M OCTETSTRING [1]
tP_ServCenterTimeSt	TP_ServCentreTimeSt		TP service centre time stamp, M HEXSTRING [14]
tP_ProtId	TP_Protld		TP protocol identifier, O
tP_DataCodingScheme	TP_DataCodingScheme		TP data coding scheme, O
tP_UD_Len	TP_UD_Len		TP user data length, O OCTETSTRING [1]
tP_UserData	TP_UserData		TP user data, O OCTETSTRING [0151] rsp. OCTETSTRING [0152] (2.)

Detailed Comments: 1. The TP failure cause is MANDATORY for SMS-SUBMIT-REPORT type for RP-ERROR, and it

is OPTIONAL for RP-ACK

2. The max. TP User Data length is 151 for RP-ERROR, and it is 152 for RP-ACK

Structured Type Definition

Type Name : RP_UserData

Encoding Variation:

Comments : RP user data element

3G TS 24.011, cl. 8.2.5.3, 3G TS 23.040, cl. 9.2.2

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01000001'B
iel	Length		
tP_COMMAND	SMS_COMMAND		ue ->n
tP_DELIVER_REPORT	SMS_DELIVER_REPORT		ue ->n
tP_SUBMIT	SMS_SUBMIT		ue->n
tP_DELIVER	SMS_DELIVER		n->ue
tP_SUBMIT_REPORT	SMS_SUBMIT_REPORT		n->ue
tP_STATUS_REPORT	SMS_STATUS_REPORT		n->ue

Detailed Comments: One of the six TP_PDU types is contained in the RP_UserData.

Maximum IEL value is 232.

Type Name : RP_UserData_lv

Encoding Variation:

Comments : RP user data element

3G TS 24.011, cl. 8.2.5.3, 3G TS 23.040, cl. 9.2.2

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
tP_COMMAND	SMS_COMMAND		ue->n
tP_DELIVER_REPORT	SMS_DELIVER_REPORT		ue ->n
tP_SUBMIT	SMS_SUBMIT		ue->n
tP_DELIVER	SMS_DELIVER		n->ue
tP_SUBMIT_REPORT	SMS_SUBMIT_REPORT		n->ue
tP_STATUS_REPORT	SMS_STATUS_REPORT		n->ue

Detailed Comments: One of the six TP_PDU types is contained in the RP_UserData.

Maximum IEL value is 232.

Structured Type Definition

Type Name : AlertPattern

Encoding Variation:

Comments : Alerting pattern (used for NIA)

3G TS 24.008 cl. 10.5.4.26

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011001'B
iel	Length		length
spare4	B4		4 spare bits
val	B4		alerting pattern value
Detailed Comments :	•		

Type Name : AuxiliaryState

Encoding Variation:

: Auxiliary state (CC information element) 3G TS 24.008 cl. 10.5.4.4 Comments

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00100100'B (24hex)
iel	Length		Length
extBit3	B1		Extension
spare3	B3		3 spare bits
holdAuxState	B2		hold auxilliary state
mptyAuxState	B2		Multi party auxilliary state

Detailed Comments:

Type Name : BuBcap

Encoding Variation:

: Backup Bearer capability 3G TS 24.008 cl. 10.5.4.4a Comments

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01000001'B (41 hex)
iel	Length		length
extBit3	B1		extension bit
radioChRequi	B2		radio channel requirements ue->n, GSM, octet 3
codingStd	B1		coding standard, '0'B, octet 3
transferMode	B1		transfer mode octet 3
itc	B3		information transfer capability, octet 3
extBit4	B1		extension bit, octet 4
compress	B1		compression, ue->network, octet 4
structure	B2		structure, '0, 3', octet 4
duplexMode	B1		duplex mode, '1'B, octet 4
cfg	B1		configuration, '0'B, octet 4
nirr	B1		negotiation of intermediate rate requested, GSM, octet 4
establish	B1		establishment, '0'B, octet 4
extBit5	B1		extension bit, octet 5
accessId	B2		access identify, '00'B, octet 5
rateAdapt	B2		rate adaption, octet 5
sacp	B3		signalling access protocol, '1 – 6', octet 5
extBit5a	B1		extension bit, octet 5a
OherItc	B2		Other ITC, octet 5a
OtherRateAdapt	B2		Other Rate adaptation, octet5a
spare3	B3		spare bits – 3 bits
extBit6	B1		extension bit, octet 6
layer1Id	B2		Layter 1 identity, '01'B, octet 6
userInfoLayer1	B4		user information Layer 1 protocol, '0000'B, octet 6
syncAsync	B1		synchronous bit, octet 6
extBit6a	B1		extension bit, octet 6a
numStopBits	B1		number of stop bits, octet 6a
nego	B1		negotiation bit, '0'B, octet 6a
numDataBits	B1		number of data bits, octet 6a
userRate	B4		user rate, GSM, octet 6a
extBit6b	B1		extension bit, octet 6b

	Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments	
intermRate	B2		intermediate rate, octet 6b	
nicTx	B1		network independent clock on transmission, GSM, octet 6b	
nicRx	B1		network independent clock on reception, GSM, octet 6b	
parity	В3		parity information, octet 6b	
extBit6c	B1		extension bit, octet 6c	
connectElem	B2		connection element, octet 6c	
modemType	B5		modem type, octet 6c	
extBit6d	B1		extension bit, octet 6d	
OtherModemType	B2		Other Modem type, octet 6d	
FixedNtwUserRate	B5		Fixed Network user rate, octet 6d	
extBit6e	B1		extension bit, octet 6e	
acceptChCoding	B4		acceptable channel coding, octet 6e	
maxNumTrafficCh	B3		maximum number of traffic channel, octet 6e	
extBit6f	B1		extension bit, octet 6f	
ulMI	В3		User initiated modification indication, octet 6f	
wAIUR	B4		wanted air interface user rate, octet 6f	
extBit6g	B1		extension bit, octet 6g	
acceptChCodingExt	В3		acceptable channel coding extended, octet 6g	
asymInd	B2		asymmetry indication, octet 6g	
spare2	B2		spare 2 bits , octet 6g	
extBit7	B1		extension bit, octet 7	
layer2id	B2		L2 identity, octet 7	
userInfoLayer2	B5		user information L2 protocol, octet 7	

Type Name : CDPN_lv

Encoding Variation:

Comments: Called party BCD number (CC information element)

3G TS 24.008 cl. 10.5.4.7

Element Name	Type Definition	Field Encoding	Comments
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
digits	OCTETSTRING[040]		BCD numbers
Detailed Comments :	•	•	

Structured Type Definition

Type Name : CGPN

Encoding Variation:

Comments: Calling party BCD number (CC information element)

3G TS 24.008 cl. 10.5.4.9

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01011100'B
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
presentIndScreeningInd	PresentIndScreeningInd		Presentation indicator & screening indicator
digits	OCTETSTRING[010]		numbers

Structured Type Definition

Type Name : CP_UserData

Encoding Variation:

Comments : CP User Data element 3G TS 24.011 cl. 8.1.4.1

Element Name Type Definition Field Encoding Comments iel Length RP_ACK rP_ACK $n \leftarrow > ue, O$ rP_DATA RP_DATA n <-> ue, O rP_ERROR RP_ERROR $n \leftarrow > ue, O$ RP_SMMA rP_SMMA ue -> n, O

Detailed Comments: One of the 4 types of RP_PDU is contained in the CP_UserData.

Maximum IEL value is 248.

Type Name : CallState_v

Encoding Variation:

Comments : Call state (CC information element)

3G TS 24.008 cl. 10.5.4.6

Element Name	Type Definition	Field Encoding	Comments
codingStd	B2		
callStateVal	B6		call state value

Detailed Comments:

Structured Type Definition

Type Name : CauNoCLI

Encoding Variation:

Comments: Cause of no CLI information elemnt

3G TS 24.008 cl. 10.5.4.30

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00111010'B
iel	Length		length
causeNoCLI	B8		cause of no CLI
Detailed Comments .			

Detailed Comments:

Structure	d Type	Definition
Julia	a ivbe	Dellilli

Type Name: ConnectedSubAdrs

Encoding Variation:

Comments : Connected subaddress

3G TS 24.008 cl. 10.5.4.14

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01001101'B
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Type Name : NtwCCCapabilities

Encoding Variation:

Comments : Network Call Control Capabilities

3G TS 24.008 cl. 10.5.4.29

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '001011111'B
iel	Length		length
spare7	B7		spare
mCS	B1		MCS

Detailed Comments:

Structured Type Definition

Type Name : PktDataProtoAddr

Encoding Variation:

Comments : 24.007, clause 10.5.6.4

	Т	T.	1
Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101011'B (2Bhex))
length	Length		
spare	B4		
pDP_TypeOrg	B4		PDP type organisation
pDP_TypeNo	PDP_TypeNo		PDP type number
addrInfo	AddressInfo		Address Information
Detailed Comments :			

Detailed Comments:

Structured Type Definition

: PktFlowIdentifier Type Name

Encoding Variation:

Comments : 24.007, section 10.5.6.11

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110100'B (34hex)
length	Length		
pktFlowIdentifier	PktFlowId		spare + 7 bits
Detailed Comments :			

Type Name : PresentIndScreeningInd

Encoding Variation:

Comments : Presentation indicator & screening indicator

3G TS 24.008 cl. 10.5.4.9, 10.5.4.13

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
presentInd	B2		presentation indicator
spare3	B3		3 spare bits
screeningInd	B2		screening indicator
Datailad Cammanta	•	•	

Detailed Comments:

Structured Type Definition

Type Name : RP_ACK

Encoding Variation:

Comments : SMS RP ACKNOWLEDGEMENT ue <-> n

3G TS 24.011, cl. 7.3.3

Element Name	Type Definition	Field Encoding	Comments
spare5	B5		spare 5 bits ('00000'B) M
rP_MsgTypeInd	RP_MsgTypeInd		message type indicator M
			BITSTRING [3]
rP_MsgRef	RP_MsgRef		message reference M OCTETSTRING [1]
rP_UserData	RP_UserData		RP-User data element O OCTETSTRING [0234]
Detailed Comments :			

Structured Type Definition

Type Name : RP_Cause

Encoding Variation:

Comments : RP Cause

3G TS 24.011, cl. 8.2.5.4

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
extBit	B1		extension bit
rP_CauClass	B3		cause class
rP_CauVal	B4		cause value
rP_CauDiag	OCTETSTRING [1]		Diagnostics

Detailed Comments: IEI not used.

The diagnostics are optional.

Type Name : RP_DATA

Encoding Variation:

Comments : SMS RP-DATA ue <-> n

3G TS 24.011, cl. 7.3.1

Element Name	Type Definition	Field Encoding	Comments
spare5	B5		spare 5 bits M
rP_MsgTypeInd	RP_MsgTypeInd		message type indicator M
			BITSTRING [3]
rP_MsgRef	RP_MsgRef		message reference M OCTETSTRING [1]
rP_OrigAddr	CDPN_Iv		RP originator address M OCTETSTRING [112]
rP_DestAddr	CDPN_Iv		RP destination address M OCTETSTRING [112]
rP_UserData_lv	RP_UserData_lv		RP-User data element M OCTETSTRING [1233]

Detailed Comments: RP-Originator Address n->ue 1 octet, ue->n 1..12 octets

RP-Destination Address n->ue 1..12 octets, ue->n 1 octet

Structured Type Definition

Type Name : RP_ERROR

Encoding Variation:

Comments : SMS RP ERROR ue <-> n

3G TS 24.011, cl. 7.3.4

Element Name	Type Definition	Field Encoding	Comments
spare5	B5		spare 5 bits ('00000'B) M
rP_MsgTypeInd	RP_MsgTypeInd		message type indicator M
			BITSTRING [3]
rP_MsgRef	RP_MsgRef		message reference MOCTETSTRING [1]
rP_Cause	RP_Cause		RP cause 2–3 octets M
rP_UserData	RP_UserData		RP-User data element O OCTETSTRING [0234]

Detailed Comments :

Type Name : RP_SMMA

Encoding Variation:

Comments : SMS RP SMMA ue -> n

3G TS 24.011, cl. 7.3.2

Element Name	Type Definition	Field Encoding	Comments
spare5	B5		spare 5 bits ('00000'B) M
rP_MsgTypeInd	RP_MsgTypeInd		message type indicator M
			BITSTRING [3]
rP_MsgRef	RP_MsgRef		message reference M OCTETSTRING [1]
D . 11 . 10			OCTETSTRING [1]

Detailed Comments: SM memory available notification

Structured Type Definition

Type Name : RedirectingPN

Encoding Variation:

: Redirecting party BCD number 3G TS 24.008 cl. 10.5.4.21b Comments

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01110100'B (74hex)
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
presentIndScreeningInd	PresentIndScreeningInd		Presentation indicator & screening indicator
digits	OCTETSTRING[015]		numbers

Structured Type Definition

Type Name : RedirectingPS

Encoding Variation:

Comments : redirecting party subaddress

3G TS 24.008 cl. 10.5.4.21c

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01110101'B (75hex)
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Type Name : SMS_COMMAND

Encoding Variation:

: SMS COMMAND, ue - > n. 3G TS 23.040, cl. 9.2.2.4 Comments

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		1 spare bit
tP_UD_HeaderInd	B1		TP User Data Header Indication, O
tP_StatRptReq	B1		TP Status Report Request, O
spare3	B3		3 spare bits
tP_MsgTypeInd	TP_MsgTypeInd		message type indicator M
			BITSTRING [2]
tP_MsgRef	TP_MsgRef		TP message reference, M
tP_Protld	TP_ProtId		TP protocol identifier, M
tP_CmdType	OCTETSTRING [1]		TP command type, '0-3' OCTETSTRING [1]
tP_MsgNum	OCTETSTRING [1]		TP message number, M OCTETSTRING [1]
tP_DestAddr	TP_Addr		TP destination address, M
tP_CmdLen	TP_UD_Len		TP command data length, M OCTETSTRING [1]
tP_CmdData	TP_Cmd		TP command data, O OCTETSTRING [0156]
Detailed Comments :			

Type Name : SMS_DELIVER

Encoding Variation:

: SMS DELIVER, n - > ue. 3G TS 23.040, cl. 9.2.2.1 Comments

Element Name	Type Definition	Field Encoding	Comments
tP_ReplyPath	B1		TP reply path, M
tP_UD_HeaderInd	B1		TP User Data Header Indication, O
tP_StatusRptInd	B1		TP status report indication, O
spare2	B2		2 spare bits
tP_MoreMsg	B1		TP more message to send, M
tP_MsgTypeInd	TP_MsgTypeInd		TP message type indicator, M BITSTRING [2]
tP_OrigAddr	TP_Addr		TP originator address, M OCTETSTRING [212]
tP_ProtId	TP_ProtId		TP protocol identifier, M
tP_DataCodingScheme	TP_DataCodingScheme		TP data coding scheme, M
tP_ServCenterTimeSt	TP_ServCentreTimeSt		TP service centre time stamp, M HEXSTRING [14]
tP_UD_Len	TP_UD_Len		TP user data length, M OCTETSTRING [1]
tP_UserData	TP_UserData		TP user data, O OCTETSTRING [0140]
Detailed Comments :	•		

Type Name : SMS_STATUS_REPORT

Encoding Variation:

: SMS STATUS REPORT, n -> ue 3G TS 23.040, cl. 9.2.2.3 Comments

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		1 spare bit
tP_UD_HeaderInd	B1		TP User Data Header Indication, O
tP_StatusRptQual	B1		TP status report qualifier, M
spare2	B2		2 spare bits
tP_MoreMsg	B1		TP more message to send, M
tP_MsgTypeInd	TP_MsgTypeInd		TP message type indicator, M BITSTRING [2]
tP_MsgRef	TP_MsgRef		TP message reference, M
tP_RecAddr	TP_Addr		TP recipient address, M OCTETSTRING [212]
tP_ServCenterTimeSt	TP_ServCentreTimeSt		TP service centre time stamp, M HEXSTRING [14]
tP_DischTime	TP_ServCentreTimeSt		TP discharge time, M HEXSTRING [14]
tP_Status	TP_Status		TP status, M
tP_ParamInd	TP_ParamInd		TP parameter indicator, O OCTETSTRING [1]
tP_Protld	TP_Protld		TP protocol identifier, O
tP_DataCodingScheme	TP_DataCodingScheme		TP data coding scheme, O
tP_UD_Len	TP_UD_Len		TP user data length, O OCTETSTRING [1]
tP_UserData	TP_UserData		TP user data, O OCTETSTRING [0143]
Detailed Comments :			

Type Name : SMS_SUBMIT

Encoding Variation:

Comments : SMS SUBMIT, ue -> n.

3G TS 23.040, cl. 9.2.2.2

Element Name	Type Definition	Field Encoding	Comments
P_ReplyPath	B1		TP reply path indication, M
P_UD_HeaderInd	B1		TP User Data Header Indication, O
:P_StatusRptReq	B1		TP status report request, O
P_ValPeriodFrmt	B2		TP validity period format, M
P_RejDuplicates	B1		TP reject duplicates, M
tP_MsgTypeInd	TP_MsgTypeInd		TP message type indicator, M BITSTRING [2]
:P_MsgRef	TP_MsgRef		TP message reference, M
P_DestAddr	TP_Addr		TP destination address, M OCTETSTRING [212]
:P_Protld	TP_ProtId		TP protocol identifier, M
:P_DataCodingScheme	TP_DataCodingScheme		TP data coding scheme, M
P_ValPeriodRel	TP_ValPeriodRel		TP validity period, O INTEGER (0255)
P_ValPeriodAbs	TP_ValPeriodAbs		TP validity period, O HEXSTRING [14]
P_ValPeriodEnh	TP_ValPeriodEnh		TP validity period, O TP_ValPeriodEnh
:P_UD_Len	TP_UD_Len		TP user data length, M OCTETSTRING [1]
tP_UserData	TP_UserData		TP user data, O OCTETSTRING [0140]

Type Name : Signal **Encoding Variation:**

: Signal information element 3G TS 24.008 cl. 10.5.4.23 Comments

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI8		information element identifier '00110100'B	
val	B8		Value	
Detailed Comments :				

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Type Name: TP_Addr

Encoding Variation:

Comments : TP originating address

3G TS 23.040, cl. 9.1.2.5

Element Name	Type Definition	Field Encoding	Comments
iel	Length		Integer representation of useful semi–octets
typeOfNumPlan	TypeOfNumPlan		Type of number and numbering plan
digits	OCTETSTRING[010]		BCD numbers

Detailed Comments: Within the address value field either a semi-octet or an alphanumeric representation applies. The

latter applies only to addressing at the SM-TL. The maximum length of the full address field is 12

octets.

Structured Type Definition

Type Name : TP_Protld

Encoding Variation:

Comments : TP protocol identifier

3G TS 23.040, cl. 9.2.3.9

Element Name	Type Definition	Field Encoding	Comments
type	B2		Protld type
interworking	B1		Telematic interworking
value	B5		Protld value
Ĭ	B5		

Detailed Comments:

Structured Type Definition

Type Name : TP_Status

Encoding Variation:

Comments : TP status

3G TS 23.040, cl. 9.2.3.15

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		spare bit
value	B7		status value/usage

Detailed Comments:

Type Name : TP_ValPeriodEnh

Encoding Variation:

: TP validity period (enhanced format) 3G TS 23.040, cl. 9.2.3.12.3 Comments

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		Extension bit
singleShot	B1		1 only delivery attempt
spare3	B3		spare bits
periodFrmt	B3		validity period format
period	OCTETSTRING [6]		validity period
Detailed Comments :			

Detailed Comments :

Type Name : CellInfoCfg

Encoding Variation:

Comments: This structure contains relevant information describing a cell configuration as needed for basic test

Steps like ts_CreateCell and ts_IdleUpdated.

NOTE: this information is not related to any PDUs, IEs or ASPs

Element Name	Type Definition	Field Encoding	Comments
cellid	INTEGER		Cell Id
frequencyInfo	FrequencyInfo		Frequency information for current cell
attenuationLevel	INTEGER		Value of RF attenuator
priScrmCode	PrimaryScramblingCode		Primary Scrambling Code
powerpCPICH	DL_TxPower_PCPICH		Absolute Tx Power of (primary) CPICH
powerpSCH	DL_TxPower		Tx power level of primary SCH relative to CPICH
powersSCH	DL_TxPower		Tx power level of secondary SCH relative to CPICH
powerpCCPCH	DL_TxPower		Tx power level of primary CCPCH relative to CPICH
powersCCPCH	DL_TxPower		Tx power level of secondary CCPCH relative to CPICH
powersCCPCH1	DL_TxPower		Tx power level of secondary CCPCH1 relative to CPICH
timingsCCPCH1	INTEGER		Timing offset for secondary CCPCH1
powerAICH	AICH_PowerOffset		Tx power level of AICH relative to CPICH
powerPICH	PICH_PowerOffset		Tx power level of PICH relative to CPICH
cellTxPowerLevel	CellTxPowerLevel		Total cell power level (>= sum of all configured physical channels)
tCell	Tcell		Cell timing offset (in chips)
sfnOffset	INTEGER		SFN offset (in frames)
puncLimit	PuncturingLimit		Puncturing limit for PRACH
sf_PRACH	SF_PRACH		Spreading factor for PRACH
slotFormatsCCPCH1	SCCPCHSlotFormat		Slot format for secondary CCPCH1
mcc	HEXSTRING		MCC
mnc	HEXSTRING		MNC
lac	OCTETSTRING		LAC
rac	OCTETSTRING		RAC
attFlag	INTEGER		Attach flag (as broadcasted in BCCH)
nmo	OCTETSTRING		Network mode of operation
ura_Identity	BITSTRING		URA Identity (3GPP 25.331 clause 10.3.2.6)
t3212	OCTETSTRING		T3212 value

Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
cRNTI	C_RNTI		cell radio network temporary identity assigned to the UE under test, this initial value is for ts_SS_CreateCellFACH. (from 34.123–1)
uRNTI	U_RNTI		srnc_Identity and s_RNTI
cellConfig	RB_ConfigType		Current configuration of the cell
dRX_CycleLength	DRX_CycleLengthStructure		To hold the 3 dRX_CycleLength
uL_ScramblingCode	UL_ScramblingCode		To hold the UL scrambling to be used in the cell
DL_DPCH_SHO	BOOLEAN		To be used in SHO (Active set update) test cases to indicate whether a DL DPCH is configured
UL_DPCH_SHO	BOOLEAN		To be used in SHO (Active set update) test cases to indicate whether a DL DPCH is configured
dl_DPCH_2ndScrCode	SecondaryScramblingCode		Secondary scrambling code for the DL DPCH
Detailed Comments :	<u> </u>		<u>.</u>

Structured Type	Definition
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Type Name $: \ \mathsf{DRX_CycleLengthStructure}$

Encoding Variation:

: Structure taht contains CN DRX cycle length (CS and PS) and the UTRAN DRX Cycle length. This type is to be used in the CellInfoCfg in order to keep all DRX values. Comments

Type Definition	Field Encoding	Comments
CN_DRX_CycleLengthCoef ficient		
CN_DRX_CycleLengthCoef ficient		
UTRAN_DRX_CycleLength Coefficient		
	CN_DRX_CycleLengthCoef ficient CN_DRX_CycleLengthCoef ficient UTRAN_DRX_CycleLength	CN_DRX_CycleLengthCoef ficient CN_DRX_CycleLengthCoef ficient UTRAN_DRX_CycleLength

Type Name: AuthenticationFailureParameter

Encoding Variation:

Comments: Authentication Failure Parameter (TLV)

3G TS 24.008 cl. 10.5.3.2.2

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100010'B for MM (22 hex) '00110000'B for GMM (30 hex)
iel	Length		M 1 octet
auts	BITSTRING[112]		AUTS, 14 octets
Dataila d Commonto			

Detailed Comments:

Structured Type Definition

Type Name : AC_ReferenceNumber

Encoding Variation:

Comments : Cipher Algorithm

3GPP 24.008 / 10.5.5.19

Element Name	Type Definition	Field Encoding	Comments
value	B4		

Detailed Comments:

Structured Type Definition

Type Name : AUTN

Encoding Variation:

Comments: Authentication Parameter AUTN

3G TS 24.008 cl. 10.5.3.1.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100000'B
iel	Length		'10'O
aUTN	BITSTRING[128]		Authentication Parameter AUTN
Detailed Comments :			

Type Name : AccessPtName

Encoding Variation:

Comments : 24.007, section 10.5.6.1

'00101000'B (28hex)
Access point name value 3–102 octets

Structured Type Definition

Type Name : AllowedAction

Encoding Variation:

Comments : Allowed actions

3G TS 24.008 cl. 10.5.4.27

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111011'B
iel	Length		Length
cCBS_Act	B1		CCBS Activation
spare7	B7		7 spare bits

Structured Type Definition

Type Name : AttachResult

Encoding Variation:

Comments : Attach result

3GPP 24.008 / 10.5.5.1

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
result	B3		Attach result

Type Name: AttachType

Encoding Variation:

Comments : Attach type

3GPP 24.008 / 10.5.5.2

Element Name	Type Definition	Field Encoding	Comments
for	B1		Follow-on request
type	B3		Type of attach

Detailed Comments:

Structured Type Definition

Type Name : AuthRspExt

Encoding Variation:

Comments : Authentication Response parameter (extension)

3G TS 24.008 cl. 10.5.3.2.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100001'B for MM (21 hex) '00101001'B for GMM (29 hex)
iel	Length		
rES	BITSTRING[196]		Authentication Parameter RES
Detailed Comments :			

Detailed Comments:

Structured Type Definition

Type Name : AuthRsp_tv

Encoding Variation:

Comments: Authentication Response parameter (TV, 5 octets)

3G TS 24.008 cl. 10.5.3.2

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100010'B (22 hex)
value	BITSTRING[32]		Authentication Parameter RES

Type Name: AuthenticationParamterRAND

Encoding Variation:

Comments : Authentication Parameter RAND (TV, 17 octets)

3G TS 24.008 cl. 10.5.3.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100001'B (21 hex)
randValue	BITSTRING[128]		Authentication Parameter RAND value

Type Name : Bcap **Encoding Variation:**

: Bearer capability (CC information element) 3G TS 24.008 cl. 10.5.4.5 Comments

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00000100'B
iel	Length		length
extBit3	B1		extension bit
radioChRequi	B2		radio channel requirements ue->n, GSM, octet 3
codingStd	B1		coding standard, '0'B, octet 3
transferMode	B1		transfer mode octet 3
itc	В3		information transfer capability, octet 3
bcap3aEtc1	Bcap3aEtc		octet 3a etc no.1
bcap3aEtc2	Bcap3aEtc		octet 3a etc no.2
bcap3aEtc3	Bcap3aEtc		octet 3a etc no.3
bcap3aEtc4	Bcap3aEtc		octet 3a etc no.4
bcap3aEtc5	Bcap3aEtc		octet 3a etc no.5
bcap3aEtc6	Bcap3aEtc		octet 3a etc no.6
extBit4	B1		extension bit, octet 4
compress	B1		compression, ue->network, octet 4
structure	B2		structure, '0, 3', octet 4
duplexMode	B1		duplex mode, '1'B, octet 4
cfg	B1		configuration, '0'B, octet 4
nirr	B1		negotiation of intermediate rate requested, GSM, octet 4
establish	B1		establishment, '0'B, octet 4
extBit5	B1		extension bit, octet 5
accessId	B2		access identify, '00'B, octet 5
rateAdapt	B2		rate adaption, octet 5
sacp	В3		signalling access protocol, '1 – 6', octet 5
extBit5a	B1		extension bit, octet 5a
OherItc	B2		Other ITC, octet 5a
OtherRateAdapt	B2		Other Rate adaptation, octet5a
spare3	В3		spare bits – 3 bits
extBit5b	B1		extension bit, '1'B, octet 5b
rateAdaptHeader	B1		rate adaptation header, octet 5b
multiFrame	B1		Multi frame, octet 5b
mode	B1		Mode of operation, octet 5b
logLinkld	B1		logical link identifier negotiation, octet 5b

Continued on next page

	Structured Ty	ype Definition	
Element Name	Type Definition	Field Encoding	Comments
assignorAssignee	B1		assignor/assignee, octet 5b
inBandOutBand	B1		in band/out band negotiation, octet 5b
spare1	B1		sapre bit – 1 bit
extBit6	B1		extension bit, octet 6
layer1ld	B2		Layter 1 identity, '01'B, octet 6
userInfoLayer1	B4		user information Layer 1 protocol, '0000'B, octet 6
syncAsync	B1		synchronous bit, octet 6
extBit6a	B1		extension bit, octet 6a
numStopBits	B1		number of stop bits, octet
·			6a
nego	B1		negotiation bit, '0'B, octet 6a
numDataBits	B1		number of data bits, octet 6a
userRate	B4		user rate, GSM, octet 6a
extBit6b	B1		extension bit, octet 6b
intermRate	B2		intermediate rate, octet 6b
nicTx	B1		network independent clock on transmission, GSM, octet 6b
nicRx	B1		network independent clock on reception, GSM, octet 6b
parity	B3		parity information, octet 6b
extBit6c	B1		extension bit, octet 6c
connectElem	B2		connection element, octet 6c
modemType	B5		modem type, octet 6c
extBit6d	B1		extension bit, octet 6d
OtherModemType	B2		Other Modem type, octet 6d
FixedNtwUserRate	B5		Fixed Network user rate, octet 6d
extBit6e	B1		extension bit, octet 6e
acceptChCoding	B4		acceptable channel coding, octet 6e
maxNumTrafficCh	В3		maximum number of traffic channel, octet 6e
extBit6f	B1		extension bit, octet 6f
ulMI	В3		User initiated modification indication, octet 6f
wAIUR	B4		wanted air interface user rate, octet 6f
extBit6g	B1		extension bit, octet 6g
acceptChCodingExt	В3		acceptable channel coding extended, octet 6g
asymInd	B2		asymmetry indication, octet
spare2	B2		spare 2 bits , octet 6g

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Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
extBit7	B1		extension bit, octet 7
layer2id	B2		L2 identity, octet 7
userInfoLayer2	B5		user information L2 protocol, octet 7
Detailed Comments :			•

Structured Type Definition

Type Name : Bcap3aEtc

Encoding Variation:

Comments: Speech Versions preferences as supported by the EFR mobile – see 3G TS 24.008 cl.

10.5.4.5/octet 3a etc/"speech version indication"

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit ('0'B)
coding	B1		Octet a1, Coding ('0'B)
spare2	B2		Octet a1, Spare bits ('00'B)
speechVersion	B4		Octet a1, Speech version indication
Detailed Comments:	•	•	•

Detailed Comments:

Structured Type Definition

Type Name : CC_Capabilities

Encoding Variation:

Comments : Call Control Capabilities

3G TS 24.008 cl. 10.5.4.5a

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00010101'B
iel	Length		length
maxNumBearer	B4		maximum number o fudpported bearer
spare2	B2		spare bits
рср	B1		PCP
dtmf	B1		indication of supporting DTMF
spare4	B4		spare bits
maxNumSpeechBearer	B4		maximum number of speech bearers

Type Name : CDPN

Encoding Variation:

Comments: Called party BCD number (CC information element)

3G TS 24.008 cl. 10.5.4.7

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01011110'B
iel	Length		length
typeOfNumPlan	TypeOfNumPlan		type of number and numbering plan identification
digits	OCTETSTRING[040]		BCD numbers
Detailed Comments :			

Structured Type Definition

Type Name : CDPS

Encoding Variation:

Comments : Called party subaddress (CC information element)

3G TS cl. 10.5.4.8

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01101101'B
iel	Length		length
subadrs	Subadrs		Subaddress
Detailed Comments :			

Structured Type Definition

Type Name : CGPS

Encoding Variation:

Comments : Calling party subaddress (CC information element)

3G TS 24.008 cl. 10.5.4.10

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01011101'B
iel	Length		length
subadrs	Subadrs		Subaddress

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Type Name : Cau **Encoding Variation:**

: Cause (CC information element) 3G TS 24.008 cl. 10.5.4.11 Comments

Type Definition	Field Encoding	Comments
IEI8		information element identifier '00001000'B
Length		length
B1		extension bit, octet 3
B2		coding standard
B1		spare bit
B4		location
B1		extension bit, '1'B, octet 3a
B7		recommendation
B1		extension bit, '1'B
B7		cause value
OCTETSTRING [027]		Diagnostics
	IEI8 Length B1 B2 B1 B4 B1 B7 B1 B7	Length B1 B2 B1 B4 B1 B7 B1 B7

Detailed Comments:

Structured Type Definition

: Cau_lv Type Name

Encoding Variation:

Comments : Cause (CC information element)

3G TS 24.008 cl. 10.5.4.11

Element Name	Type Definition	Field Encoding	Comments
iel	Length		length
extBit3	B1		extension bit, octet 3
codingStd	B2		coding standard
spare1	B1		spare bit
loc	B4		location
extBit3a	B1		extension bit, '1'B, octet 3a
recommend	B7		recommendation
extBit4	B1		extension bit, '1'B
cauValue	B7		cause value
diagnostic	OCTETSTRING [027]		Diagnostics

Type Name : CellIndependantInfo

Encoding Variation:

Comments: This structure contains relevant information independant from the cell

Element Name	Type Definition	Field Encoding	Comments
cs_cipheringStarted	BOOLEAN		Set to TRUE when ciphering is started, to be initiated in Security Steps and used in RAB establishment Steps
ps_cipheringStarted	BOOLEAN		Set to TRUE when ciphering is started, to be initiated in Security Steps and used in RAB establishment Steps
recentSecureDomain	CN_DomainIdentity		the domain on which security was recently started, and hence the SRB are ciphered and Integrit protected with this domain.
dL_CipherMode	CipheringModeCommand		To hold the DL cipher mode to be used in RAB Steps.
uL_CipherMode	RB_ActivationTimeInfoList		To hold the UL cipher mode to be used in RAB Steps.
cipheringAlgorithmCapability	BITSTRING		BITSTRING thats hold the ciphering algorithm capability supported by UE
integrityStarted	BOOLEAN		Set to TRUE when integrity is started
dL_Integrity	IntegrityProtectionModeInfo		To hold the DL integrity protection active during a test case
uL_Integrity	IntegrityProtActivationInfo		To hold the UL integrity protection active during a test case
dl_IntegrityCheckInfo	IntegrityCheckInfo		To hold the integrity information to be sent
start_CS	START_Value		To hold the START value for CS Domain
start_PS	START_Value		To hold the START value for PS Domain

Structured Type Definition

Type Name : CellNotification

Encoding Variation:

Comments : Cell notification

3GPP 24.008 / 10.5.5.21

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI8		'10001100'B (8C hex)	
Detailed Comments :				

Type Name : CiphAlgorithm

Encoding Variation:

Comments : Cipher Algorithm

3GPP 24.008 / 10.5.5.3

Type Definition	Field Encoding	Comments
B1		
B3		
	11	11

Detailed Comments:

Structured Type Definition

Type Name : CiphKeySeqNum

Encoding Variation:

Comments : Ciphering Key Sequence Number

3G TS 24.008 cl. 10.5.1.2

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
keySeq	KeySeq		
Patrillad Comments			

Detailed Comments:

Structured Type Definition

Type Name : CiphKeySeqNum_tv

Encoding Variation:

Comments: Ciphering Key Sequence Number

3G TS 24.008 cl. 10.5.1.2

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI4		'1000'B	
spare1	B1			
keySeq	KeySeq			
Partition of the Community				

Detailed Comments:

Structured Type Definition

Type Name : Codec

Encoding Variation:

Comments : Codec

3G TS 24.008 cl. 10.5.4.32

Element Name	Type Definition	Field Encoding	Comments
sysld	OCTETSTRING[1]		system identification
len	Length		length
bitMap1to8	BITSTRING[8]		codec bitmap bits 1-8
bitMap9to16	BITSTRING[8]		codec bitmap bits 9-16
Detailed Comments:	Bironanolol		Codeo bilinap bilo 3-10

Type Name : CodecList

Encoding Variation:

Comments : Supported Codec List

3G TS 24.008 cl. 10.5.3.32

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01000000'B (40 hex)
iel	Length		length
codec1	Codec		Codec
codec2	Codec		Codec
codec3	Codec		Codec
codec4	Codec		Codec
codec5	Codec		Codec
Petallad Comments			

Detailed Comments:

Structured Type Definition

Type Name : CodeWord

Encoding Variation:

Comments : Code word within an RList super field. Ref 3G TS 25.322 clause 9.2.2.11.6

Element Name	Type Definition	Field Encoding	Comments
numberPart	CW_NumberPart		
statusInd	BITSTRING[1]		

Detailed Comments:

Structured Type Definition

Type Name : DRXparamter

Encoding Variation:

Comments : DRX paramter

3GPP 24.008 / 10.5.5.6

Element Name	Type Definition	Field Encoding	Comments
splitPGcycleCode	B8		Split PG cycle code
cnDRXcoef	B4		CN specific DRX cycle length coefficient
splitOnCCCH	B1		Split on CCCCH
nonDRXtimer	B3		non-DRX timer
Datailed Comments	_	-	-

Type Name : DRXparamter_tv

Encoding Variation:

Comments : DRX paramter

3GPP 24.008 / 10.5.5.6

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100111'B (hex 27)
splitPGcycleCode	B8		Split PG cycle code
cnDRXcoef	B4		CN specific DRX cycle length coefficient
splitOnCCCH	B1		Split on CCCCH
nonDRXtimer	B3		non-DRX timer
Detailed Comments :			

Structured Type Definition

Type Name: DetachType

Encoding Variation:

Comments : Detach type

3GPP 24.008 / 10.5.5.5

Element Name	Type Definition	Field Encoding	Comments
powOff	B1		
type	B3		

Detailed Comments:

Structured Type Definition

Type Name : EmergNum

Encoding Variation:

Comments: Emergency Number

3G TS 24.008 cl. 10.5.3.13

Element Name	Type Definition	Field Encoding	Comments
len	Length		length
emergServCat	EmergServCat		Emergency Service Category
digits	OCTETSTRING[010]		BCD numbers
Detailed Comments :			

Type Name : EmergNumList

Encoding Variation:

Comments : Emergency Number List

3G TS 24.008 cl. 10.5.3.13

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110100'B (34 hex)
iel	Length		length
emergNum1	EmergNum		Emergency Number
emergNum2	EmergNum		Emergency Number
emergNum3	EmergNum		Emergency Number
emergNum4	EmergNum		Emergency Number
emergNum5	EmergNum		Emergency Number
Poteiled Comments	Emerginum		

Detailed Comments:

Structured Type Definition

Type Name : EmergServCat

Encoding Variation:

: Emergency Service Category 3GPP 24.008 / 10.5.4.33 Comments

Element Name	Type Definition	Field Encoding	Comments
spare	B3		
value	B5		Emergency Service Category value
Detailed Comments :			

Structured Type Definition

Type Name : Facility

Encoding Variation:

: Facility information element 3G TS 24.008 cl. 10.5.4.15 Comments

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011100'B
iel	Length		length
comps	OCTETSTRING		Component

Type Name : ForceToStandby

Encoding Variation:

Comments : Force to standby

3GPP 24.008 / 10.5.5.7

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Force to standby value

Detailed Comments:

Structured Type Definition

Type Name : GMM_AUTN

Encoding Variation:

Comments: Authentication Parameter AUTN- to be used in GMM constraints

3G TS 24.008 cl. 10.5.3.1.1

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101000'B
iel	Length		'10'O
aUTN	BITSTRING[128]		Authentication Parameter AUTN

Detailed Comments:

Structured Type Definition

Type Name : GMM_Cause

Encoding Variation:

Comments : GMM cause

3GPP 24.008 / 10.5.5.14

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100101'B (25 hex)
value	B8		Cause value

Type Name : GMM_MS_Identity

Encoding Variation:

Comments : Mobile Identity

3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00100011'B
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfld	B3		Type of identity
otherDigits	OCTETSTRING[08]		Other identity digits

Detailed Comments: Maximum number of digits is 16 (IMEISV). Filler may be used.

Structured Type Definition

Type Name : GMM_MS_IdentityPTMSI

Encoding Variation:

Comments : Mobile Identity

3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00011000'B
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[08]		Other identity digits

Detailed Comments: Maximum number of digits is 16 (IMEISV). Filler may be used.

Structured Type Definition

Type Name : GPRS_Timer

Encoding Variation:

Comments : GPRS timer

3GPP 24.008 / 10.5.7.3

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI8		00010111'B (17 hex)	
unit	В3		Unit	
value	B5		Timer value	
Detailed Comments :				

Type Name : GPRS_Timer2

Encoding Variation:

Comments : GPRS timer

3GPP 24.008 / 10.5.7.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101010'B (2A hex)
iel	Length		length
unit	B3		Unit
value	B5		Timer value

Structured Type Definition

Type Name : GPRS_Timer_v

Encoding Variation:

Comments : GPRS timer

3GPP 24.008 / 10.5.7.3

Element Name	Type Definition	Field Encoding	Comments	
unit	B3		Unit	
value	B5		Timer value	
Datailed Comments :				

Detailed Comments:

Structured Type Definition

Type Name : HLC Encoding Variation :

Comments : High layer compatibility (CC information element)

3G TS 24.008 cl. 10.5.4.16, ITU Q.931

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI8		information element identifier '01111101'B	
iel	Length		length	
extBit3	B1		extension bit ('1'B)	
codingStd	B2		coding standard	
interpretation	B3		interpretation	
presentModeProtocolProfile	B2		presentation method of protocol profile	
extBit4	B1		extension bit, octet 4	
hlcld	B7		high layer characteristics identification	
extBit4a	B1		extension bit, '1'B, octet 4a	
exteHlcld	B7		extended high layer characteristics identification	
Detailed Comments :	Detailed Comments :			

Type Name : IMEISVRequest

Encoding Variation:

Comments

: IMEISV Request 3GPP 24.008 / 10.5.5.10

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
value	B3		

Type Name : LLC **Encoding Variation:**

Comments

: Low layer compatibility (CC information element) 3G TS 24.008 cl. 10.5.4.18 and ETS DE/SPS-5034-1 (update of ETS 300 102-1)

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111100'B
iel	Length		length
extBit3	B1		extension bit
codingStd	B2		coding standard, octet 3
itc	B5		information transfer capability, octet 3
extBit3a	B1		extension bit, octet 3a
negoInd	B1		negotiation indicator, octet 3a
spare6	B6		6 spare bits
extBit4	B1		extension bit, octet 4
transferMode	B2		transfer mode
infoTransferRate	B5		information transfer rate, octet 4
extBit4_1	B1		extension bit, octet 4.1
rateMultiplier	B7		rate multiplier, octet 4.1
extBit5	B1		extension bit, octet 5
layer1ld	B2		Layter 1 identity, '01'B, octet 5
userInfoLayer1	B5		user information Layer 1 protocol, '0000'B, octet 5
extBit5a	B1		extension bit, octet 5a
syncAsync	B1		synchronous bit, octet 5a
nego	B1		negotiation bit, octet 5a
userRate	B5		user rate, octet 5a
extBit5b1	B1		extension bit, octet 5b1
intermRate	B2		intermediate rate, octet 5b1
nicTx	B1		network independent clock on transmission, octet 5b1
nicRx	B1		network independent clock on reception, octet 5b1
flowCtrlTx	B1		flow control on transmission, octet 5b1
flowCtrlRx	B1		flow control on reception, octet 5b1
spare1	B1		1 spare bit, '0'B, octet 5b1
extBit5b2	B1		extension bit, octet 5b2
rateAdaptHeader	B1		rate adaptation header, octet 5b2
multiFrame	B1		Multi frame, octet 5b2
mode	B1		Mode of operation, octet 5b2
logLinkld	B1		logical link identifier negotiation, octet 5b2
assignorAssignee	B1		assignor/assignee, octet 5b2

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Structured Type Definition			
Element Name	Type Definition	Field Encoding	Comments
inBandOutBand	B1		in band/out band negotiation, octet 5b2
spare1_5b2	B1		sapre bit – 1 bit, octet 5b2
extBit5c	B1		extension bit, octet 5c
numStopBits	B2		number of stop bits, octet 5c
numDataBits	B2		number of data bits, octet 5c
parity	B3		parity, octet 5c
extBit5d	B1		extension bit, octet 5d
duplexMode	B1		duplex mode, octet 5d
modemType	B6		modem type, octet 5d
extBit6	B1		extension bit, octet 6
layer2id	B2		L2 identity, octet 6
userInfoLayer2	B5		user information L2 protocol, octet 6
extBit6a1	B1		extension bit, octet 6a1
modeLayer2	B2		mode, octet 6a1
spare3	B3		spare bits , '000'B, octet 6a1
q933	B2		Q.933 use, octet 6a1
extBit6a2	B1		extension bit, octet 6a2
userSpecifLayer2	B7		user specified layer 2 protocol information, octet 6a2
extBit6b	B1		extension bit, octet 6b
windowSize	B7		window size, octet 6b
extBit7	B1		extension bit, octet 7
layer3id	B2		L3 identity, octet 7
userInfoLayer3	B5		user information L3 protocol, octet 7
extBit7a1	B1		extension bit, octet 7a2
OptionUserSpecifLayer3	B7		user specified layer 3 protocol information, octet 7a2
extBit7a2	B1		extension bit, '1'B, octet 7a2
modeLayer3	B2		mode, octet 7a2
spare5	B5		spare bits , '00000'B, octet 7a2
extb7b	B1		extension bit, octet 7b
spare3_7b	B3		spare bits , '000'B, octet 7b
defaultPacketSize	B4		default packet size, octet 7b
extBit7c	B1		extension bit, '1'B, octet 7c
packetWindowSize	В7		packet window size, octet 7bc
extBit7a3	B1		extension bit, octet 7a3
spare3_7a3	B3		3 spare bits

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Structured Type Definition			
Type Definition	Field Encoding	Comments	
B4		additional layer 3 protocol information (most significant bits), octet 7a3	
B1		extension bit, octet 7a4	
B3		3 spare bits	
B4		additional layer 3 protocol information (least significant bits), octet 7a4	
	Type Definition B4 B1 B3	Type Definition Field Encoding B4 B1 B3	

Structured Type Definition

Type Name : LLC_SAPI_v

Encoding Variation:

Comments : 24.007, clause 10.5.6.9

Element Name	Type Definition	Field Encoding	Comments
spare	B4		
ILC_SAPI_Value	B4		LLC SAPI Value

Detailed Comments:

Structured Type Definition

Type Name : LocAreald_v

Encoding Variation:

Comments : Location Area Identification Value

3G TS 24.008 cl. 10.5.1.3

Element Name	Type Definition	Field Encoding	Comments
plmn	OCTETSTRING[3]		MCC + MNC 3 digits each
lac	OCTETSTRING[2]		LAC

Detailed Comments:

Structured Type Definition

Type Name : LocUpdType

Encoding Variation:

Comments: Location Updating Type

3G TS 24.008 cl. 10.5.3.5

Element Name	Type Definition	Field Encoding	Comments
fOR	B1		Follow-On Request
spare1	B1		
IUT	B2		Location Updating Type

Type Name : MM_MS_Identity

Encoding Variation:

Comments : Mobile Identity

3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00010111'B
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfld	B3		Type of identity
otherDigits	OCTETSTRING[08]		Other identity digits

Detailed Comments: Maximum number of digits is 16 (IMEISV). Filler may be used.

Structured Type Definition

Type Name : MSRadioAccessCap_lv

Encoding Variation:

Comments : MS radio access capability

3GPP 24.008 / 10.5.5.12a

Element Name	Type Definition	Field Encoding	Comments	
iel	Length			
value	OCTETSTRING[050]		MS radio access capability value (CSN.1 coding)	
Detailed Comments :				

Structured 7	Type Definition
--------------	-----------------

Type Name : MS_Clsmk1

Encoding Variation:

Comments : Mobile Station Classmark 1

3G TS 24.008 cl. 10.5.1.5

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		Spare bit
revLvl	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 supported
rFPwrCap	B3		RF Power Capability
Detailed Comments :			

Type Name : MS_Clsmk2

Encoding Variation:

: Mobile Station Classmark 2 3G TS 24.008 cl. 10.5.1.6 Comments

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		
iel	Length		
spare1_1	B1		Spare bit
revLvl	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 Support
rFPwrCap	В3		RF Power Capability
spare1_2	B1		Spare bit
pSCap	B1		Pseudo Synchronisation Capability
sSSI	B2		SS Screen Indicator
sMCap	B1		Short Message Capability
vBS	B1		VBS Capability
vGCS	B1		VGCS Capability
fC	B1		Frequency Capability
cM3	B1		Classmark 3 Indicator
spare1_3	B1		Spare bit
ICSVA	B1		LCS VA Capability
uCS2	B1		UCS2 Encoding Support
soLSA	B1		SoLSA Support
cMSP	B1		CM Service Prompt Support
a5_3	B1		Algorithm A5/3 Support
a5_2	B1		Algorithm A5/2 Support
Detailed Comments :	•	•	·

Type Name : MS_Clsmk2_lv

Encoding Variation:

Comments : Mobile Station Classmark 2

3G TS 24.008 cl. 10.5.1.6

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
spare1_1	B1		Spare bit
revLvI	B2		Revision Level
eSIND	B1		Early Sending Indication
a5_1	B1		Algorithm A5/1 Support
rFPwrCap	В3		RF Power Capability
spare1_2	B1		Spare bit
pSCap	B1		Pseudo Synchronisation Capability
sSSI	B2		SS Screen Indicator
sMCap	B1		Short Message Capability
vBS	B1		VBS Capability
vGCS	B1		VGCS Capability
fC	B1		Frequency Capability
cM3	B1		Classmark 3 Indicator
spare1_3	B1		Spare bit
ICSVA	B1		LCS VA Capability
uCS2	B1		UCS2 Encoding Support
soLSA	B1		SoLSA Support
cMSP	B1		CM Service Prompt Support
a5_3	B1		Algorithm A5/3 Support
a5_2	B1		Algorithm A5/2 Support
Data la LO ammanta			

Detailed Comments:

Structured Type Definition

Type Name : MS_Identity_lv

Encoding Variation:

Comments : Mobile Identity LV

3G TS 24.008 cl. 10.5.1.4

Element Name	Type Definition	Field Encoding	Comments
iel	Length		
iDigit1	B4		1st identitity digit
oddEvenInd	B1		Odd/even indicator
typeOfId	B3		Type of identity
otherDigits	OCTETSTRING[08]		Other identity digits

Detailed Comments: Maximum number of digits is 16 (IMEISV). Filler may be used.

Type Name : MS_NetworkCap_lv

Encoding Variation:

Comments : MS network capabilityt LV

3GPP 24.008 / 10.5.5.12

Element Name	Type Definition	Field Encoding	Comments
iel value	Length OCTETSTRING[08]		MS network capability value (CSN.1 coding)

Detailed Comments:

Structured Type Definition

Type Name : MS_NetworkCap_tlv

Encoding Variation:

Comments : MS network capabilityt T LV

3GPP 24.008 / 10.5.5.12

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00110001'B (hex 31)
iel	Length		
value	OCTETSTRING[08]		MS network capability value (CSN.1 coding)
Detailed Comments :	•	•	

Detailed Comments:

Structured Type Definition

Type Name : NSAPI_v

Encoding Variation:

Comments : 24.007, clause 10.5.6.2

Element Name	Type Definition	Field Encoding	Comments	
spare	B4			
nSAPI_Value	B4		NSAPI value	
Datailed Comments:				

Type Name : NtwFeatureSupport_tv

Encoding Variation:

Comments : Network Feature Support

3G TS 24.008 cl. 10.5.5.23

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI4		'1011'B (B- hex)	
ICS_MOLR	B1			
spare3	B3			
Parity 10 annuals				

Detailed Comments:

Structured Type Definition

Type Name : PDP_ContextStatus

Encoding Variation:

Comments : PDP_ContextStatus

3G TS 24.008 cl. 10.5.7.1

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI8		'00110010'B	
iel	Length			
nSAPI	BITSTRING[16]			
Parallel Community				

Detailed Comments:

Structured Type Definition

Type Name : PLMN_List

Encoding Variation:

Comments : PLMN list

3G TS 24.008 cl. 10.5.1.13

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'01001010"B
iel	Length		
plmn1	OCTETSTRING[3]		PLMN 1
plmn2	OCTETSTRING[3]		PLMN 2
plmn3	OCTETSTRING[3]		PLMN 3
plmn4	OCTETSTRING[3]		PLMN 4
plmn5	OCTETSTRING[3]		PLMN 5

Type Name : PS_LCS_Capability

Encoding Variation:

Comments : PS LCS Capability

3GPP 24.008 / 10.5.5.22

Element Name	Type Definition	Field Encoding	Comments		
iei	IEI8		'00110011'B (33 hex)		
iel	Length		'01'O		
spare	B3				
oTD_A	B1				
oTD_B	B1				
gPS_A	B1				
gPS_B	B1				
gPS_C	B1				

Detailed Comments:

Structured Type Definition

Type Name : PTMSI_Signature

Encoding Variation:

Comments : P-TMSI signature

3GPP 24.008 / 10.5.5.8

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00011001'B (19 hex)
value	OCTETSTRING[3]		P-TMSI signature value

Detailed Comments:

Structured Type Definition

Type Name : PTMSI_Signature_tlv

Encoding Variation:

Comments : P-TMSI signature

3GPP 24.008 / 10.5.5.8

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00011001'B (19 hex)
iel	Length		
value	OCTETSTRING[3]		P-TMSI signature value

Type Name : PktDataProtoAddr_lv

Encoding Variation:

Comments : 24.007, clause 10.5.6.4

Element Name	Type Definition	Field Encoding	Comments
length	Length		
spare	B4		
pDP_TypeOrg	B4		PDP type organisation
pDP_TypeNo	PDP_TypeNo		PDP type number
addrInfo	AddressInfo		Address Information
Detailed Comments :			

Structured Type Definition

Type Name : PriorityLvl

Encoding Variation:

Comments : Priority Level

3G TS 24.008 cl. 10.5.1.11

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1000'B
spare1	B1		
callPrio	B3		Call Priority

Detailed Comments:

Structured Type Definition

Type Name : ProgInd

Encoding Variation:

Comments: Progrees indicator information element

3G TS 24.008 cl. 10.5.4.21

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00011110'B
iel	Length		length
extBit3	B1		extension bit
codingStd	B2		coding standard
spare	B1		spare bit
location	B4		location
extBit4	B1		extension bit
progressDescr	B7		progress description

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Type Name : ProtoCfgOpt

Encoding Variation:

Comments : 24.007, clause 10.5.6.3

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		'00101000'B (27hex)
length	Length		
ext	B1		extension bit
spare	B4		
configprotocol	B3		configuration protocol
protocolldContents	ProtoIdContents		information related to additional external protocols

Type Name : QualityOfService_lv

Encoding Variation:

Comments : 24.008, clause 10.5.6.5

Element Name	Type Definition	Field Encoding	Comments
ength	Length		
spare	B2		
dlyClass	В3		Delay Class
relabilityClass	B3		Reliability Class
peakThroughput	B4		Peak Throughput
spare1	B1		
precedenceClass	В3		Precedence Class
spare2	В3		
meanThroughput	B5		Mean Throughput
trafficClass	B3		Traffic Class
deliveryOrder	B2		Delivery Order
deliveryErrorSDU	B3		Delivery of erroneous SDU
maxSDUSize	MaxSDU_Size		Maximum SDU Size
maxBitRateUplink	MaxBitRate		Maximum Bit Rate for Uplini
maxBitRateDnlink	MaxBitRate		Maximum Bit Rate for Downlink
residualBER	B4		Residual BER
sduErrRatio	B4		SDU Error Ratio
transDly	B6		Transfer Delay
trafficHandpro	B2		Traffic Handling Priority
bitRateUplink	BitRate		Guaranteed bit rate for uplink
bitRateDnlink	BitRate		Guaranteed bit rate for downlink
spare3	В3		
signallingInd	B1		Signalling Indication
srcStatsDescr	B4		Source Statistics Descriptor
maxBitRateDnlinkExt	BitRate		Maximum bit rate for downlink (extended)
bitRateDnlinkExt	BitRate		Guaranteed bit rate for downlink (extended)

: RAI_v Type Name **Encoding Variation:**

: Routing Area Identification 3GPP 24.008 / 10.5.5.15 Comments

Element Name	Type Definition	Field Encoding	Comments	
plmn	OCTETSTRING[3]		MCC + MNC 3 digits each	
lac	OCTETSTRING[2]		LAC	
rac	OCTETSTRING[1]		RAC	
Detailed Comments :				

Type Name : RadioPriority_v

Encoding Variation:

Comments : Radio priority

3GPP 24.008 / 10.5.7.2

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Radio priority value

Detailed Comments:

Structured Type Definition

Type Name : RadioPriority2_v

Encoding Variation:

Comments : Radio priority 2

3GPP 24.008 / 10.5.7.5

Element Name	Type Definition	Field Encoding	Comments
spare	B1		
value	B3		Radio priority value

Detailed Comments:

Structured Type Definition

Type Name : RepeatInd

Encoding Variation:

Comments : Repeat indicator

3G TS 24.008 cl. 10.5.4.22

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		
repeatInd	B4		

Detailed Comments:

Structured Type Definition

Type Name : SM_Cause_v

Encoding Variation:

Comments : Ref 24.008, 10.5.6.6

Element Name	Type Definition	Field Encoding	Comments
causeValue	CauseValue		

Type Name : SNiLiPair

Encoding Variation:
Comments:

Element Name	Type Definition	Field Encoding	Comments
sNi	AM_SeqNum		
li	SUFI_ListLi		

Detailed Comments:

Structured Type Definition

Type Name : SS_VersionInd

Encoding Variation:

Comments : SS version indicator

3G TS 24.008 cl. 10.5.4.24

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '01111111'B
iel	Length		length
sS_VersionInfo	OCTETSTRING [1]		ss version information 1.

Detailed Comments: 1. Usually this IE has only one octet of content.

Exact definition see TS 24.080

Structured Type Definition

Type Name : SUFI_Ack

Encoding Variation:

Comments : Acknowledgement super field. Ref 3G TS 25.322 clause 9.2.2.11.2. The ACK SUFI shall always be

placed as the last SUFI if it is included in a STATUS PDU.

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_Ack
Isn	AM_SeqNum		1.

Detailed Comments: 1. Acknowledges the reception of all PDUs with sequence numbers < LSN that are not indicated

to be erroneous in earlier parts of the STATUS PDU.

Type Name : SUFI_Bitmap

Encoding Variation:

Comments : Bitmap super field. Ref 3G TS 25.322 clause 9.2.2.11.5

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_Bitmap
len	BitmapLen		1.
fsn	AM_SeqNum		2.
bitmap	Bitmap		3.

Detailed Comments: 1. The size of the bitmap in octets = len+1. len='0000'B means that the bitmap is one octet, and

len='1111'B means that the bitmap is the maximum size of 16 octets

2. The sequence number for the first bit in the bitmap.

3. Status of the SNs in the interval [FSN, FSN + (len + 1) * 8 -1] where each bit_position can

take on the following values:-

* '1'B indicates that FSN + bit_position has been correctly received * '0'B indicates that FSN + bit_position has not been correctly received

Structured Type Definition

Type Name : SUFI_List

Encoding Variation:

Comments : List super field. Ref 3G TS 25.322 clause 9.2.2.11.4

This type definition assumes that a maximum of 3 (SNi, Li) pairs will be required for RLC test

purposes.

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_List
len	LIST_Len		1.
sN1L1	SNiLiPair		2.
sN2L2	SNiLiPair		2.
sN3L3	SNiLiPair		2.

Detailed Comments: 1. The number of (SNi, Li) pairs in the super field.

2. SNi: Sequence number of PDU which was not correctly received; Li: The number of consecutive PDUs not correctly received following PDU with sequence number SNi.

Type Name : SUFI_MRW

Encoding Variation:

Comments : Move receiving window super field. Ref 3G TS 25.322 clause 9.2.2.11.8

This type definition assumes that a maximum of three SN_MRWi will be required for RLC testing.

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_MRW
len	MRW_Len		1.
sN_MRW1	SUFI_SN_MRWi		2.
sN_MRW2	SUFI_SN_MRWi		2.
sN_MRW3	SUFI_SN_MRWi		2.
nLength	N_Length		3.

Detailed Comments: 1. The number of SN_MRWi fields in the super–field.

2. Each SN_MRWi is used to indicate the end of each discarded SDU. SN_MRWi is the sequenec

number of the PDU that contains the LI of the i:th discarded SDU.

3. nLength is used together with SN_MRW_Length to indicate the end of the last discarded SDU

Structured Type Definition

Type Name : SUFI_MRW_ACK

Encoding Variation:

Comments : Move receiving window acknowledgement super field. Ref 3G TS 25.322 clause 9.2.2.11.7

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_MRW_ACK
n	N_Length		1.
sN_ACK	AM_SeqNum		2.

Detailed Comments: 1. The N field shall be set equal to the N_Length field in the received MRW SUFI if the SN_ACK

field is equal to the SN_MRW_Length field. Otherwise N shall be set to 0.

2. The SN_ACK field indicates the updated value of VR(R) after the reception of the MRW SUFI.

Structured Type Definition

Type Name : SUFI_NoMore

Encoding Variation:

Comments : No more data super field. Ref 3G TS 25.322 clause 9.2.2.11.1

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_NoMore

Type Name : SUFI_RList

Encoding Variation:

Comments : Relative list super field. Ref 3G TS 25.322 clause 9.2.2.11.6

This type definition assumes that a maximum of three codewords will be required for RLC testing

Element Name	Type Definition	Field Encoding	Comments	
type	SUFI_Type		Always tsc_SUFI_RList	
len	RLIST_Len		1.	
fsn	AM_SeqNum		2.	
CW1	CodeWord		3.	
CW2	CodeWord		3.	
CW3	CodeWord		3.	

Detailed Comments: 1. The number of codewords in the super-field

2. The sequence number of the first erroneous PDU in the RLIST. Note that len = '0000'B means

that only FSN is present in the SUFI.

3. Each CW consists of 4 bits where the first three bits are part of a number, and the last bit is a

status indicator. see 3G TS 25.25.322 clause 9.2.2.11.6 for a detailed description.

Structured Type Definition

Type Name : SUFI_WindowSize

Encoding Variation:

Comments : Window size super field. Ref 3G TS 25.322 clause 9.2.2.11.3

Element Name	Type Definition	Field Encoding	Comments
type	SUFI_Type		Always tsc_SUFI_WindowSize
wsn	BITSTRING[12]		1.

Detailed Comments: 1. The allowed Tx window size to be used by the transmitter.

Structured Type Definition

Type Name : ServiceType_v

Encoding Variation:

Comments : Service type

3GPP 24.008 / 10.5.5.20

Element Name	Type Definition	Field Encoding	Comments
spare1	B1		
type	B3		type

Type Name : Streamld

Encoding Variation:

Comments: stream identifier

3G TS 24.008 cl. 10.5.4.28

Element Name	Type Definition	Field Encoding	Comments
iei	IEI8		information element identifier '00101101'B
iel	Length		length
val	B8		stream identifier value

Detailed Comments:

Structured Type Definition

Type Name : Subadrs

Encoding Variation:

Comments : Subaddress

3G TS 24.008 cl. 10.5.4.8, 10.5.4.10, 10.5.4.14

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
typrOfSubadrs	B3		Type of subaddress
oddEven	B1		odd/even indicator
spare3	B3		3 spare bits
subadrsInfo	OCTETSTRING [020]		subaddress information

Detailed Comments:

Structured Type Definition

Type Name : SuperFields

Encoding Variation:

Comments : This type is used to represent the set of super-fields within a STATUS PDU. Ref 3G TS 25.322

clause 9.2.1.5.

Element Name	Type Definition	Field Encoding	Comments
windowSize	SUFI_WindowSize		1
list	SUFI_List		1
rList	SUFI_RList		1
bitmap	SUFI_Bitmap		1
mRW	SUFI_MRW		1
mRW_Ack	SUFI_MRW_ACK		1
noMore	SUFI_NoMore		2
ack	SUFI_Ack		2, 3

Detailed Comments: 1. These super fields may arrive in any order, and may or may not be present. This type definition

only supports a single super–field, followed by either a NO_MORE SUFI, or an ACK SUFI.

2. The NO_MORE SUFI, and the ACK SUFI are mutually exclusive, and should never both be

present in the same STATUS PDU.

3. The ACK SUFI is used to acknowledge reception of all PDUs up to LSN, EXCEPT for any

PDUs indicated as incorrectly received in the previous SUFIs.

Type Name : TI Encoding Variation :

Comments: Transaction identifier

3G TS 24.007 cl. 11.2.3.1.3

Element Name	Type Definition	Field Encoding	Comments
tiFlag	B1		Flag
tiVal	B3		TIO

Detailed Comments:

Structured Type Definition

Type Name : TMSI_Status

Encoding Variation:

Comments : TMSI status

3GPP 24.008 cl. 10.5.5.4

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1001'B
spare3	B3		
flag	B1		Flag
5			

Detailed Comments:

Structured Type Definition

Type Name : TP_DataCodingScheme

Encoding Variation:

Comments: structured Type given by the manufacturer

Element Name	Type Definition	Field Encoding	Comments
cg	BITSTRING[4]		
code	BITSTRING[4]		

Detailed Comments:

Structured Type Definition

Type Name : TearDwnInd_tv

Encoding Variation:

Comments : Ref 24.008, clause 10.5.6.10

Element Name	Type Definition	Field Encoding	Comments
iei	IEI4		'1001'B (9 hex)
spare	В3		
tdiflag	B1		TDI Flag
Detailed Comments :			

Structured Type Definition

Type Name: TypeOfNumPlan

Encoding Variation:

Comments: Type of number and numbering plan

3G TS 24.008 cl.10.5.4.7, 10.5.4.9, 10.5.4.13

Element Name	Type Definition	Field Encoding	Comments
extBit	B1		extension bit
typeOfNum	B3		Type of number
numbPlanId	B4		Numbering plan id.

Detailed Comments:

Structured Type Definition

Type Name : UpdateType_v

Encoding Variation:

Comments : Update result

3GPP 24.008 / 10.5.5.18

Follow-on request
Update type value

Detailed Comments:

Structured Type Definition

Type Name : UserUser

Encoding Variation:

Comments : User-user

3G TS 24.008 cl. 10.5.4.25

Element Name	Type Definition	Field Encoding	Comments	
iei	IEI8		information element identifier 01111110'B	
iel	Length		length	
userUserProtocolDiscr	B8		user–user protocol discriminator	
userUserInfo	OCTETSTRING [1128]		user user information	

Detailed Comments : In SETUP, ALERTING, CONNECT, DISCONNECT, RELEASE and RELEASE COMPLETE

messages the userUserInfo length is of 0 – 32 bytes.

In USER INFORMATION messages the userUserInfo length is of 1 – 128.

Type Name : RB_ConfigType

Encoding Variation: Comments

Type Definition

```
ENUMERATED {
cell_NotConfigured (0),
  - Configurations on DPCH
 cell_DCH_StandAloneSRB_NoConn (1),
 cell_NoDPCH (2),
 cell_DCH_StandAloneSRB (3),
 cell_DCH_Speech (4),
 cell_DCH_64kCS_RAB_SRB (5)
cell_DCH_57_6kCS_RAB_SRB (6),
cell_DCH_64kPS_RAB_SRB (7),
 cell_RLC_DCH_AM_RAB_15Lis (8),
 cell_RLC_DCH_AM_RAB_7Lis (9),
 cell_RLC_DCH_UM_RAB_15Lis (10),
 cell_RLC_DCH_UM_RAB_7Lis (11),
 cell_PDCP_AM_RAB (12),
 cell_PDCP_UM_RAB (13),
 cell_PDCP_AM_UM_RAB (14),
 cell_DCH_MAC_SRB_NoConn (15),
 cell_DCH_MAC_SRB (16),
cell_DCH_2AM_PS (17),
 -- Configurations on FACH
 cell_FACH_NoConn (18),
 cell_FACH (19),
 cell_FACH_NoDedicated (20),
 cell_FACH_PS (21),
 cell FACH BMC (22),
 cell_FACH_BMC_NoConn (23),
 cell_FACH_2_PRACH_NoConn (24), --no RAB
 cell_FACH_2_PRACH (25), -- no RAB
 cell_FACH_2_SCCPCH_NoConn (26), --used in BMC
 cell_FACH_2_SCCPCH (27), --Used in BMC
 cell_FACH_MAC_SRB_NoConn (28),
 cell_FACH_MAC_SRB (29),
cell_FACH_MAC_SRB0_NoConn (30), cell_FACH_MAC_SRB0 (31),
 -- Configurations for RAB test cases
 -- for these configuarations Security step does not handle RAB eastablished situation, as in RAB test procedure
 -- Security procedure is called before RAB establishment
 cell_FACH_2SCCPCH_StandAlonePCH_NoConn (32),
cell_FACH_2SCCPCH_StandAlonePCH (33),
 cell FACH 2SCCPCH StandAlonePCH PS (34),
 cell_Two_DTCH (35),
 cell_Four_DTCH_CS (36),
 cell_Two_DTCH_CS_PS (37),
 cell_Four_DTCH_CS_PS (38),
 cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn (39),
 cell_FACH_3_SCCPCH_4_FACH_Cnfg1 (40),
 cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn (41),
 cell_FACH_3_SCCPCH_3_FACH_CTCH (42),
 cell_Two_DTCH_PS_CS (43),
cell_Four_DTCH_PS_CS (44)
 cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn (45),
 cell_FACH_3_SCCPCH_4_FACH_Cnfg2 (46),
 cell_DCH_2_PS_Call(47)

    Configurations for DSCH RAB test cases

cell_DCH_DSCH_PS (48)
 cell_DCH_DSCH_CS_PS (49),
 cell_FACH_2SCCPCH_StandAlonePCH_PS_2a(50),
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ASN.1 Type Definition
                                             Type Definition
cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn (51),
cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1 (52),
cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn (53),
 cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2 (54),
cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn (55),
 cell_FACH_3_SCCPCH_3_FACH_2a_CTCH (56),
 cell_Two_DTCH_CS_PS_Init (57),
cell_Four_DTCH_CS_PS_Init (58),
cell_FACH_2SCCPCH_StandAlonePCH_2a_NoConn (59),
cell_FACH_2SCCPCH_StandAlonePCH_2a (60),
cell_Two_DTCH_PS_CS_Init (61),
 cell_Four_DTCH_PS_CS_Init (62),
 cell_DCH_HS_DSCH(63),
 cell_FACH_HS(64),
cell_DCH_64kPS_RAB_SRB_HS(65),
cell_One_DTCH_HS_DSCH_MAC(66),
 cell_5_UM_DCH_HS_DSCH (67),
cell_DCH_Speech_WAMR (68),
cell_Four_DTCH_HS_CS_Init (69),
cell_Four_DTCH_HS_CS (70),
cell_Two_DTCH_HS_CS_Init (71),
 cell_Two_DTCH_HS_CS (72),
cell_Four_DTCH_CS_HS_Init (73),
 cell_DCH_2AM_HS_DSCH (74)
Detailed Comments:
```

```
ASN.1 Type Definition

Type Name : AICHInfo
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
    aichinfo AICH_Info,
    dI_TxPower AICH_PowerOffset
}

Detailed Comments :
```

Type Name : AmConfirmationRequest

Encoding Variation:

Comments : If the noConfirmationRequested option is used, then an RLC_AM_DATA_CNF is not expected

from the RLC AM entity.

If the confirmationRequested option is used, then the RLC AM entity is being requested to provide

an RLC_DATA_CNF primitive containing the same mui value.

Type Definition

CHOICE {

noConfirmationRequest NULL, confirmationRequested Mui

}

Detailed Comments:

ASN.1 Type Definition

Type Name : COUNT_I_MSB

Encoding Variation:

Comments : 28 bits long

Type Definition

INTEGER (0..268435455)

Detailed Comments:

ASN.1 Type Definition

Type Name : CellToBeCreated

Encoding Variation:
Comments:

Type Definition

ENUMERATED { cell_DCH (0), cell_FACH (10) }

Detailed Comments:

ASN.1 Type Definition

Type Name : CellTxPowerLevel

Encoding Variation:

Comments : The defaultCellTxPowerLvI is a default setting and is used for the most signalling tests. The real total

cell DL Tx power level equals to the sum of the DL Tx power of the individual physical channels

configured.

The totalCellTxPowerLvI applies to e.g. the idle mode tests in a non-default multi-cell radio

environment.

Type Definition

CHOICE

defaultCellTxPowerLvl NULL, totalCellTxPowerLvl DL_TxPower

}

Type Name : CiphActivationInfo

Encoding Variation:

Comments : DL or UL ciphering activation infolf RB is omitted in rB_UL_CiphActivationTimeInfo the SS takes

no action on this RB and the ciphering configuration keeps unchanged on this RB.

CipheringModeCommand = dummy NULL means no ciphering.

Type Definition

CHOICE {

cipheringModeInfo CipheringModeInfo,

 $rb_UL_CipheringActivationTimeInfo\ RB_ActivationTimeInfoList$

}

Detailed Comments:

ASN.1 Type Definition

Type Name : CmacConfigReq

Encoding Variation:

Comments: To request to configure MAC

Type Definition

SEQUENCE {

activationTime SS_ActivationTime,

uE_Info UE_Info, trCHInfo TrCHInfo,

trCH_LogCHMapping TrCH_LogCHMappingList1

-- RACHTransmissionCtrolElements

— CPCHTransmissionControlElements

}

Detailed Comments:

ASN.1 Type Definition

Type Name : CmacPagingConfigReq

Encoding Variation:
Comments:

Type Definition

```
SEQUENCE {
```

pl_BitMapInfo CHOICE {

e18 BIT STRING (SIZE (18)),

e36 BIT STRING (SIZE (36)),

e72 BIT STRING (SIZE (72)),

e144 BIT STRING (SIZE (144))}, dRX_CycleLength INTEGER (3..9),

iMSI IMSI_GSM_MAP,

t_pich_T_sccpch BOOLEAN -- T_pich > T_sccpch then FALSE

```
ASN.1 Type Definition

Type Name : CmacSysinfoConfigReq
Encoding Variation :

Comments : if bcch_ModificationTime = OMIT SS shall modify the Sysinfo immediately

Type Definition

SEQUENCE {
    sg_REP INTEGER (2..12),
    -- Repetition period is the sg_REP-th power of 2.
    sg_POS INTEGER (0..2047),
    -- The position of each segment is 2 * sg_POS.
    bcch_ModificationTime BCCH_ModificationTime OPTIONAL
}

Detailed Comments :
```

```
ASN.1 Type Definition
Type Name
                   : CommonOrDedicatedTFS
Encoding Variation:
Comments
                   : Transport Format Set
                                                  Type Definition
SEQUENCE {
 tti CHOICE {
  tti10 CommonOrDedicatedTF_InfoList,
  tti20 CommonOrDedicatedTF_InfoList,
  tti40 CommonOrDedicatedTF_InfoList,
  tti80 CommonOrDedicatedTF_InfoList,
  dynamic\ Common Or Dedicated TF\_InfoList\_Dynamic TTI
 semistatic TF\_Information \ Semistatic TF\_Information
Detailed Comments:
```

```
ASN.1 Type Definition

Type Name : CommonOrDedicatedTF_Info
Encoding Variation :
Comments : Transport Format Set

Type Definition

SEQUENCE {
tb_Size INTEGER (0..5035),
numberOfTbSizeList SEQUENCE (SIZE (1..maxTF)) OF NumberOfTransportBlocks,
logicalChannelList LogicalChannelList
}

Detailed Comments :
```

Type Name : CommonOrDedicatedTF_InfoList

Encoding Variation:

Comments : Transport Format Set

Type Definition

SEQUENCE (SIZE (1..maxTF)) OF CommonOrDedicatedTF_Info

Detailed Comments:

ASN.1 Type Definition

Type Name : CommonOrDedicatedTF_InfoList_DynamicTTI

Encoding Variation:
Comments:

Type Definition

SEQUENCE

tb_Size INTEGER (0..5035),

numberOfTbSizeList SEQUENCE (SIZE (1..maxTF)) OF NumberOfTransportBlocks,

logicalChannelList LogicalChannelList

}

Detailed Comments:

ASN.1 Type Definition

Type Name : CphyRIModifyReq

Encoding Variation : Comments :

Type Definition

SEQUENCE {

activationTime SS_ActivationTime,

physicalChannelInfo

CHOICE {

 $dpch_Compressed Mode Status Info\ DPCH_Compressed Mode Status Info,$

secondaryCCPCHInfo SecondaryCCPCHInfo,

pRACHInfo PRACHInfo,

dPCHInfo DPCHInfo,

dPCHInfo_r5 DPCHInfo_r5, -- Rel-5 or later

hS_PDSCHInfo HS_PDSCHInfo -- Rel-5 or later

},

trchConfigToFollow BOOLEAN DEFAULT TRUE

Type Name : CphyRlSetupReq

Encoding Variation:

Comments : To request to setup the Radio Link

Type Definition

```
SEQUENCE {
    physicalChannelInfo CHOICE {
        primaryCPICHInfo PrimaryCPICHInfo,
        secondaryCPICHInfo SecondaryCPICHInfo,
        primarySCHInfo PrimarySCHInfo,
        primarySCHInfo SecondarySCHInfo,
        primaryCCPCHInfo PrimaryCCPCHInfo,
        secondaryCCPCHInfo SecondaryCCPCHInfo,
        pRACHInfo PRACHInfo,
        pICHInfo PICHInfo,
        aICHInfo AICHInfo,
        dPCHInfo DPCHInfo,
        pDSCHInfo PDSCHInfo,
        dPCHInfo PDSCHInfo,
        dPCHInfo PDSCHInfo,
        AICHInfo Rel=5 or later
        hS_PDSCHInfo HS_PDSCHInfo --- Rel=5 or later
    }
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : CphyTrchConfigReq

Encoding Variation:

Comments

: To request to configure the transport channel. The same TFCS information should be provided to the PHY and MAC layers at all times. When a CPHY_TrCH_Config_REQ is used to configure the PHY layer, a corresponding CMAC_Config_REQ should be sent to the MAC layer to ensure that

the configuration is consistent.

For configuring HS-DSCH transport channel, the ulconnectedTrCHList, ulTFCS,

dlconnectedTrCHList and dlTFCS shall be omitted.

Type Definition

```
SEQUENCE {
 activationTime SS_ActivationTime,
 ulconnectedTrCHList SEQUENCE (SIZE (0..maxTrCH)) OF SEQUENCE {
  trchid TransportChannelIdentity,
  ul_TransportChannelType SS_UL_TransportChannelType,
  transportChannelInfo CommonOrDedicatedTFS
 } OPTIONAL.
 ultfcs tfcs optional,
 dlconnectedTrCHList SEQUENCE (SIZE (0..maxTrCH)) OF SEQUENCE {
  trchid TransportChannelIdentity,
  dl_TransportChannelType SS_DL_TransportChannelType,
  transportChannelInfo CommonOrDedicatedTFS
 } OPTIONAL ,
 dITFCS TFCS OPTIONAL,
 hsDSCHMacdFlows HS_DSCHMACdFlows OPTIONAL -- Rel-5 or later
Detailed Comments:
```

Type Name : CrlcConfigReq

Encoding Variation:

Comments: To request to setup, re_configure or release RLC entityThe Stop parameter indicates that the RLC

entity shall not transmit or receive RLC PDUs. The Continue parameter indicates that the RLC entity shall continue transmission and reception of RLC PDUs. When the RLC entity is stopped, the RLC timers are not affected. Triggered polls and status transmissions are delayed until the RLC

entity is continued.

Type Definition

CHOICE {
 setup RBInfo,
 reconfigure RBInfo,
 release NULL,
 sS_stop NULL,
 sS_continue NULL

Detailed Comments:

ASN.1 Type Definition

Type Name : DL_DPCHInfo

Encoding Variation:

Comments : The range for powerOffsetOfTPC_PO2 and powerOffsetOfTFCI_PO1 and

powerOffsetOfPILOT_PO3 is 0-6 dB, 0.25 dB per step.

Type Definition

SEQUENCE {

dl_CommonInformation DL_CommonInformation, dl_DPCH_InfoPerRL DL_DPCH_InfoPerRL, powerOffsetOfTFCI_PO1 INTEGER (0..24), powerOffsetOfTPC_PO2 INTEGER (0..24), powerOffsetOfPILOT_PO3 INTEGER (0..24),

dl_TxPower DL_TxPower, dl_TxPowerMax DL_TxPower,

dl_TxPowerMin DL_TxPower

Type Name : DL_DPCHInfo_r5

Encoding Variation:

Comments : Applicable Rel–5 or later

Type Definition

SEQUENCE {

dl_CommonInformation_r5, dl_DPCH_InfoPerRL DL_DPCH_InfoPerRL_r5, powerOffsetOfTFCI_PO1 INTEGER (0..24), powerOffsetOfTPC_PO2 INTEGER (0..24), powerOffsetOfPILOT_PO3 INTEGER (0..24), dl_TxPower_Dl_TxPower

dl_TxPower DL_TxPower, dl_TxPowerMax DL_TxPower, dl_TxPowerMin DL_TxPower

Detailed Comments:

ASN.1 Type Definition

Type Name : DL_TxPower

Encoding Variation:

Comments: Downlink Tx Power relative to PCPICH

Type Definition

INTEGER (-35..15)

Detailed Comments:

ASN.1 Type Definition

Type Name : DL_TxPower_PCPICH

Encoding Variation:

Comments : Absolute Tx Power of PCPICH

Type Definition

Detailed Comments:

ASN.1 Type Definition

Type Name : DPCHInfo

Encoding Variation:

Comments: The range for powerOffsetOfTPC_PO2 and powerOffsetOfTFCI_PO1 and

powerOffsetOfPILOT_PO3 is 0 dB to 6 dB, 0,25 dB per step.

Type Definition

SEQUENCE {

ul_DPCHInfo UL_DPCH_Info OPTIONAL, dl_DPCHInfo DL_DPCHInfo OPTIONAL

}

Type Name : DPCHInfo_r5

Encoding Variation:

Comments : Applicable Rel–5 or later

At least one of the first two fields shall be present.

Presence of hs_DPCCHInd (value = truevalue) means that the HS-DPCCH shall be configured in the uplink DPCH. If hs_DPCCHInd is absent no HS-DPCCH shall be configured in the uplink DPCH, or the configured HS-DPCCH shall be removed in the modify ASP. In the active set which has radio links from more than one cell the HS-DPCCH is configured only in the HS-DSCH

serving cell.

Three combinations are valid: ul_DPCH_Info only, dl_DPCHInfo only and ul_DPCH_Info +

hs_DPCCHInd.

Type Definition

```
SEQUENCE {
    ul_DPCHInfo UL_DPCH_Info_r5 OPTIONAL,
    dl_DPCHInfo DL_DPCHInfo_r5 OPTIONAL,
    hs_DPCCHInd HS_DPCCHInfo OPTIONAL
```

Detailed Comments:

ASN.1 Type Definition

Type Name : HS_DPCCHInfo

Encoding Variation:
Comments:

Type Definition

SEQUENCE {

cqi_RepetitionFactor CQI_RepetitionFactor,

ackNackRepetitionFactor ACK_NACK_repetitionFactor

}

Detailed Comments:

ASN.1 Type Definition

Type Name : HS_DSCHMACdFlows

Encoding Variation:

Comments : Applicable Rel–5 or later.

Within the ACK/NACK repetition period indicated by ackNackRepetitionFactor the SS shall not

transmit MAC-hs PDU's on HS-PDSCH.

Type Definition

SEQUENCE {

harqInfo HARQ_Info OPTIONAL,

addOrReconfMACdFlow SS_AddOrReconfMAC_dFlow OPTIONAL, ackNackRepetitionFactor ACK_NACK_repetitionFactor OPTIONAL

}

Type Name : HS_PDSCHInfo

Encoding Variation:

Comments : Applicable Rel–5 or later

When CHY_RL_Setup_REQ is called with CHOICE of hS_PDSCHInfo the SS shall not only

configure the HS_PDSCH but also the HS-SCCH;

The following HS-DSCH related parameters are passed to the SS implicitly by

HSDSCH_physical_layer_category: "Maximum number of HS-DSCH codes can be received by UE", "Minimum inter-TTI interval", "Maximum number of bits of an HS-DSCH transport block

within an HS-DSCH TTI" and "Total number of soft channel bits".

The HSDSCH_physical_Layer_category is also used for interpret the meaning of CQI value.

Type Definition

SEQUENCE{

 $hSDSCHP hysical Layer Category\ HSDSCH_physical_layer_category,$

h_RNTI H_RNTI,

dIHSPDSCHInformation DL_HSPDSCH_Information,

sttd_Indicator BOOLEAN,

hs_SCCH_TxPower DL_TxPower -- offset related to pilot bits on DL-DPCCH

-- (TS 25.433 subcluse 9.2.2.18I)

}

Detailed Comments:

ASN.1 Type Definition

Type Name: HyperFrameNumber

Encoding Variation:
Comments:

Type Definition

BIT STRING (SIZE (20))

Detailed Comments:

ASN.1 Type Definition

Type Name : Increment_Mode

Encoding Variation:
Comments:

Type Definition

ENUMERATED {incPerCFN_Cycle(0), notInc(1), incByOne_IncPerCFN_Cycle(2)}

Type Name: IntegrityActivationInfo

Encoding Variation:

Comments : Comment DL or UL integrity activation info.At the RRC message sequence numbers specified in the

ul_IntegProtActivationInfo the SS shall initialise COUNT-I for the SRB's indicated in the ul_IntegProtActivationInfo and start using the new configuration on uplink for the indicated SRB's.If the START value is omitted in the CRLC_SecurityMode_Config_REQ above COUNT-I

initialisation shall not be performed.

Type Definition

Type Definition

CHOICE {

 $integrity Protection Modeln fo\ Integrity Protection Modeln fo, ul_IntegProtActivation Info\ Integrity ProtActivation Info\ List$

Detailed Comments:

ASN.1 Type Definition

Type Name : IntegrityProtActivationInfoList

Encoding Variation:

Comments : List of SS IntegrityProtActivationInfo

Type Definition

SEQUENCE (SIZE (1..maxRB)) OF SS_IntegrityProtActivationTimeInfo

Detailed Comments:

ASN.1 Type Definition

Type Name : IntegrityResult

Encoding Variation:
Comments:

Type Definition

CHOICE {

integrityNotUsed NULL, integrityUsed IntegrityStatus

Detailed Comments:

ASN.1 Type Definition

Type Name : IntegrityStatus

Encoding Variation:
Comments:

Type Definition

ENUMERATED {
 i_pass(0),
 i_fail(1)

Type Name : Invalid_ActiveSetUpdate

Encoding Variation:

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE {
    r3 SEQUENCE {
        activeSetUpdate_r3 ActiveSetUpdate_r3_IEs,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    },
    later_than_r3 SEQUENCE {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
    }
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_CCCH_MsgShort

Encoding Variation:
Comments:

Type Definition

NULL

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_CellUpdateConfirm

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

ASN.1 Type Definition

: Invalid_DCCH_MsgShort
::
:
Type Definition

NULL

Type Name

Comments

Detailed Comments:

Encoding Variation:

ASN.1 Type Definition

Type Name : Invalid_DL_CCCH_MsgType

Encoding Variation:
Comments:

Type Definition

CHOICE {

invalid_cellUpdateConfirm [0] Invalid_CCCH_MsgShort, invalid_rrcConnectionReject [1] Invalid_CCCH_MsgShort, invalid_rrcConnectionRelease [2] Invalid_CCCH_MsgShort,

invalid_rrcConnectionSetup [3] Invalid_RRCConnectionSetup, -- Specific invalid message

invalid_uraUpdateConfirm [4] Invalid_UraUpdateConfirm,

invalid_extension [5] NULL,

unkown_Type_CCCH_message [6] Invalid_CCCH_MsgShort

Type Name : Invalid_DL_DCCH_MsgType

Encoding Variation:
Comments:

Type Definition

```
CHOICE {
invalid_activeSetUpdate [0] Invalid_ActiveSetUpdate,
invalid_assistanceDataDelivery [1] Invalid_DCCH_MsgShort,
invalid_cellChangeOrderFromUTRAN [2] Invalid_DCCH_MsgShort,
invalid_cellUpdateConfirm [3] Invalid_CellUpdateConfirm,
invalid_counterCheck [4] Invalid_DCCH_MsgShort,
invalid_downlinkDirectTransfer [5] Invalid_DownlinkDirectTransfer,
invalid_handoverFromUTRANCommand_GSM [6] Invalid_HandoverFromUTRANCommand_GSM,
invalid_handoverFromUTRANCommand_CDMA2000 [7] Invalid_DCCH_MsgShort,
invalid_measurementControl [8] Invalid_MeasurementControl,
invalid_pagingType2 [9] Invalid_DCCH_MsgShort,
invalid_physicalChannelReconfiguration [10] Invalid_PhysicalChannelReconfiguration,
invalid physicalSharedChannelAllocation [11] Invalid DCCH MsgShort,
invalid_radioBearerReconfiguration [12] Invalid_RadioBearerReconfiguration,
invalid_radioBearerRelease [13] Invalid_RadioBearerRelease,
invalid_radioBearerSetup [14] Invalid_RadioBearerSetup,
invalid_rrcConnectionRelease [15] Invalid_RRC_ConnectionRelease,
invalid_securityModeCommand [16] Invalid_SecurityModeCommand,
invalid_signallingConnectionRelease [17] Invalid_DCCH_MsgShort,
invalid_transportChannelReconfiguration [18] Invalid_TransportChannelReconfiguration,
invalid_transportFormatCombinationControl [19] Invalid_DCCH_MsgShort,
invalid_ueCapabilityEnquiry [20] Invalid_UECapabilityEnquiry, -- Specific invalid message
invalid_ueCapabilityInformationConfirm [21] Invalid_UECapabilityInformationConfirm, -- Specific invalid message
invalid_uplinkPhysicalChannelControl [22] Invalid_DCCH_MsgShort,
invalid_uraUpdateConfirm [23] Invalid_UraUpdateConfirm,
invalid_utranMobilityInformation [24] Invalid_UtranMobilityInformation,
invalid_extension [25] NULL,
unkown_Type_DCCH_message [26] Invalid_DCCH_MsgShort
```

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_DL_SHCCH_MsgType

Encoding Variation:
Comments:

Type Definition

CHOICE {

 $invalid_physical Shared Channel Allocation~[0]~Invalid_SHCCH_Message_short,$

extension [1] NULL,

unkown_Type_SHCCH_message [2] Invalid_SHCCH_Message_short

}

Type Name : Invalid_DownlinkDirectTransfer

Encoding Variation:

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        downlinkDirectTransfer_r3 DownlinkDirectTransfer_r3_IEs,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
    }
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_HandoverFromUTRANCommand_GSM

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        handoverFromUTRANCommand_GSM_r3 HandoverFromUTRANCommand_GSM_r3_IEs,
        laterNonCriticalExtensions SEQUENCE
    {
            handoverFromUTRANCommand_GSM_r3_add_ext BIT STRING OPTIONAL,
            nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
},
later_than_r3 SEQUENCE
{
    rrc_TransactionIdentifier RRC_TransactionIdentifier,
    criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
}
}
```

Type Name : Invalid_MeasurementControl

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_PhysicalChannelReconfiguration

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE

{
    r3 SEQUENCE
    {
        physicalChannelReconfiguration_r3 PhysicalChannelReconfiguration_r3_IEs,
        v3a0NonCriticalExtensions SEQUENCE
    {
            physicalChannelReconfiguration_v3a0ext PhysicalChannelReconfiguration_v3a0ext,
            nonCriticalExtensions SEQUENCE {} OPTIONAL
        } OPTIONAL
    }
    later_than_r3 SEQUENCE
    {
            rrc_TransactionIdentifier RRC_TransactionIdentifier,
            criticalExtensions BIT STRING (SIZE(8)) — INSTEAD OF SEQUENCE {}
    }
}
```

Type Name : Invalid_RRCConnectionSetup

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    rr3 SEQUENCE
    {
        rrcConnectionSetup_r3 RRCConnectionSetup_r3_IEs,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
    }
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_RRC_ConnectionRelease

Encoding Variation:

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        rrcConnectionRelease_r3 RRCConnectionRelease_r3_IEs,
        laterNonCriticalExtensions SEQUENCE
    {
            rrcConnectionRelease_r3_add_ext BIT STRING OPTIONAL,
            nonCriticalExtensions SEQUENCE {} OPTIONAL
        } OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
            rrc_TransactionIdentifier RRC_TransactionIdentifier,
            criticalExtensions BIT STRING (SIZE(8)) — instead of SEQUENCE {}
    }
}
```

Type Name : Invalid_RadioBearerReconfiguration

Encoding Variation:

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        radioBearerReconfiguration_r3 RadioBearerReconfiguration_r3_IEs,
        v3aoNonCriticalExtensions SEQUENCE
    {
            radioBearerReconfiguration_v3a0ext RadioBearerReconfiguration_v3a0ext,
            nonCriticalExtensions SEQUENCE {} OPTIONAL
        } OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
            rrc_TransactionIdentifier RRC_TransactionIdentifier,
            criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
    }
}

Detailed Comments:
```

ASN.1 Type Definition

Type Name : Invalid_RadioBearerRelease

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE

{
    r3 SEQUENCE
    {
        radioBearerRelease_r3 RadioBearerRelease_r3_IEs,
        v3a0NonCriticalExtensions SEQUENCE
    {
        radioBearerRelease_v3a0ext RadioBearerRelease_v3a0ext,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) — INSTEAD OF SEQUENCE {}
    }
}
```

Type Name : Invalid_RadioBearerSetup

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        radioBearerSetup_r3 RadioBearerSetup_r3_IEs,
        v3a0NonCriticalExtensions SEQUENCE
    {
        radioBearerSetup_v3a0ext RadioBearerSetup_v3a0ext,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    } OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) — INSTEAD OF SEQUENCE {}
    }
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_SHCCH_Message_short

Encoding Variation:
Comments:

Type Definition

CounterCheckResponse

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_SecurityModeCommand

Encoding Variation:

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        securityModeCommand_r3 SecurityModeCommand_r3_IEs,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
    }
}
```

Type Name : Invalid_TransportChannelReconfiguration

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        transportChannelReconfiguration_r3 TransportChannelReconfiguration_r3_IEs,
        v3a0NonCriticalExtensions SEQUENCE
    {
            transportChannelReconfiguration_v3a0ext TransportChannelReconfiguration_v3a0ext,
            nonCriticalExtensions SEQUENCE {} OPTIONAL
        } OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
            rrc_TransactionIdentifier RRC_TransactionIdentifier,
            criticalExtensions BIT STRING (SIZE(8)) — INSTEAD OF SEQUENCE {}
    }
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_UECapabilityEnquiry

Encoding Variation:

Comments: This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        ueCapabilityEnquiry_r3 UECapabilityEnquiry_r3_IEs,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) — INSTEAD OF SEQUENCE {}
    }
}
```

Type Name : Invalid_UECapabilityInformationConfirm

Encoding Variation:

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        ueCapabilityInformationConfirm_r3 UECapabilityInformationConfirm_r3_IEs,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
    }
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : Invalid_UraUpdateConfirm

Encoding Variation:

Comments : This invalid type should cause an undefined critical extension error

Type Definition

```
CHOICE
{
    r3 SEQUENCE
    {
        uraUpdateConfirm_r3 URAUpdateConfirm_r3_IEs,
        nonCriticalExtensions SEQUENCE {} OPTIONAL
    },
    later_than_r3 SEQUENCE
    {
        rrc_TransactionIdentifier RRC_TransactionIdentifier,
        criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}
    }
}
```

ASN.1 Type Definition Type Name : Invalid_UtranMobilityInformation **Encoding Variation:** Comments : This invalid type should cause an undefined critical extension error **Type Definition** CHOICE r3 SEQUENCE utranMobilityInformation_r3_UTRANMobilityInformation_r3_IEs, v3a0NonCriticalExtensions SEQUENCE utranMobilityInformation_v3a0ext UTRANMobilityInformation_v3a0ext_IEs, nonCriticalExtensions SEQUENCE {} OPTIONAL } OPTIONAL later_than_r3 SEQUENCE rrc_TransactionIdentifier RRC_TransactionIdentifier, criticalExtensions BIT STRING (SIZE(8)) -- INSTEAD OF SEQUENCE {}

ASN.1 Type Definition

Type Name : KeyCiphering
Encoding Variation :
Comments :

Type Definition

BIT STRING (SIZE (128))

Detailed Comments :

```
ASN.1 Type Definition

Type Name : LogicalChannelType
Encoding Variation :
Comments :

Type Definition

ENUMERATED {
    bCCH (0),
    pCCH (1),
    cCCH (2),
    cTCH (3),
    dCCH (4),
    dTCH (5),
    sHCCH (6)
}

Detailed Comments :
```

```
ASN.1 Type Definition

Type Name : MAC_HeaderManipulation
Encoding Variation :
Comments :

Type Definition

ENUMERATED
{
normalMacHeader (0),
omitMacHeader (1)
}

Detailed Comments :
```

```
ASN.1 Type Definition

Type Name : Mui
Encoding Variation :
Comments :

Type Definition

INTEGER (0..4095)

Detailed Comments :
```

```
ASN.1 Type Definition
Type Name
                 : PDSCHInfo
Encoding Variation:
Comments
                                             Type Definition
SEQUENCE {
fdd_tdd CHOICE {
 fdd SEQUENCE {
  pdsch_CodeMapping PDSCH_CodeMapping
 tdd SEQUENCE {
  -- pdsch-Identity PDSCH-Identity,
   -- pdsch-Info PDSCH-Info,
   -- pdsch-PowerControlInfo PDSCH-PowerControlInfo OPTIONAL
 }
dl_TxPower DL_TxPower
Detailed Comments:
```

```
ASN.1 Type Definition

Type Name : PICHInfo
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
pichinfo PICH_Info,
dI_TxPower PICH_PowerOffset,
sccpchId_associated INTEGER (0..31)
}

Detailed Comments :
```

```
ASN.1 Type Definition
Type Name
                  : PRACHInfo
Encoding Variation:
Comments
                                                Type Definition
SEQUENCE {
 fdd_tdd CHOICE {
  fdd SEQUENCE {
   preambleSignature AvailableSignatures,
   spreadingFactorForDataPart SF_PRACH,
   preamble Scrambling Code\ Preamble Scrambling Code\ Word Number,
   puncturingLimit PuncturingLimit,
   accessSlot AvailableSubChannelNumbers
  tdd SEQUENCE {
   -- timeSlot TimeSlot,
   -- spreadingCode SpreadingCode,
   -- midambleCode MidambleCode,
}
Detailed Comments:
```

```
ASN.1 Type Definition

Type Name : PayloadSize
Encoding Variation :
Comments :

Type Definition

INTEGER (0..4992)

Detailed Comments :
```

ASN.1 Type Definition

Type Name : PhysicalChannelIdentity
Encoding Variation :
Comments :

Type Definition

INTEGER (0..31)
Detailed Comments :

ASN.1 Type Definition

Type Name : PrimaryCCPCHInfo
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
sttd_Indicator BOOLEAN,
dl_TxPower DL_TxPower
-- timeSlot TimeSlot OPTIONAL,
-- burstType BurstType OPTIONAL,
-- offset Offset OPTIONAL,
-- repetitionPeriod RepetitionPeriod OPTIONAL,
-- repetitionLength RepetitionLength OPTIONAL,
}

Detailed Comments :

ASN.1 Type Definition

Type Name : PrimaryCPICHInfo
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
dI_TxPower_PCPICH DL_TxPower_PCPICH,
txdiversityIndicator BOOLEAN
}
Detailed Comments :

ASN.1 Type Definition

Type Name : PrimarySCHInfo
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
tstdIndicator BOOLEAN,
dI_TxPower DL_TxPower
}

Detailed Comments :

```
ASN.1 Type Definition

Type Name : RBInfo
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
    sS_rlc_Info OPTIONAL,
    rB_LogCH_Mapping RB_LogCH_Mapping
}

Detailed Comments :
```

ASN.1 Type Definition

Type Name : RB_LogCH_Mapping
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
 uLlogicalChannelIdentity LogicalChannelIdentity OPTIONAL,
 dLlogicalChannelIdentity LogicalChannelIdentity OPTIONAL,
 logicalChannelType LogicalChannelType OPTIONAL,
 cn_DomainIdentity CN_DomainIdentity OPTIONAL
}

Detailed Comments :

ASN.1 Type Definition

Type Name : RLC_IncMode
Encoding Variation :
Comments :

Type Definition

ENUMERATED {notInc(0), inc(1)}

Detailed Comments :

```
ASN.1 Type Definition

Type Name : RRC_Rel_Status
Encoding Variation :

Comments :

Type Definition

ENUMERATED {
    cell_Dch(0),
    cell_Fach_Dcch(1),
    cell_Fach_Ccch(2)
}

Detailed Comments :
```

ASN.1 Type Definition Type Name : RRC_SequenceNumber Encoding Variation : Comments : 4 bits long Type Definition INTEGER (0..15)

Detailed Comments:

ASN.1 Type Definition

Type Name : RRC_ServTested
Encoding Variation :
Comments :

Type Definition

ENUMERATED {
 speech (0),
 conversational_64k (1),
 streaming_57_6k (2),
 ps_Interactive (3),
 ps_Background (4)
}

Detailed Comments :

ASN.1 Type Definition

Type Name : RatType
Encoding Variation :
Comments : To select route between each channels

Type Definition

ENUMERATED {
fdd(0),
tdd(1)
}
Detailed Comments :

```
ASN.1 Type Definition

Type Name : RegOr_MO
Encoding Variation :

Comments :

Type Definition

ENUMERATED {
    est_Reg(0),
    est_MO(1),
    est_MT(2)
}

Detailed Comments :
```

Type Name : RoutingInfo

Encoding Variation:
Comments:

Type Definition

CHOICE {

physicalChannelIdentity INTEGER (0..31), transportChannelIdentity TransportChannelIdentity, logicalChannelIdentity LogicalChannelIdentity, rB_Identity INTEGER (-31..32), cn_DomainIdentity CN_DomainIdentity

Detailed Comments:

ASN.1 Type Definition

Type Name : SCCPCHSlotFormat

Encoding Variation:

Comments : Reference to TS25.211

Type Definition

INTEGER (0..17)

```
ASN.1 Type Definition
Type Name
                   : SIB
Encoding Variation:
Comments
                   : Union of all system information blocks
                                                  Type Definition
CHOICE {
 sIB1 SysInfoType1,
 sIB2 SysInfoType2,
 sIB3 SysInfoType3,
 sIB4 SysInfoType4,
 sIB5 SysInfoType5,
 sIB6 SysInfoType6,
 sIB7 SysInfoType7,
 sIB8 SysInfoType8,
 sIB9 SysInfoType9,
 sIB10 SysInfoType10,
 sIB11 SysInfoType11,
 sIB12 SysInfoType12,
 sIB13 SysInfoType13,
 sIB13_1 SysInfoType13_1,
 sIB13_2 SysInfoType13_2,
 sIB13_3 SysInfoType13_3,
 sIB13_4 SysInfoType13_4,
 sIB14 SysInfoType14,
 sIB15 SysInfoType15,
 sIB15_1 SysInfoType15_1,
 slB15_2 SysInfoType15_2,
 sIB15_3 SysInfoType15_3,
 sIB16 SysInfoType16,
 sIB17 SysInfoType17,
 sIB18 SysInfoType18,
 mIB MasterInformationBlock,
 sB1 SysInfoTypeSB1,
 sB2 SysInfoTypeSB2
Detailed Comments:
```

```
ASN.1 Type Definition

Type Name : SS_ActivationTime 
Encoding Variation : 
Comments : 

Type Definition

CHOICE { activationCFN ActivationTime, activateNow NULL } 
Detailed Comments :
```

Type Name : SS_AddOrReconfMAC_dFlow

Encoding Variation:

Comments : Applicable Rel–5 or later.

Type Definition

```
SEQUENCE {
    mac_hs_AddReconfQueue_List SEQUENCE (SIZE(1..maxQueueIDs)) OF SEQUENCE {
    mac_hs_AddReconfQueue SS_MAC_hs_AddReconfQueue } OPTIONAL,
    mac_hs_DelQueue_List SEQUENCE (SIZE(1..maxQueueIDs)) OF SEQUENCE {
    mac_hsQueueId INTEGER(0..7)
    } OPTIONAL
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : SS_DL_LogicalChannelMapping

Encoding Variation:

Comments: If the macHeaderManipulation field is 'normalMacHeader', then data transmitted on this logical

channel shall have an appropriate MAC header added before it is sent to lower layers for

transmission.

If the macHeaderManipulation field is 'OmitMacHeader', then data transmitted on this logical channel shall not have any MAC header information added, even if the logical channel type and mapping indicates that there should be a MAC header present. This allows the entire MAC PDU to

be specified in the TTCN, so individual fields in the MAC header can be modified. When used for logical channel to MAC_d flow mapping rlc_SizeList should choose

RLC_SizeExplicitList.

Type Definition

```
SEQUENCE {
    macHeaderManipulation MAC_HeaderManipulation,
    dl_TransportChannelType SS_DL_TransportChannelType,
    logicalChannelIdentity LogicalChannelIdentity,
    logicalChannelType LogicalChannelType ,
    rlc_SizeList CHOICE {
        allSizes NULL,
        configured NULL,
        explicitList RLC_SizeExplicitList
    },
    mac_LogicalChannelPriority MAC_LogicalChannelPriority OPTIONAL
}
```

```
ASN.1 Type Definition

Type Name : SS_DL_RLC_Mode
Encoding Variation :
Comments :

Type Definition

SEQUENCE {
dI_PayloadSize PayloadSize OPTIONAL,
dI_RLCModeInfo UL_RLC_Mode
}

Detailed Comments :
```

```
ASN.1 Type Definition

Type Name : SS_DL_TransportChannelType
Encoding Variation :

Comments :

Type Definition

ENUMERATED {
    dch(0),
    fach(1),
    bch(2),
    pch(3),
    dsch(4),
    hsdsch(5) -- Rel-5 or later
}

Detailed Comments :
```

```
ASN.1 Type Definition

Type Name : SS_IntegrityProtActivationTimeInfo
Encoding Variation :
Comments : Omitting rrc_MessageSequenceNumber means activation time set to "now".

Type Definition

SEQUENCE
{
rb_Identity INTEGER (-31..32),
rrc_MessageSequenceNumber RRC_MessageSequenceNumber OPTIONAL
}

Detailed Comments :
```

Type Name : SS_MAC_hs_AddReconfQueue

Encoding Variation:

Comments : Applicable Rel–5 or later.

When writing TTCN constraints the TTCN writer shall set the priority of PriorityQueue in this object correctly according to the priority of logical channels which is mapped on to this priority queue. And please note that : the range of priority of PriorityQueue is from 0 to 7 and 0 is the lowest

priority.

Type Definition

```
SEQUENCE {
    mAChsAddReconfQueue MAC_hs_AddReconfQueue,
    logicalChannelList SEQUENCE OF LogicalChannelIdentity,
    -- logical channels mapping onto the priority queue
    -- which is specified in maChsAddReconfQueue
    priority INTEGER(0..7),
    discardTimer ENUMERATED { v20(0),v40(1),v60(2),v80(3),v100(4),
        v120(5),v140(6),v160(7),v180(8),v200(9),
        v250(10),v300(11),v400(12),v500(13),
        v750(14),v1000(15),v1250(16),v1500(17),
        v1750(18),v2000(19),v2500(20),v3000(21),
        v3500(22),v4000(23),v4500(24),v5000(25),
        v7500(26)
    } OPTIONAL
}
```

Detailed Comments:

ASN.1 Type Definition

Type Name : SS_RLC_Info

Encoding Variation:
Comments:

Type Definition

```
SEQUENCE {
    sS_ul_RLC_Mode DL_RLC_Mode OPTIONAL,
    sS_dl_RLC_Mode SS_DL_RLC_Mode OPTIONAL,
```

sS_ul_RLC_Mode_r5 DL_RLC_Mode_r5 OPTIONAL -- Rel-5 or later

}

Type Name : SS_UL_LogicalChannelMapping

Encoding Variation:

Comments

: If the macHeaderManipulation field is 'normalMacHeader', then data received on the transport channel supporting this logical channel shall have it's MAC header inspected to determine the appropriate routing, and removed as normal. The MAC SDU shall be passed to the appropriate logical channel.

If the macHeaderManipulation field field is 'OmitMacHeader', then data received on the transport channel supporting this logical channel shall have it's MAC header inspected to determine the appropriate routing, but the MAC layer shall not remove the MAC header. Thus the entire MAC PDU shall be passed to the appropriate logical channel, and the MAC header can be checked by the

TTCN.

Type Definition

SEQUENCE {

macHeaderManipulation MAC_HeaderManipulation, ul_TransportChannelType SS_UL_TransportChannelType, logicalChannelIdentity LogicalChannelIdentity, logicalChannelType LogicalChannelType

Detailed Comments:

ASN.1 Type Definition

Type Name : SS_UL_TransportChannelType

Encoding Variation:
Comments:

Type Definition

ENUMERATED {
dch(0),
rach(1),
cpch(2),
usch(3)

Type Name : SecondaryCCPCHInfo

Encoding Variation:

Comments: The range for powerOffsetOfTFCI_PO1 and powerOffsetOfPILOT_PO3 is 0–6 dB, 0.25 dB per

step.

Type Definition

```
SEQUENCE {
scramblingCode INTEGER(0..15),
{\sf dl\_ChannelizationCode\ SF256\_AndCodeNumber,}
 sCCPCHSlotFormat SCCPCHSlotFormat,
timingOffset INTEGER (0..149),
positionFixedOrFlexible PositionFixedOrFlexible,
 sttd_Indicator BOOLEAN,
 dl_TxPower DL_TxPower,
powerOffsetOfTFCI_PO1 INTEGER (0..24),
powerOffsetOfPILOT_PO3 INTEGER (0..24)
 -- timeSlot TimeSlot OPTIONAL,
 -- burstType BurstType OPTIONAL,
 -- midambleShift MidambleShift OPTIONAL,
 -- offset Offset OPTIONAL,
 -- repetitionPeriod RepetitionPeriod OPTIONAL,
 -- repetitionLength RepetitionLength OPTIONAL,
 -- tFCIPresence TFCIPresence OPTIONAL,
```

Detailed Comments:

ASN.1 Type Definition

Type Name : SecondaryCPICHInfo

Encoding Variation:
Comments:

Type Definition

SEQUENCE {

scramblingCode INTEGER(0..63),

dl_ChannelizationCode SF512_AndCodeNumber,

dl_TxPower DL_TxPower

Detailed Comments:

ASN.1 Type Definition

Type Name : SecondarySCHInfo

Encoding Variation:
Comments:

Type Definition

SEQUENCE {

tstdIndicator BOOLEAN, dI_TxPower DL_TxPower

}

ASN.1 Type Definition

Type Name : SecurityInfo

Encoding Variation:

Comments : The integrityKey is not applicable to MAC

Type Definition

```
SEQUENCE {
```

cn_DomainIdentity CN_DomainIdentity, startValue START_Value OPTIONAL,

cipheringKey BIT STRING (SIZE (128)) OPTIONAL, integrityKey BIT STRING (SIZE (128)) OPTIONAL. gsmCipheringKey BIT STRING (SIZE (64)) OPTIONAL

Detailed Comments: When the SS receives SecurityInfo, the SS first stores the contents. The SecurityInfo contents is not activated ion of the contents follows until receiving the subsequent ASP,

CRLC_Ciphering_Activate_REQ, CMAC_Ciphering_Activate_REQ or

CRLC_Integrity_Activate_REQ. Omitted fields of SecurityInfo shall not be affected by the subsequent ASP at the activation time.EXAMPLE: Omitting of startValue indicates not to re-initialize the relevant COUNT?C or COUNT-I, omitting of cipheringKey indicates that the

current ciphering key is valid..

ASN.1 Type Definition

Type Name : SegmentsOfSysInfoBlock

Encoding Variation:

Comments : The structure holding the segments of a MIB/SIB/SB, maximum number of segments is 16.

Type Definition

```
SEQUENCE
```

segCount INTEGER (1..16), seg1 BIT STRING (SIZE (1..226)),

seg2 BIT STRING (SIZE (1..222)) OPTIONAL, seg3 BIT STRING (SIZE (1..222)) OPTIONAL,

seg4 BIT STRING (SIZE (1..222)) OPTIONAL,

seg5 BIT STRING (SIZE (1..222)) OPTIONAL, seg6 BIT STRING (SIZE (1..222)) OPTIONAL,

seg7 BIT STRING (SIZE (1..222)) OPTIONAL,

seg8 BIT STRING (SIZE (1..222)) OPTIONAL, seg9 BIT STRING (SIZE (1..222)) OPTIONAL,

seg10 BIT STRING (SIZE (1..222)) OPTIONAL,

seg11 BIT STRING (SIZE (1..222)) OPTIONAL, seg12 BIT STRING (SIZE (1..222)) OPTIONAL,

seg13 BIT STRING (SIZE (1..222)) OPTIONAL,

seg14 BIT STRING (SIZE (1..222)) OPTIONAL, seg15 BIT STRING (SIZE (1..222)) OPTIONAL,

seg16 BIT STRING (SIZE (1..222)) OPTIONAL

Detailed Comments:

ASN.1 Type Definition

Type Name : Tcell Encoding Variation :

Comments : Timing offset between reference channel and this channel (unit : 256 chips)

Type Definition

INTEGER (0..38399)

Detailed Comments:

ASN.1 Type Definition

Type Name : TrCHInfo

Encoding Variation:

Comments: The same TFCS information should be provided to the PHY and MAC layers at all times. When a

CMAC_Config_REQ is used to configure the MAC layer, a corresponding

CPHY_TrCH_Config_REQ should be sent to the PHY layer to ensure that the configuration is

consistent.

For MAC-hs configuration:

When ulconnectedTrCHList, ulTFCS, dlconnectedTrCHList and dlTFCS are omitted this ASP

configures an MAC-hs entity.

Type Definition

```
SEQUENCE
```

{

ulconnectedTrCHList SEQUENCE (SIZE (1..maxulTrCH)) OF SEQUENCE {

trchid TransportChannelIdentity,

transportChannelInfo CommonOrDedicatedTFS

} OPTIONAL,

ultfcs tfcs optional,

dlconnectedTrCHList SEQUENCE (SIZE (1..maxdlTrCH)) OF SEQUENCE {

trchid TransportChannelIdentity,

transportChannelInfo CommonOrDedicatedTFS

} OPTIONAL,

dITFCS TFCS OPTIONAL,

 $hs DSCHMacdFlows\ HS_DSCHMACdFlows\ OPTIONAL\ --\ Rel-5\ or\ later$

Detailed Comments :

ASN.1 Type Definition

Type Name : TrCH_LogCHMappingList

Encoding Variation:

Comments : maxLogCHperTrCH = 8

Type Definition

SEQUENCE (SIZE (1..maxLogCHperTrCH)) OF TrCH_LogicalChannelMapping

Detailed Comments:

```
ASN.1 Type Definition
Type Name
                  : TrCH_LogCHMappingList1
Encoding Variation:
Comments
                  : maxulTrCH = maxdlTrCH = 16
                                               Type Definition
SEQUENCE
 ulconnectedTrCHList SEQUENCE (SIZE (1..maxulTrCH)) OF SEQUENCE {
  trchid TransportChannelldentity,
  trCH_LogCHMappingList TrCH_LogCHMappingList} OPTIONAL,
 dlconnectedTrCHList SEQUENCE (SIZE (1..maxdlTrCH)) OF SEQUENCE {
  trchid TransportChannelldentity,
  trCH\_LogCHMappingList\ TrCH\_LogCHMappingList\}\ OPTIONAL,
 dlconnectedMACdFlows SEQUENCE (SIZE (1..8)) OF SEQUENCE {
  mac_dFlowId MAC_d_FlowIdentity,
  trCH_LogCHMappingList TrCH_LogCHMappingList
 } OPTIONAL -- Rel-5 or later
Detailed Comments:
```

```
ASN.1 Type Definition

Type Name : TrCH_LogicalChannelMapping
Encoding Variation :

Comments : When used for logical channel to MAC_d flow mapping dl_LogicalChannelMapping shall be chosen,

Type Definition

SEQUENCE {
    logicalChannel_Mapping CHOICE {
        ul_LogicalChannelMapping SS_UL_LogicalChannelMapping,
        dl_LogicalChannelMapping SS_DL_LogicalChannelMapping
      },
      rB_Identity INTEGER (-31..32) OPTIONAL,
      cn_DomainIdentity CN_DomainIdentity OPTIONAL
    }

Detailed Comments :
```

```
ASN.1 Type Definition

Type Name : TrChConfigType
Encoding Variation :
Comments :

Type Definition

CHOICE {
    nonDch NULL,
    dch ENUMERATED {normal(0), softHO(1)}}

Detailed Comments :
```

ASN.1 Type Definition

Type Name : UE_Info

Encoding Variation:

Comments : The value of c_RNTI_DSCH_RNTI is 16 bits, used either for C-RNTI or DSCH-RNTI. DSCH is

configured if the physical channel in CMAC_config_REQ is a PDSCH. Otherwise, C-RNTI is applied. For MAC-hs configuration both u_RNTI and c_RNTI_DSCH_RNTI are omitted.

Type Definition

SEQUENCE {

u_RNTI U_RNTI OPTIONAL, c_RNTI C_RNTI OPTIONAL

}

Detailed Comments:

ASN.1 Type Definition

Type Name : UE_OperationMode

Encoding Variation:
Comments:

Type Definition

ENUMERATED { opModeA (0), opModeC (1) }

Detailed Comments:

	ASN.1 Type Definitions By Reference			
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
DL_DCCH_MessageT	DL-DCCH-MessageT	Class-definitions		
ype	ype			
UL_DCCH_MessageT ype	UL-DCCH-MessageT ype	Class-definitions		
DL_CCCH_MessageT ype	DL-CCCH-MessageT ype	Class-definitions		
UL_CCCH_MessageT ype	UL-CCCH-MessageT ype	Class-definitions		
PCCH_MessageType	PCCH-MessageType	Class-definitions		
DL_SHCCH_Message Type	DL-SHCCH-Messag eType	Class-definitions		
UL_SHCCH_Message Type	UL-SHCCH-Messag eType	Class-definitions		
BCCH_FACH_Messa geType	BCCH-FACH-Messa geType	Class-definitions		
ActiveSetUpdate	ActiveSetUpdate	Class-definitions		
ActiveSetUpdate_r3_I Es	ActiveSetUpdate-r3- IEs	Class-definitions		
ActiveSetUpdate_v4b 0ext_IEs	ActiveSetUpdate-v4b 0ext-IEs	Class-definitions		
ActiveSetUpdate_v59 0ext_IEs	ActiveSetUpdate-v59 0ext-IEs	Class-definitions		
ActiveSetUpdateCom plete	ActiveSetUpdateCom plete	Class-definitions		
ActiveSetUpdateFailur e	ActiveSetUpdateFailur e	Class-definitions		
AssistanceDataDeliver y	AssistanceDataDeliver y	Class-definitions		
AssistanceDataDeliver y_r3_IEs	AssistanceDataDeliver y-r3-IEs	Class-definitions		
AssistanceDataDeliver y_v3a0ext	AssistanceDataDeliver y-v3a0ext	Class-definitions		
AssistanceDataDeliver y_v4b0ext_IEs	AssistanceDataDeliver y-v4b0ext-IEs	Class-definitions		
CellChangeOrderFrom UTRAN	CellChangeOrderFrom UTRAN	Class-definitions		
CellChangeOrderFrom UTRAN_r3_IEs	CellChangeOrderFrom UTRAN-r3-IEs	Class-definitions		
CellChangeOrderFrom UTRAN_v590ext_IEs	CellChangeOrderFrom UTRAN-v590ext-IEs	Class-definitions		
CellChangeOrderFrom UTRANFailure	CellChangeOrderFrom UTRANFailure	Class-definitions		
CellChangeOrderFrom UTRANFailure_r3_IEs	CellChangeOrderFrom UTRANFailure-r3-lEs	Class-definitions		
CellUpdate	CellUpdate	Class-definitions		
CellUpdate_v590ext	CellUpdate-v590ext	Class-definitions		
CellUpdateConfirm	CellUpdateConfirm	Class-definitions		
CellUpdateConfirm_r3 _IEs	CellUpdateConfirm-r 3-IEs	Class-definitions		
CellUpdateConfirm_v 3a0ext	CellUpdateConfirm-v 3a0ext	Class-definitions		
CellUpdateConfirm_v 4b0ext_IEs	CellUpdateConfirm-v 4b0ext-IEs	Class-definitions		

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
CellUpdateConfirm_v 590ext_IEs	CellUpdateConfirm-v 590ext-IEs	Class-definitions		
CellUpdateConfirm_r4 _IEs	CellUpdateConfirm-r 4-IEs	Class-definitions		
CellUpdateConfirm_r5 _IEs	CellUpdateConfirm-r 5-IEs	Class-definitions		
CellUpdateConfirm_CCCH	CellUpdateConfirm-C CCH	Class-definitions		
CounterCheck	CounterCheck	Class-definitions		
CounterCheck_r3_IEs	CounterCheck-r3-IE s	Class-definitions		
CounterCheckRespon se	CounterCheckRespon se	Class-definitions		
DownlinkDirectTransfe r	DownlinkDirectTransfe r	Class-definitions		
DownlinkDirectTransfe r_r3_IEs	DownlinkDirectTransfe r-r3-IEs	Class-definitions		
HandoverToUTRANC omplete	HandoverToUTRANC omplete	Class-definitions		
InitialDirectTransfer	InitialDirectTransfer	Class-definitions		
InitialDirectTransfer_v 3a0ext	InitialDirectTransfer-v 3a0ext	Class-definitions		
InitialDirectTransfer_v 590ext	InitialDirectTransfer-v 590ext	Class-definitions		
HandoverFromUTRAN Command_GSM	HandoverFromUTRAN Command-GSM	Class-definitions		
HandoverFromUTRAN Command_GSM_r3_I Es	HandoverFromUTRAN Command-GSM-r3-I Es	Class-definitions		
HandoverFromUTRAN Command_GERANIu	HandoverFromUTRAN Command-GERANIu	Class-definitions		
HandoverFromUTRAN Command_GERANIu_ r5_IEs	HandoverFromUTRAN Command-GERANIu -r5-IEs	Class-definitions		
HandoverFromUTRAN Command_CDMA200 0	HandoverFromUTRAN Command-CDMA200 0	Class-definitions		
HandoverFromUTRAN Command_CDMA200 0_r3_IEs	HandoverFromUTRAN Command-CDMA200 0-r3-IEs	Class-definitions		
HandoverFromUTRAN Failure	HandoverFromUTRAN Failure	Class-definitions		
HandoverFromUtranF ailure_v590ext_IEs	HandoverFromUtranF ailure-v590ext-IEs	Class-definitions		
MeasurementControl	MeasurementControl	Class-definitions		
MeasurementControl_ r3_IEs	MeasurementControl- r3-IEs	Class-definitions		
MeasurementControl_ v390ext	MeasurementControl- v390ext	Class-definitions		
MeasurementControl_ v3a0ext	MeasurementControl- v3a0ext	Class-definitions		
MeasurementControl_ r4_IEs	MeasurementControl- r4-IEs	Class-definitions		

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
MeasurementControl_ v590ext_IEs	MeasurementControl- v590ext-IEs	Class-definitions		
MeasurementControl_ v5b0ext_IEs	MeasurementControl- v5b0ext-IEs	Class-definitions		
MeasurementControlF ailure	MeasurementControlF ailure	Class-definitions		
MeasurementControlF ailure_v590ext_IEs	MeasurementControlF ailure-v590ext-IEs	Class-definitions		
MeasurementReport	MeasurementReport	Class-definitions		
MeasurementReport_v 390ext	MeasurementReport- v390ext	Class-definitions		
MeasurementReport_v 4b0ext_IEs	MeasurementReport- v4b0ext-IEs	Class-definitions		
MeasurementReport_v 590ext_IEs	MeasurementReport- v590ext-IEs	Class-definitions		
MeasurementReport_v 5b0ext_IEs	MeasurementReport- v5b0ext-IEs	Class-definitions		
PagingType1	PagingType1	Class-definitions		
PagingType1_v590ext _IEs	PagingType1-v590ext -IEs	Class-definitions		
PagingType2	PagingType2	Class-definitions		
PhysicalChannelRecon figuration	PhysicalChannelRecon figuration	Class-definitions		
PhysicalChannelRecon figuration_r3_IEs	PhysicalChannelRecon figuration-r3-IEs	Class-definitions		
PhysicalChannelRecon figuration_v3a0ext	PhysicalChannelRecon figuration-v3a0ext	Class-definitions		
PhysicalChannelRecon figuration_v4b0ext_IE s	PhysicalChannelRecon figuration-v4b0ext-I Es	Class-definitions		
PhysicalChannelRecon figuration_v590ext_IE s	PhysicalChannelRecon figuration-v590ext-l Es	Class-definitions		
PhysicalChannelRecon figuration_r4_IEs	PhysicalChannelRecon figuration-r4-IEs	Class-definitions		
PhysicalChannelRecon figuration_r5_IEs	PhysicalChannelRecon figuration-r5-IEs	Class-definitions		
PhysicalChannelRecon figurationComplete	PhysicalChannelRecon figurationComplete	Class-definitions		
PhysicalChannelRecon figurationFailure	PhysicalChannelRecon figurationFailure	Class-definitions		
PhysicalSharedChann elAllocation	PhysicalSharedChann elAllocation	Class-definitions		
PhysicalSharedChann elAllocation_r3_IEs	PhysicalSharedChann elAllocation-r3-IEs	Class-definitions		
PhysicalSharedChann elAllocation_r4_IEs	PhysicalSharedChann elAllocation-r4-IEs	Class-definitions		
PUSCHCapacityRequ est	PUSCHCapacityRequ est	Class-definitions		
PUSCHCapacityRequ est_v590ext	PUSCHCapacityRequ est-v590ext	Class-definitions		
RadioBearerReconfigu ration	RadioBearerReconfigu ration	Class-definitions		

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
RadioBearerReconfigu ration_r3_IEs	RadioBearerReconfigu ration-r3-IEs	Class-definitions		
RadioBearerReconfigu ration_v3a0ext	RadioBearerReconfigu ration–v3a0ext	Class-definitions		
RadioBearerReconfigu ration_v4b0ext_IEs	RadioBearerReconfigu ration–v4b0ext–IEs	Class-definitions		
RadioBearerReconfigu ration_v590ext_IEs	RadioBearerReconfigu ration–v590ext–IEs	Class-definitions		
RadioBearerReconfigu ration_r4_IEs	RadioBearerReconfigu ration–r4–IEs	Class-definitions		
RadioBearerReconfigu ration_r5_IEs	RadioBearerReconfigu ration–r5–IEs	Class-definitions		
RadioBearerReconfigu rationComplete	RadioBearerReconfigu rationComplete	Class-definitions		
RadioBearerReconfigu rationFailure	RadioBearerReconfigu rationFailure	Class-definitions		
RadioBearerRelease	RadioBearerRelease	Class-definitions		
RadioBearerRelease_r 3_IEs	RadioBearerRelease-r 3-IEs	Class-definitions		
RadioBearerRelease_v 3a0ext	RadioBearerRelease-v 3a0ext	Class-definitions		
RadioBearerRelease_v 4b0ext_IEs	RadioBearerRelease-v 4b0ext-IEs	Class-definitions		
RadioBearerRelease_v 590ext_IEs	RadioBearerRelease-v 590ext-IEs	Class-definitions		
RadioBearerRelease_r 4_IEs	RadioBearerRelease-r 4-IEs	Class-definitions		
RadioBearerRelease_r 5_IEs	RadioBearerRelease-r 5-IEs	Class-definitions		
RadioBearerReleaseCo mplete	RadioBearerReleaseCo mplete	Class-definitions		
RadioBearerReleaseFail ure	RadioBearerReleaseFail ure	Class-definitions		
RadioBearerSetup	RadioBearerSetup	Class-definitions		
RadioBearerSetup_r3_ IEs	RadioBearerSetup-r3 -IEs	Class-definitions		
RadioBearerSetup_v3 a0ext	RadioBearerSetup-v3 a0ext	Class-definitions		
RadioBearerSetup_v4 b0ext_IEs	RadioBearerSetup-v4 b0ext-IEs	Class-definitions		
RadioBearerSetup_v5 90ext_IEs	RadioBearerSetup-v5 90ext-IEs	Class-definitions		
RadioBearerSetup_r4_ IEs	RadioBearerSetup-r4 -IEs	Class-definitions		
RadioBearerSetup_r5_ IEs	RadioBearerSetup-r5 -IEs	Class-definitions		
RadioBearerSetupCom plete	RadioBearerSetupCom plete	Class-definitions		
RadioBearerSetupFailu re	RadioBearerSetupFailu re	Class-definitions		
RRCConnectionReject	RRCConnectionReject	Class-definitions		
RRCConnectionReject _r3_IEs	RRCConnectionReject –r3–IEs	Class-definitions		

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
RRCConnectionReleas	RRCConnectionReleas	Class-definitions			
e RRCConnectionReleas e_r3_IEs	e RRCConnectionReleas e-r3-IEs	Class-definitions			
RRCConnectionReleas e_r4_IEs	RRCConnectionReleas e-r4-IEs	Class-definitions			
RRCConnectionReleas e_CCCH	RRCConnectionReleas e-CCCH	Class-definitions			
RRCConnectionReleas e_CCCH_r3_IEs	RRCConnectionReleas e-CCCH-r3-IEs	Class-definitions			
RRCConnectionReleas e_CCCH_r4_IEs	RRCConnectionReleas e-CCCH-r4-IEs	Class-definitions			
RRCConnectionReleas e_CCCH_r5_IEs	RRCConnectionReleas e-CCCH-r5-IEs	Class-definitions			
RRCConnectionReleas eComplete	RRCConnectionReleas eComplete	Class-definitions			
RRCConnectionReque st	RRCConnectionReque st	Class-definitions			
RRCConnectionReque st_v3d0ext_IEs	RRCConnectionReque st-v3d0ext-IEs	Class-definitions			
RRCConnectionReque st_v4b0ext_IEs	RRCConnectionReque st-v4b0ext-IEs	Class-definitions			
RRCConnectionReque st_v590ext_IEs	RRCConnectionReque st-v590ext-IEs	Class-definitions			
RRCConnectionSetup	RRCConnectionSetup	Class-definitions			
RRCConnectionSetup _r3_IEs	RRCConnectionSetup -r3-IEs	Class-definitions			
RRCConnectionSetup _v4b0ext_IEs	RRCConnectionSetup -v4b0ext-IEs	Class-definitions			
RRCConnectionSetup _v590ext_IEs	RRCConnectionSetup -v590ext-IEs	Class-definitions			
RRCConnectionSetup _r4_IEs	RRCConnectionSetup -r4-IEs	Class-definitions			
RRCConnectionSetup _r5_IEs	RRCConnectionSetup -r5-IEs	Class-definitions			
RRCConnectionSetup Complete	RRCConnectionSetup Complete	Class-definitions			
RRCConnectionSetup Complete_v370ext	RRCConnectionSetup Complete-v370ext	Class-definitions			
RRCConnectionSetup Complete_v380ext_IE s	RRCConnectionSetup Complete-v380ext-I Es	Class-definitions			
RRCConnectionSetup Complete_v3a0ext_IE s	RRCConnectionSetup Complete-v3a0ext-I Es	Class-definitions			
RRCConnectionSetup Complete_v3g0ext_IE s	RRCConnectionSetup Complete-v3g0ext-I Es	Class-definitions			
RRCConnectionSetup Complete_v4b0ext_IE s	RRCConnectionSetup Complete-v4b0ext-I Es	Class-definitions			
RRCConnectionSetup Complete_v590ext_IE s	RRCConnectionSetup Complete-v590ext-I Es	Class-definitions			

Continued from previous pa	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
RRCStatus	RRCStatus	Class-definitions			
SecurityModeComman d	SecurityModeComman d	Class-definitions			
SecurityModeComman d_r3_IEs	SecurityModeComman d-r3-IEs	Class-definitions			
SecurityModeComplet e	SecurityModeComplet e	Class-definitions			
SecurityModeFailure	SecurityModeFailure	Class-definitions			
SignallingConnectionR elease	SignallingConnectionR elease	Class-definitions			
SignallingConnectionR elease_r3_IEs	SignallingConnectionR elease-r3-IEs	Class-definitions			
SignallingConnectionR eleaseIndication	SignallingConnectionR eleaseIndication	Class-definitions			
SystemInformation_B CH	SystemInformation-B CH	Class-definitions			
SystemInformation_F ACH	SystemInformation–F ACH	Class-definitions			
FirstSegment	FirstSegment	Class-definitions			
FirstSegmentShort	FirstSegmentShort	Class-definitions			
SubsequentSegment	SubsequentSegment	Class-definitions			
LastSegment	LastSegment	Class-definitions			
LastSegmentShort	LastSegmentShort	Class-definitions			
CompleteSIB_List	CompleteSIB-List	Class-definitions			
CompleteSIB	CompleteSIB	Class-definitions			
CompleteSIBshort	CompleteSIBshort	Class-definitions			
SystemInformationCh angeIndication	SystemInformationCh angeIndication	Class-definitions			
TransportChannelRec onfiguration	TransportChannelRec onfiguration	Class-definitions			
TransportChannelRec onfiguration_r3_IEs	TransportChannelRec onfiguration-r3-IEs	Class-definitions			
TransportChannelRec onfiguration_v3a0ext	TransportChannelRec onfiguration-v3a0ext	Class-definitions			
TransportChannelRec onfiguration_v4b0ext _IEs	TransportChannelRec onfiguration-v4b0ext -IEs	Class-definitions			
TransportChannelRec onfiguration_v590ext _IEs	TransportChannelRec onfiguration-v590ext -IEs	Class-definitions			
TransportChannelRec onfiguration_r4_IEs	TransportChannelRec onfiguration-r4-IEs	Class-definitions			
TransportChannelRec onfiguration_r5_IEs	TransportChannelRec onfiguration-r5-IEs	Class-definitions			
TransportChannelRec onfigurationComplete	TransportChannelRec onfigurationComplete	Class-definitions			
TransportChannelRec onfigurationFailure	TransportChannelRec onfigurationFailure	Class-definitions			
TransportFormatCom binationControl	TransportFormatCom binationControl	Class-definitions			
TransportFormatCom binationControlFailure	TransportFormatCom binationControlFailure	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UECapabilityEnquiry	UECapabilityEnquiry	Class-definitions			
UECapabilityEnquiry_r 3_IEs	UECapabilityEnquiry– r3–IEs	Class-definitions			
UECapabilityEnquiry_ v4b0ext_IEs	UECapabilityEnquiry– v4b0ext–IEs	Class-definitions			
UECapabilityEnquiry_ v590ext_IEs	UECapabilityEnquiry– v590ext–IEs	Class-definitions			
UECapabilityInformati on	UECapabilityInformati on	Class-definitions			
UECapabilityInformati on_v370ext	UECapabilityInformati on–v370ext	Class-definitions			
UECapabilityInformati on_v380ext_IEs	UECapabilityInformati on-v380ext-IEs	Class-definitions			
UECapabilityInformati on_v3a0ext_IEs	UECapabilityInformati on-v3a0ext-IEs	Class-definitions			
UECapabilityInformati on_v4b0ext	UECapabilityInformati on-v4b0ext	Class-definitions			
UECapabilityInformati on_v590ext	UECapabilityInformati on-v590ext	Class-definitions			
UECapabilityInformati onConfirm	UECapabilityInformati onConfirm	Class-definitions			
UECapabilityInformati onConfirm_r3_IEs	UECapabilityInformati onConfirm-r3-IEs	Class-definitions			
UplinkDirectTransfer	UplinkDirectTransfer	Class-definitions			
UplinkPhysicalChannel Control	UplinkPhysicalChannel Control	Class-definitions			
UplinkPhysicalChannel Control_r3_IEs	UplinkPhysicalChannel Control-r3-IEs	Class-definitions			
UplinkPhysicalChannel Control_v4b0ext_IEs	UplinkPhysicalChannel Control-v4b0ext-IEs	Class-definitions			
UplinkPhysicalChannel Control_r4_IEs	UplinkPhysicalChannel Control-r4-IEs	Class-definitions			
UplinkPhysicalChannel Control_r5_IEs	UplinkPhysicalChannel Control-r5-IEs	Class-definitions			
URAUpdate	URAUpdate	Class-definitions			
URAUpdateConfirm	URAUpdateConfirm	Class-definitions			
URAUpdateConfirm_r 3_IEs	URAUpdateConfirm-r 3-IEs	Class-definitions			
URAUpdateConfirm_r 5_IEs	URAUpdateConfirm-r 5-IEs	Class-definitions			
URAUpdateConfirm_ CCCH	URAUpdateConfirm- CCCH	Class-definitions			
URAUpdateConfirm_ CCCH_r3_IEs	URAUpdateConfirm- CCCH-r3-IEs	Class-definitions			
UTRANMobilityInform ation	UTRANMobilityInform ation	Class-definitions			
UTRANMobilityInform ation_r3_IEs	UTRANMobilityInform ation-r3-IEs	Class-definitions			
UTRANMobilityInform ation_v3a0ext_IEs	UTRANMobilityInform ation-v3a0ext-IEs	Class-definitions			
UTRANMobilityInform ation_r5_IEs	UTRANMobilityInform ation-r5-IEs	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UTRANMobilityInform ationConfirm	UTRANMobilityInform ationConfirm	Class-definitions			
UTRANMobilityInform ationFailure	UTRANMobilityInform ationFailure	Class-definitions			
Ansi_41_IDNNS	Ansi-41-IDNNS	Class-definitions			
CN_DomainIdentity	CN-DomainIdentity	Class-definitions			
CN_DomainInformation	CN-DomainInformati on	Class-definitions			
CN_DomainInformatio nFull	CN-DomainInformati onFull	Class-definitions			
CN_DomainInformatio nList	CN-DomainInformati onList	Class-definitions			
CN_DomainInformatio nListFull	CN-DomainInformati onListFull	Class-definitions			
CN_DomainSysInfo	CN-DomainSysInfo	Class-definitions			
CN_DomainSysInfoLi st	CN-DomainSysInfoLi st	Class-definitions			
CN_InformationInfo	CN-InformationInfo	Class-definitions			
CN_InformationInfoF ull	CN-InformationInfoF ull	Class-definitions			
Digit	Digit	Class-definitions			
Gsm_map_IDNNS	Gsm-map-IDNNS	Class-definitions			
IMEI	IMEI	Class-definitions			
IMEI_Digit	IMEI-Digit	Class-definitions			
IMSI_GSM_MAP	IMSI-GSM-MAP	Class-definitions			
IntraDomainNasNode Selector	IntraDomainNasNode Selector	Class-definitions			
LAI	LAI	Class-definitions			
MCC	MCC	Class-definitions			
MNC	MNC	Class-definitions			
NAS_Message	NAS-Message	Class-definitions			
NAS_Synchronisation _Indicator	NAS–Synchronisation –Indicator	Class-definitions			
NAS_SystemInformati onGSM_MAP	NAS-SystemInformati onGSM-MAP	Class-definitions			
P_TMSI_GSM_MAP	P-TMSI-GSM-MAP	Class-definitions			
PagingRecordTypeID	PagingRecordTypeID	Class-definitions			
PLMN_Identity	PLMN-Identity	Class-definitions			
PLMN_Type	PLMN-Type	Class-definitions			
RAB_Identity	RAB-Identity	Class-definitions			
RAI	RAI	Class-definitions			
RoutingAreaCode	RoutingAreaCode	Class-definitions			
RoutingParameter	RoutingParameter	Class-definitions			
TMSI_GSM_MAP	TMSI-GSM-MAP	Class-definitions			
AccessClassBarred	AccessClassBarred	Class-definitions			
AccessClassBarredList	AccessClassBarredList	Class-definitions			
AllowedIndicator	AllowedIndicator	Class-definitions			
CellAccessRestriction	CellAccessRestriction	Class-definitions			
CellBarred	CellBarred	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
CellIdentity	CellIdentity	Class-definitions			
CellIdentity_PerRL_Li st	CellIdentity-PerRL-Li st	Class-definitions			
CellSelectReselectInfo SIB_3_4	CellSelectReselectInfo SIB-3-4	Class-definitions			
MapParameter	MapParameter	Class-definitions			
Mapping	Mapping	Class-definitions			
Mapping_LCR_r4	Mapping-LCR-r4	Class-definitions			
MappingFunctionPara meter	MappingFunctionPara meter	Class-definitions			
MappingFunctionPara meterList	MappingFunctionPara meterList	Class-definitions			
MappingFunctionType	MappingFunctionType	Class-definitions			
MappingInfo	MappingInfo	Class-definitions			
Q_Hyst_S	Q-Hyst-S	Class-definitions			
Q_Hyst_S_Fine	Q-Hyst-S-Fine	Class-definitions			
RAT	RAT	Class-definitions			
RAT_FDD_Info	RAT-FDD-Info	Class-definitions			
RAT_FDD_InfoList	RAT-FDD-InfoList	Class-definitions			
RAT_Identifier	RAT-Identifier	Class-definitions			
RAT_TDD_Info	RAT-TDD-Info	Class-definitions			
RAT_TDD_InfoList	RAT-TDD-InfoList	Class-definitions			
ReservedIndicator	ReservedIndicator	Class-definitions			
S_SearchQual	S-SearchQual	Class-definitions			
S_SearchRXLEV	S-SearchRXLEV	Class-definitions			
T_Barred	T-Barred	Class-definitions			
T_Reselection_S	T-Reselection-S	Class-definitions			
T_Reselection_S_Fine	T-Reselection-S-Fine	Class-definitions			
UpperLimit	UpperLimit	Class-definitions			
URA_Identity	URA-Identity	Class-definitions			
URA_IdentityList	URA-IdentityList	Class-definitions			
AccessStratumRelease Indicator	AccessStratumRelease Indicator	Class-definitions			
ActivationTime	ActivationTime	Class-definitions			
BackoffControlParam	BackoffControlParam	Class-definitions			
S	S				
C_RNTI	C-RNTI	Class-definitions			
CapabilityUpdateRequi rement	CapabilityUpdateRequi rement	Class-definitions			
CapabilityUpdateRequi rement_r4_ext	CapabilityUpdateRequi rement-r4-ext	Class-definitions			
CapabilityUpdateRequi rement_r4	CapabilityUpdateRequi rement-r4	Class-definitions			
CellUpdateCause	CellUpdateCause	Class-definitions			
ChipRateCapability	ChipRateCapability	Class-definitions			
CipheringAlgorithm	CipheringAlgorithm	Class-definitions			
CipheringModeComm and	CipheringModeComm and	Class-definitions			
CipheringModeInfo	CipheringModeInfo	Class-definitions			

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Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
CN_DRX_CycleLengt hCoefficient	CN-DRX-CycleLengt hCoefficient	Class-definitions			
CN_PagedUE_Identit y	CN-PagedUE-Identit y	Class-definitions			
CompressedModeMea sCapability	CompressedModeMea sCapability	Class-definitions			
CompressedModeMea sCapability_LCR_r4	CompressedModeMea sCapability-LCR-r4	Class-definitions			
CompressedModeMea sCapabFDDList	CompressedModeMea sCapabFDDList	Class-definitions			
CompressedModeMea sCapabFDD	CompressedModeMea sCapabFDD	Class-definitions			
CompressedModeMea sCapabTDDList	CompressedModeMea sCapabTDDList	Class-definitions			
CompressedModeMea sCapabTDD	CompressedModeMea sCapabTDD	Class-definitions			
CompressedModeMea sCapabGSMList	CompressedModeMea sCapabGSMList	Class-definitions			
CompressedModeMea sCapabGSM	CompressedModeMea sCapabGSM	Class-definitions			
CompressedModeMea sCapabMC	CompressedModeMea sCapabMC	Class-definitions			
CPCH_Parameters	CPCH-Parameters	Class-definitions			
DL_CapabilityWithSim ultaneousHS_DSCHC onfig	DL–CapabilityWithSim ultaneousHS–DSCHC onfig	Class-definitions			
DL_DPCCH_BER	DL-DPCCH-BER	Class-definitions			
DL_PhysChCapability FDD	DL-PhysChCapability FDD	Class-definitions			
DL_PhysChCapability FDD_v380ext	DL-PhysChCapability FDD-v380ext	Class-definitions			
SupportOfDedicatedPi lotsForChEstimation	SupportOfDedicatedPi lotsForChEstimation	Class-definitions			
DL_PhysChCapability TDD	DL-PhysChCapability TDD	Class-definitions			
DL_PhysChCapability TDD_LCR_r4	DL-PhysChCapability TDD-LCR-r4	Class-definitions			
DL_TransChCapability	DL-TransChCapability	Class-definitions			
DRAC_SysInfo	DRAC-SysInfo	Class-definitions			
DRAC_SysInfoList	DRAC-SysInfoList	Class-definitions			
DSCH_RNTI	DSCH-RNTI	Class-definitions			
ESN_DS_41	ESN-DS-41	Class-definitions			
EstablishmentCause	EstablishmentCause	Class-definitions			
FailureCauseWithProt Err	FailureCauseWithProt Err	Class-definitions			
FailureCauseWithProt ErrTrld	FailureCauseWithProt ErrTrld	Class-definitions			
GroupIdentityWithRele aseInformation	GroupIdentityWithRele aseInformation	Class-definitions			
GroupReleaseInformati on	GroupReleaseInformati on	Class-definitions			
GSM_Measurements	GSM-Measurements	Class-definitions			

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Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
H_RNTI	H-RNTI	Class-definitions		
HSDSCH_physical_la yer_category	HSDSCH-physical-la yer-category	Class-definitions		
UESpecificBehaviourI nformation1idle	UESpecificBehaviourl nformation1idle	Class-definitions		
IMSI_and_ESN_DS_ 41	IMSI-and-ESN-DS- 41	Class-definitions		
IMSI_DS_41	IMSI-DS-41	Class-definitions		
InitialPriorityDelayList	InitialPriorityDelayList	Class-definitions		
InitialUE_Identity	InitialUE-Identity	Class-definitions		
IntegrityCheckInfo	IntegrityCheckInfo	Class-definitions		
IntegrityProtActivatio nInfo	IntegrityProtActivatio nInfo	Class-definitions		
IntegrityProtectionAlg orithm	IntegrityProtectionAlg orithm	Class-definitions		
IntegrityProtectionMo deCommand	IntegrityProtectionMo deCommand	Class-definitions		
IntegrityProtectionMo deInfo	IntegrityProtectionMo deInfo	Class-definitions		
IntegrityProtInitNumb er	IntegrityProtInitNumb er	Class-definitions		
MaxHcContextSpace	MaxHcContextSpace	Class-definitions		
MaxHcContextSpace _r5_ext	MaxHcContextSpace -r5-ext	Class-definitions		
MaxROHC_ContextS essions_r4	MaxROHC-ContextS essions-r4	Class-definitions		
MaximumAM_EntityN umberRLC_Cap	MaximumAM-EntityN umberRLC-Cap	Class-definitions		
MaximumBitRate	MaximumBitRate	Class-definitions		
MaximumRLC_Windo wSize	MaximumRLC-Windo wSize	Class-definitions		
MaxNoDPDCH_BitsT ransmitted	MaxNoDPDCH-BitsT ransmitted	Class-definitions		
MaxNoBits	MaxNoBits	Class-definitions		
MaxNoPhysChBitsRe ceived	MaxNoPhysChBitsRe ceived	Class-definitions		
MaxNoSCCPCH_RL	MaxNoSCCPCH-RL	Class-definitions		
MaxNumberOfTF	MaxNumberOfTF	Class-definitions		
MaxNumberOfTFC_D L	MaxNumberOfTFC-D L	Class-definitions		
MaxNumberOfTFC_U L	MaxNumberOfTFC-U L	Class-definitions		
MaxPhysChPerFrame	MaxPhysChPerFrame	Class-definitions		
MaxPhysChPerSubFr ame_r4	MaxPhysChPerSubFr ame-r4	Class-definitions		
MaxPhysChPerTimesl ot	MaxPhysChPerTimesl ot	Class-definitions		
MaxPhysChPerTS	MaxPhysChPerTS	Class-definitions		
MaxSimultaneousCCTr CH_Count	MaxSimultaneousCCTr CH-Count	Class-definitions		
MaxSimultaneousTrans ChsDL	MaxSimultaneousTrans ChsDL	Class-definitions		

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Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
MaxSimultaneousTrans ChsUL	MaxSimultaneousTrans ChsUL	Class-definitions		
MaxTransportBlocksD L	MaxTransportBlocksD L	Class-definitions		
MaxTransportBlocksU L	MaxTransportBlocksU	Class-definitions		
MaxTS_PerFrame	MaxTS-PerFrame	Class-definitions		
MaxTS_PerSubFrame _r4	MaxTS-PerSubFrame -r4	Class-definitions		
MeasurementCapabilit y	MeasurementCapabilit y	Class-definitions		
MeasurementCapabilit yExt	MeasurementCapabilit yExt	Class-definitions		
MeasurementCapabilit y_r4_ext	MeasurementCapabilit y-r4-ext	Class-definitions		
MessageAuthenticatio nCode	MessageAuthenticatio nCode	Class-definitions		
MinimumSF_DL	MinimumSF-DL	Class-definitions		
MinimumSF_UL	MinimumSF-UL	Class-definitions		
MultiModeCapability	MultiModeCapability	Class-definitions		
MultiRAT_Capability	MultiRAT-Capability	Class-definitions		
MultiModeRAT_Capabi lity_v590ext	MultiModeRAT-Capab ility-v590ext	Class-definitions		
N_300	N-300	Class-definitions		
N_301	N-301	Class-definitions		
N_302	N-302	Class-definitions		
N_304	N-304	Class-definitions		
N_308	N-308	Class-definitions		
N_310	N-310	Class-definitions		
N_312	N-312	Class-definitions		
N_312ext	N-312ext	Class-definitions		
N_312_r5	N-312-r5	Class-definitions		
N_313	N-313	Class-definitions		
N_315	N-315	Class-definitions		
N_315ext	N-315ext	Class-definitions		
N_315_r5	N-315-r5	Class-definitions		
N_AccessFails	N-AccessFails	Class-definitions		
N_AP_RetransMax	N-AP-RetransMax	Class-definitions		
NetworkAssistedGPS _Supported	NetworkAssistedGPS –Supported	Class-definitions		
NF_BO_AllBusy	NF-BO-AllBusy	Class-definitions		
NF_BO_NoAICH	NF-BO-NoAICH	Class-definitions		
NF_BO_Mismatch	NF-BO-Mismatch	Class-definitions		
NS_BO_Busy	NS-BO-Busy	Class-definitions		
NS_IP	NS-IP	Class-definitions		
P_TMSI_and_RAI_GS M_MAP	P-TMSI-and-RAI-G SM-MAP	Class-definitions		
- PagingCause	PagingCause	Class-definitions		
PagingRecord	PagingRecord	Class-definitions		

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Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
PagingRecord2_r5	PagingRecord2-r5	Class-definitions		
PagingRecordList	PagingRecordList	Class-definitions		
PagingRecord2List_r5	PagingRecord2List-r5	Class-definitions		
PDCP_Capability	PDCP-Capability	Class-definitions		
PDCP_Capability_r4_ ext	PDCP-Capability-r4 -ext	Class-definitions		
PDCP_Capability_r5_ ext	PDCP-Capability-r5 -ext	Class-definitions		
PhysicalChannelCapab ility	PhysicalChannelCapab ility	Class-definitions		
PhysicalChannelCapab ility_LCR_r4	PhysicalChannelCapab ility-LCR-r4	Class-definitions		
PhysicalChannelCapab ility_hspdsch_r5	PhysicalChannelCapab ility-hspdsch-r5	Class-definitions		
PNBSCH_Allocation_ r4	PNBSCH-Allocation- r4	Class-definitions		
ProtocolErrorCause	ProtocolErrorCause	Class-definitions		
ProtocolErrorIndicato r	ProtocolErrorIndicato r	Class-definitions		
ProtocolErrorIndicato rWithMoreInfo	ProtocolErrorIndicato rWithMoreInfo	Class-definitions		
ProtocolErrorMoreInf ormation	ProtocolErrorMoreInf ormation	Class-definitions		
RadioFrequencyBandF DD	RadioFrequencyBandF DD	Class-definitions		
RadioFrequencyBandT DDList	RadioFrequencyBandT DDList	Class-definitions		
RadioFrequencyBandT DD	RadioFrequencyBandT DD	Class-definitions		
RadioFrequencyBandG SM	RadioFrequencyBandG SM	Class-definitions		
Rb_timer_indicator	Rb-timer-indicator	Class-definitions		
Re_EstablishmentTime r	Re–EstablishmentTime r	Class-definitions		
RedirectionInfo	RedirectionInfo	Class-definitions		
RejectionCause	RejectionCause	Class-definitions		
ReleaseCause	ReleaseCause	Class-definitions		
RF_Capability	RF-Capability	Class-definitions		
RF_Capability_r4_ext	RF-Capability-r4-ext	Class-definitions		
RLC_Capability	RLC-Capability	Class-definitions		
RLC_Capability_r5_ex t	RLC-Capability-r5-e xt	Class-definitions		
RRC_ConnectionRele aseInformation	RRC-ConnectionRele aseInformation	Class-definitions		
RRC_MessageSequen ceNumber	RRC-MessageSequen ceNumber	Class-definitions		
RRC_MessageSequen ceNumberList	RRC-MessageSequen ceNumberList	Class-definitions		
RRC_StateIndicator	RRC-StateIndicator	Class-definitions		
RRC_TransactionIdent ifier	RRC-TransactionIden tifier	Class-definitions		

Continued from previous pa	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
S_RNTI	S-RNTI	Class-definitions			
SecurityCapability	SecurityCapability	Class-definitions			
SimultaneousSCCPC H_DPCH_Reception	SimultaneousSCCPC H-DPCH-Reception	Class-definitions			
SRNC_Identity	SRNC-Identity	Class-definitions			
START_Value	START-Value	Class-definitions			
STARTList	STARTList	Class-definitions			
STARTSingle	STARTSingle	Class-definitions			
CapabilityUpdateRequi rement_r5	CapabilityUpdateRequi rement-r5	Class-definitions			
SystemSpecificCapUp dateReq	SystemSpecificCapUp dateReq	Class-definitions			
SystemSpecificCapUp dateReq_v590ext	SystemSpecificCapUp dateReq-v590ext	Class-definitions			
SystemSpecificCapUp dateReq_r5	SystemSpecificCapUp dateReq-r5	Class-definitions			
SystemSpecificCapUp dateReqList	SystemSpecificCapUp dateReqList	Class-definitions			
SystemSpecificCapUp dateReqList_r5	SystemSpecificCapUp dateReqList-r5	Class-definitions			
T_300	T-300	Class-definitions			
T_301	T-301	Class-definitions			
T_302	T-302	Class-definitions			
T_304	T-304	Class-definitions			
T_305	T-305	Class-definitions			
T_307	T-307	Class-definitions			
T_308	T-308	Class-definitions			
T_309	T-309	Class-definitions			
T_310	T-310	Class-definitions			
T_311	T-311	Class-definitions			
T_312	T-312	Class-definitions			
T_313	T-313	Class-definitions			
T_314	T-314	Class-definitions			
T_315	T-315	Class-definitions			
T_316	T-316	Class-definitions			
T_317	T-317	Class-definitions			
T_CPCH	T-CPCH	Class-definitions			
TMSI_and_LAI_GSM_ MAP	TMSI-and-LAI-GSM -MAP	Class-definitions			
TMSI_DS_41	TMSI-DS-41	Class-definitions			
TotalRLC_AM_Buffer Size	TotalRLC-AM-Buffer Size	Class-definitions			
TotalRLC_AM_Buffer Size_r5_ext	TotalRLC-AM-Buffer Size-r5-ext	Class-definitions			
TransmissionProbabilit y	TransmissionProbabilit y	Class-definitions			
TransportChannelCap ability	TransportChannelCap ability	Class-definitions			
TurboSupport	TurboSupport	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
TxRxFrequencySepara	TxRxFrequencySepara	Class-definitions			
tion	tion U-RNTI	Class-definitions			
U_RNTI LL PNTL Group	U-RNTI-Group	Class-definitions			
U_RNTI_Group UE_ConnTimersAndC	UE-ConnTimersAndC	Class-definitions Class-definitions			
onstants	onstants				
UE_ConnTimersAndC onstants_v3a0ext	UE-ConnTimersAndC onstants-v3a0ext	Class-definitions			
UE_ConnTimersAndC onstants_r5	UE-ConnTimersAndC onstants-r5	Class-definitions			
UE_IdleTimersAndCon stants	UE-IdleTimersAndCo nstants	Class-definitions			
UE_IdleTimersAndCon stants_v3a0ext	UE-IdleTimersAndCo nstants-v3a0ext	Class-definitions			
UE_MultiModeRAT_C apability	UE-MultiModeRAT-C apability	Class-definitions			
UE_PowerClass	UE-PowerClass	Class-definitions			
UE_PowerClassExt	UE-PowerClassExt	Class-definitions			
UE_RadioAccessCapa bility	UE-RadioAccessCapa bility	Class-definitions			
UE_RadioAccessCapa bility_v370ext	UE-RadioAccessCapa bility-v370ext	Class-definitions			
UE_RadioAccessCapa bility_v380ext	UE-RadioAccessCapa bility-v380ext	Class-definitions			
UE_RadioAccessCapa bility_v3a0ext	UE-RadioAccessCapa bility-v3a0ext	Class-definitions			
UE_RadioAccessCapa bility_v3g0ext	UE-RadioAccessCapa bility-v3g0ext	Class-definitions			
UE_PositioningCapabi lityExt_v380	UE-PositioningCapab ilityExt-v380	Class-definitions			
UE_PositioningCapabi lityExt_v3a0	UE-PositioningCapab ilityExt-v3a0	Class-definitions			
UE_PositioningCapabi lityExt_v3g0	UE-PositioningCapab ilityExt-v3g0	Class-definitions			
UE_RadioAccessCapa bBandFDDList	UE-RadioAccessCapa bBandFDDList	Class-definitions			
UE_RadioAccessCapa bBandFDD	UE-RadioAccessCapa bBandFDD	Class-definitions			
UE_RadioAccessCapa bility_v4b0ext	UE-RadioAccessCapa bility-v4b0ext	Class-definitions			
UE_RadioAccessCapa bility_v590ext	UE-RadioAccessCapa bility-v590ext	Class-definitions			
UL_PhysChCapability FDD	UL-PhysChCapability FDD	Class-definitions			
UL_PhysChCapability TDD	UL-PhysChCapability TDD	Class-definitions			
UL_PhysChCapability TDD_LCR_r4	UL-PhysChCapability TDD-LCR-r4	Class-definitions			
UL_TransChCapability	UL-TransChCapability	Class-definitions			
UE_Positioning_Capa bility	UE-Positioning-Capa bility	Class-definitions			
URA_UpdateCause	URA-UpdateCause	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UTRAN_DRX_CycleLe ngthCoefficient	UTRAN-DRX-CycleL engthCoefficient	Class-definitions			
WaitTime	WaitTime	Class-definitions			
AlgorithmSpecificInfo	AlgorithmSpecificInfo	Class-definitions			
AlgorithmSpecificInfo _r4	AlgorithmSpecificInfo -r4	Class-definitions			
CID_InclusionInfo_r4	CID-InclusionInfo-r4	Class-definitions			
COUNT_C	COUNT-C	Class-definitions			
COUNT_C_MSB	COUNT-C-MSB	Class-definitions			
DefaultConfigIdentity _r5	DefaultConfigldentity -r5	Class-definitions			
DefaultConfigMode	DefaultConfigMode	Class-definitions			
DL_AM_RLC_Mode	DL-AM-RLC-Mode	Class-definitions			
DL_AM_RLC_Mode_r 5	DL-AM-RLC-Mode- r5	Class-definitions			
DL_CounterSynchroni sationInfo	DL-CounterSynchron isationInfo	Class-definitions			
DL_CounterSynchroni sationInfo_r5	DL-CounterSynchron isationInfo-r5	Class-definitions			
DL_LogicalChannelMa pping	DL-LogicalChannelMa pping	Class-definitions			
DL_LogicalChannelMa pping_r5	DL-LogicalChannelMa pping-r5	Class-definitions			
DL_LogicalChannelMa ppingList	DL-LogicalChannelMa ppingList	Class-definitions			
DL_LogicalChannelMa ppingList_r5	DL-LogicalChannelMa ppingList-r5	Class-definitions			
DL_RFC3095_r4	DL-RFC3095-r4	Class-definitions			
DL_RLC_Mode	DL-RLC-Mode	Class-definitions			
DL_RLC_Mode_r5	DL-RLC-Mode-r5	Class-definitions			
DL_RLC_StatusInfo	DL-RLC-StatusInfo	Class-definitions			
DL_TM_RLC_Mode	DL-TM-RLC-Mode	Class-definitions			
DL_TransportChannel Type	DL-TransportChannel Type	Class-definitions			
DL_TransportChannel Type_r5	DL-TransportChannel Type-r5	Class-definitions			
DL_UM_RLC_LI_size	DL-UM-RLC-LI-siz e	Class-definitions			
DL_UM_RLC_Mode_ r5	DL-UM-RLC-Mode -r5	Class-definitions			
ExpectReordering	ExpectReordering	Class-definitions			
ExplicitDiscard	ExplicitDiscard	Class-definitions			
HeaderCompressionIn fo	HeaderCompressionIn fo	Class-definitions			
HeaderCompressionIn foList	HeaderCompressionIn foList	Class-definitions			
HeaderCompressionIn fo_r4	HeaderCompressionIn fo-r4	Class-definitions			
HeaderCompressionIn foList_r4	HeaderCompressionIn foList-r4	Class-definitions			
LogicalChannelIdentity	LogicalChannelIdentity	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
LosslessSRNS_Reloc Support	LosslessSRNS-Reloc Support	Class-definitions			
MAC_d_HFN_initial_v alue	MAC-d-HFN-initial- value	Class-definitions			
MAC_LogicalChannel Priority	MAC-LogicalChannel Priority	Class-definitions			
MaxDAT	MaxDAT	Class-definitions			
MaxDAT_Retransmissi ons	MaxDAT-Retransmissi ons	Class-definitions			
MaxMRW	MaxMRW	Class-definitions			
MaxPDCP_SN_Wind owSize	MaxPDCP-SN-Wind owSize	Class-definitions			
MaxRST	MaxRST	Class-definitions			
NoExplicitDiscard	NoExplicitDiscard	Class-definitions			
PDCP_Info	PDCP-Info	Class-definitions			
PDCP_Info_r4	PDCP-Info-r4	Class-definitions			
PDCP_InfoReconfig	PDCP-InfoReconfig	Class-definitions			
PDCP_InfoReconfig_ r4	PDCP-InfoReconfig- r4	Class-definitions			
PDCP_PDU_Header	PDCP-PDU-Header	Class-definitions			
PDCP_SN_Info	PDCP-SN-Info	Class-definitions			
Poll_PDU	Poll-PDU	Class-definitions			
Poll_SDU	Poll-SDU	Class-definitions			
PollingInfo	PollingInfo	Class-definitions			
PollWindow	PollWindow	Class-definitions			
PredefinedConfiglden tity	PredefinedConfiglden tity	Class-definitions			
PredefinedConfigValu eTag	PredefinedConfigValu eTag	Class-definitions			
PredefinedRB_Config uration	PredefinedRB–Config uration	Class-definitions			
PreDefRadioConfigura tion	PreDefRadioConfigura tion	Class-definitions			
RAB_Info	RAB-Info	Class-definitions			
RAB_InformationList	RAB-InformationList	Class-definitions			
RAB_InformationReconfigList	RAB–InformationReconfigList	Class-definitions			
RAB_InformationReconfig	RAB–InformationReconfig	Class-definitions			
RAB_InformationSetu p	RAB-InformationSetu p	Class-definitions			
RAB_InformationSetu p_r4	RAB-InformationSetu p-r4	Class-definitions			
RAB_InformationSetu p_r5	RAB–InformationSetu p–r5	Class-definitions			
RAB_InformationSetu pList	RAB–InformationSetu pList	Class-definitions			
RAB_InformationSetu pList_r4	RAB–InformationSetu pList–r4	Class-definitions			
RAB_InformationSetu pList_r5	RAB-InformationSetu pList-r5	Class-definitions			

Continued from previous pa	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
RB_ActivationTimeInf	RB-ActivationTimeInf	Class-definitions			
o RB_ActivationTimeInf	RB–ActivationTimeInf	Class-definitions			
oList RB_COUNT_C_Information	RB-COUNT-C-Information	Class-definitions			
RB_COUNT_C_InformationList	RB-COUNT-C-Infor	Class-definitions			
RB_COUNT_C_MSB _Information	RB-COUNT-C-MSB -Information	Class-definitions			
RB_COUNT_C_MSB _InformationList	RB-COUNT-C-MSB -InformationList	Class-definitions			
RB_Identity	RB-Identity	Class-definitions			
RB_IdentityList	RB-IdentityList	Class-definitions			
RB_InformationAffect ed	RB–InformationAffect ed	Class-definitions			
RB_InformationAffect ed_r5	RB–InformationAffect ed–r5	Class-definitions			
RB_InformationAffect edList	RB–InformationAffect edList	Class-definitions			
RB_InformationAffect edList_r5	RB–InformationAffect edList–r5	Class-definitions			
RB_InformationRecon fig	RB-InformationRecon fig	Class-definitions			
RB_InformationRecon fig_r4	RB-InformationRecon fig-r4	Class-definitions			
RB_InformationRecon fig_r5	RB-InformationRecon fig-r5	Class-definitions			
RB_InformationRecon figList	RB-InformationRecon figList	Class-definitions			
RB_InformationRecon figList_r4	RB-InformationRecon figList-r4	Class-definitions			
RB_InformationRecon figList_r5	RB-InformationRecon figList-r5	Class-definitions			
RB_InformationReleas eList	RB-InformationReleas eList	Class-definitions			
RB_InformationSetup	RB-InformationSetup	Class-definitions			
RB_InformationSetup _r4	RB-InformationSetup -r4	Class-definitions			
RB_InformationSetup _r5	RB-InformationSetup -r5	Class-definitions			
RB_InformationSetup List	RB-InformationSetup List	Class-definitions			
RB_InformationSetup List_r4	RB-InformationSetup List-r4	Class-definitions			
RB_InformationSetup List_r5	RB-InformationSetup List-r5	Class-definitions			
RB_MappingInfo	RB-MappingInfo	Class-definitions			
RB_MappingInfo_r5	RB-MappingInfo-r5	Class-definitions			
RB_MappingOption	RB-MappingOption	Class-definitions			
RB_MappingOption_r 5	RB-MappingOption-r 5	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
RB_PDCPContextRel ocation	RB-PDCPContextRel ocation	Class-definitions			
RB_PDCPContextRel ocationList	RB-PDCPContextRel ocationList	Class-definitions			
RB_StopContinue	RB-StopContinue	Class-definitions			
RB_WithPDCP_Info	RB-WithPDCP-Info	Class-definitions			
RB_WithPDCP_InfoLi st	RB-WithPDCP-InfoL ist	Class-definitions			
ReceivingWindowSize	ReceivingWindowSize	Class-definitions			
RFC2507_Info	RFC2507-Info	Class-definitions			
RFC3095_Info_r4	RFC3095-Info-r4	Class-definitions			
RLC_Info	RLC-Info	Class-definitions			
RLC_Info_r5	RLC-Info-r5	Class-definitions			
RLC_InfoChoice	RLC-InfoChoice	Class-definitions			
RLC_InfoChoice_r5	RLC-InfoChoice-r5	Class-definitions			
RLC_SequenceNumbe r	RLC-SequenceNumbe r	Class-definitions			
RLC_SizeInfo	RLC-SizeInfo	Class-definitions			
RLC_SizeExplicitList	RLC-SizeExplicitList	Class-definitions			
ROHC_Profile_r4	ROHC-Profile-r4	Class-definitions			
ROHC_ProfileList_r4	ROHC-ProfileList-r4	Class-definitions			
ROHC_PacketSize_r4	ROHC-PacketSize-r4	Class-definitions			
ROHC_PacketSizeList _r4	ROHC-PacketSizeList -r4	Class-definitions			
SRB_InformationSetu p	SRB-InformationSetu	Class-definitions			
SRB_InformationSetu p_r5	SRB-InformationSetu p-r5	Class-definitions			
SRB_InformationSetu pList	SRB-InformationSetu pList	Class-definitions			
SRB_InformationSetu pList_r5	SRB-InformationSetu pList-r5	Class-definitions			
SRB_InformationSetu pList2	SRB-InformationSetu pList2	Class-definitions			
TimerDiscard	TimerDiscard	Class-definitions			
TimerEPC	TimerEPC	Class-definitions			
TimerMRW	TimerMRW	Class-definitions			
TimerPoll	TimerPoll	Class-definitions			
TimerPollPeriodic	TimerPollPeriodic	Class-definitions			
TimerPollProhibit	TimerPollProhibit	Class-definitions			
TimerRST	TimerRST	Class-definitions			
TimerStatusPeriodic	TimerStatusPeriodic	Class-definitions			
TimerStatusProhibit	TimerStatusProhibit	Class-definitions			
TransmissionRLC_Dis card	TransmissionRLC-Dis card	Class-definitions			
TransmissionWindowSi ze	TransmissionWindowSi ze	Class-definitions			
UL_AM_RLC_Mode	UL-AM-RLC-Mode	Class-definitions			
UL_CounterSynchroni sationInfo	UL-CounterSynchron isationInfo	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UL_LogicalChannelMa	UL-LogicalChannelMa	Class-definitions			
pping	pping	Olana dafinikiana			
UL_LogicalChannelMa ppingList	UL-LogicalChannelMa ppingList	Class-definitions			
UL_LogicalChannelMa ppings	UL-LogicalChannelMa ppings	Class-definitions			
UL_RFC3095_r4	UL-RFC3095-r4	Class-definitions			
UL_RLC_Mode	UL-RLC-Mode	Class-definitions			
UL_TM_RLC_Mode	UL-TM-RLC-Mode	Class-definitions			
UL_UM_RLC_Mode	UL-UM-RLC-Mode	Class-definitions			
UL_TransportChannel Type	UL-TransportChannel Type	Class-definitions			
AddOrReconfMAC_d Flow	AddOrReconfMAC-d Flow	Class-definitions			
AllowedTFC_List	AllowedTFC-List	Class-definitions			
AllowedTFI_List	AllowedTFI-List	Class-definitions			
BitModeRLC_SizeInfo	BitModeRLC-SizeInfo	Class-definitions			
BLER_QualityValue	BLER-QualityValue	Class-definitions			
ChannelCodingType	ChannelCodingType	Class-definitions			
CodingRate	CodingRate	Class-definitions			
CommonDynamicTF_I nfo	CommonDynamicTF-I nfo	Class-definitions			
CommonDynamicTF_I nfo_DynamicTTI	CommonDynamicTF-I nfo-DynamicTTI	Class-definitions			
CommonDynamicTF_I nfoList	CommonDynamicTF-I nfoList	Class-definitions			
CommonDynamicTF_I nfoList_DynamicTTI	CommonDynamicTF-I nfoList-DynamicTTI	Class-definitions			
CommonTransChTFS	CommonTransChTFS	Class-definitions			
CommonTransChTFS_ LCR	CommonTransChTFS -LCR	Class-definitions			
CPCH_SetID	CPCH-SetID	Class-definitions			
CRC_Size	CRC-Size	Class-definitions			
DedicatedDynamicTF_I nfo	DedicatedDynamicTF- Info	Class-definitions			
DedicatedDynamicTF_Info_DynamicTTI	DedicatedDynamicTF- Info-DynamicTTI	Class-definitions			
DedicatedDynamicTF_I nfoList	DedicatedDynamicTF- InfoList	Class-definitions			
DedicatedDynamicTF_I nfoList_DynamicTTI	DedicatedDynamicTF- InfoList-DynamicTTI	Class-definitions			
DedicatedTransChTFS	DedicatedTransChTFS	Class-definitions			
DL_AddReconfTransC hInfo2List	DL-AddReconfTrans ChInfo2List	Class-definitions			
DL_AddReconfTransC hInfoList	DL-AddReconfTrans ChInfoList	Class-definitions			
DL_AddReconfTransC hInfoList_r4	DL-AddReconfTrans ChInfoList-r4	Class-definitions			
DL_AddReconfTransC hInfoList_r5	DL-AddReconfTrans ChInfoList-r5	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
DL_AddReconfTransC hInformation	DL-AddReconfTrans ChInformation	Class-definitions			
DL_AddReconfTransC hInformation_r4	DL-AddReconfTrans ChInformation-r4	Class-definitions			
DL_AddReconfTransC hInformation_r5	DL-AddReconfTrans ChInformation-r5	Class-definitions			
DL_AddReconfTransC hInformation2	DL-AddReconfTrans ChInformation2	Class-definitions			
DL_CommonTransChI nfo	DL-CommonTransChI nfo	Class-definitions			
DL_CommonTransChI nfo_r4	DL-CommonTransChI nfo-r4	Class-definitions			
DL_DeletedTransChIn foList	DL-DeletedTransChIn foList	Class-definitions			
DL_DeletedTransChIn foList_r5	DL-DeletedTransChIn foList-r5	Class-definitions			
DL_TransportChannel Identity	DL-TransportChannel Identity	Class-definitions			
DL_TransportChannel Identity_r5	DL-TransportChannel Identity-r5	Class-definitions			
DL_TrCH_Type	DL-TrCH-Type	Class-definitions			
DL_TrCH_TypeId1_r5	DL-TrCH-Typeld1-r 5	Class-definitions			
DL_TrCH_TypeId2_r5	DL-TrCH-Typeld2-r 5	Class-definitions			
DRAC_ClassIdentity	DRAC-ClassIdentity	Class-definitions			
DRAC_StaticInformati on	DRAC-StaticInformat ion	Class-definitions			
DRAC_StaticInformati onList	DRAC-StaticInformat ionList	Class-definitions			
ExplicitTFCS_Configu ration	ExplicitTFCS–Configu ration	Class-definitions			
GainFactor	GainFactor	Class-definitions			
GainFactorInformation	GainFactorInformation	Class-definitions			
HSDSCH_Info	HSDSCH-Info	Class-definitions			
HARQ_Info	HARQ-Info	Class-definitions			
HARQMemorySize	HARQMemorySize	Class-definitions			
IndividualDL_CCTrCH _Info	IndividualDL-CCTrCH -Info	Class-definitions			
IndividualDL_CCTrCH _InfoList	IndividualDL-CCTrCH -InfoList	Class-definitions			
IndividualUL_CCTrCH _Info	IndividualUL-CCTrCH -Info	Class-definitions			
IndividualUL_CCTrCH _InfoList	IndividualUL-CCTrCH -InfoList	Class-definitions			
LogicalChannelByRB	LogicalChannelByRB	Class-definitions			
LogicalChannelList	LogicalChannelList	Class-definitions			
MAC_d_FlowIdentity DCHandHSDSCH	MAC-d-FlowIdentity DCHandHSDSCH	Class-definitions			
MAC_d_FlowIdentity	MAC-d-FlowIdentity	Class-definitions			
MAC_d_PDU_SizeInf o_List	MAC-d-PDU-SizeIn fo-List	Class-definitions			

Continued from previous pa	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
MAC_d_PDUsizeInfo	MAC-d-PDUsizeInfo	Class-definitions			
MAC_hs_AddReconf Queue_List	MAC-hs-AddReconf Queue-List	Class-definitions			
MAC_hs_AddReconf Queue	MAC-hs-AddReconf Queue	Class-definitions			
MAC_hs_DelQueue_Li st	MAC-hs-DelQueue-L ist	Class-definitions			
MAC_hs_DelQueue	MAC-hs-DelQueue	Class-definitions			
MAC_hs_WindowSize	MAC-hs-WindowSize	Class-definitions			
NumberOfTbSizeAndT TIList	NumberOfTbSizeAndT TIList	Class-definitions			
MessType	MessType	Class-definitions			
Non_allowedTFC_List	Non-allowedTFC-List	Class-definitions			
NumberOfTransportBl ocks	NumberOfTransportBl ocks	Class-definitions			
OctetModeRLC_SizeI nfoType1	OctetModeRLC-SizeI nfoType1	Class-definitions			
OctetModeRLC_SizeI nfoType2	OctetModeRLC-SizeI nfoType2	Class-definitions			
PowerOffsetInformati on	PowerOffsetInformati on	Class-definitions			
PowerOffsetPp_m	PowerOffsetPp-m	Class-definitions			
PreDefTransChConfig uration	PreDefTransChConfig uration	Class-definitions			
QualityTarget	QualityTarget	Class-definitions			
RateMatchingAttribute	RateMatchingAttribute	Class-definitions			
ReferenceTFC_ID	ReferenceTFC-ID	Class-definitions			
RestrictedTrChInfo	RestrictedTrChInfo	Class-definitions			
RestrictedTrChInfoLis t	RestrictedTrChInfoLis t	Class-definitions			
SemistaticTF_Informat ion	SemistaticTF–Informat ion	Class-definitions			
SignalledGainFactors	SignalledGainFactors	Class-definitions			
SplitTFCI_Signalling	SplitTFCI-Signalling	Class-definitions			
SplitType	SplitType	Class-definitions			
T1_ReleaseTimer	T1-ReleaseTimer	Class-definitions			
TFC_Subset	TFC-Subset	Class-definitions			
TFC_SubsetList	TFC-SubsetList	Class-definitions			
TFC_Value	TFC-Value	Class-definitions			
TFCI_Field2_Informati on	TFCI-Field2-Informati on	Class-definitions			
TFCI_Range	TFCI-Range	Class-definitions			
TFCI_RangeList	TFCI-RangeList	Class-definitions			
TFCS	TFCS	Class-definitions			
TFCS_Identity	TFCS-Identity	Class-definitions			
TFCS_IdentityPlain	TFCS-IdentityPlain	Class-definitions			
TFCS_InfoForDSCH	TFCS-InfoForDSCH	Class-definitions			
TFCS_ReconfAdd	TFCS-ReconfAdd	Class-definitions			
TFCS_Removal	TFCS-Removal	Class-definitions			
TFCS_RemovalList	TFCS-RemovalList	Class-definitions			

	ASN.1 Type Definitions By Reference			
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
TimeDurationBeforeRe	TimeDurationBeforeRe	Class-definitions		
try	try			
TM_SignallingInfo	TM-SignallingInfo	Class-definitions		
TransmissionTimeInter val	TransmissionTimeInter val	Class-definitions		
TransmissionTimeValidi ty	TransmissionTimeValidi ty	Class-definitions		
TransportChannellden tity	TransportChannellden tity	Class-definitions		
TransportChannellden tityDCHandDSCH	TransportChannellden tityDCHandDSCH	Class-definitions		
TransportFormatSet	TransportFormatSet	Class-definitions		
TransportFormatSet_ LCR	TransportFormatSet- LCR	Class-definitions		
UL_AddReconfTransC hInfoList	UL-AddReconfTrans ChInfoList	Class-definitions		
UL_AddReconfTransC hInformation	UL-AddReconfTrans ChInformation	Class-definitions		
UL_CommonTransChI nfo	UL-CommonTransChI nfo	Class-definitions		
UL_CommonTransChl nfo_r4	UL-CommonTransChl nfo-r4	Class-definitions		
UL_ControlledTrChLis t	UL-ControlledTrChLi st	Class-definitions		
UL_DeletedTransChIn foList	UL-DeletedTransChIn foList	Class-definitions		
UL_TransportChannel Identity	UL-TransportChannel Identity	Class-definitions		
UL_TrCH_Type	UL-TrCH-Type	Class-definitions		
USCH_TransportCha nnelsInfo	USCH-TransportCha nnelsInfo	Class-definitions		
ACK_NACK_repetitio nFactor	ACK-NACK-repetitionFactor	Class-definitions		
AC_To_ASC_Mappin g	AC-To-ASC-Mappin g	Class-definitions		
AC_To_ASC_Mappin gTable	AC-To-ASC-Mappin gTable	Class-definitions		
AccessServiceClass_F DD	AccessServiceClass-F DD	Class-definitions		
AccessServiceClass_T DD	AccessServiceClass-T DD	Class-definitions		
AccessServiceClass_T DD_LCR_r4	AccessServiceClass-T DD-LCR-r4	Class-definitions		
AICH_Info	AICH-Info	Class-definitions		
AICH_PowerOffset	AICH-PowerOffset	Class-definitions		
AICH_TransmissionTi ming	AICH-TransmissionTi ming	Class-definitions		
AllocationPeriodInfo	AllocationPeriodInfo	Class-definitions		
Alpha	Alpha	Class-definitions		
AP_AICH_Channelisa tionCode	AP-AICH-Channelisa tionCode	Class-definitions		

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
AP_PreambleScrambli	AP-PreambleScrambli	Class-definitions			
ngCode	ngCode	Olassa da Carria			
AP_Signature	AP-Signature	Class-definitions			
AP_Signature_VCAM	AP-Signature-VCAM	Class-definitions			
AP_Subchannel	AP-Subchannel	Class-definitions			
ASCSetting_FDD	ASCSetting-FDD	Class-definitions			
ASCSetting_TDD	ASCSetting-TDD	Class-definitions			
ASCSetting_TDD_LC R_r4	ASCSetting-TDD-LC R-r4	Class-definitions			
AvailableAP_Signature _VCAMList	AvailableAP-Signature –VCAMList	Class-definitions			
AvailableAP_Signature List	AvailableAP–Signature List	Class-definitions			
AvailableAP_Subchan nelList	AvailableAP-Subchan nelList	Class-definitions			
AvailableMinimumSF_L istVCAM	AvailableMinimumSF– ListVCAM	Class-definitions			
AvailableMinimumSF_ VCAM	AvailableMinimumSF- VCAM	Class-definitions			
AvailableSignatures	AvailableSignatures	Class-definitions			
AvailableSubChannelN umbers	AvailableSubChannelN umbers	Class-definitions			
BurstType	BurstType	Class-definitions			
Bler_Target	Bler-Target	Class-definitions			
CCTrCH_PowerContr olInfo	CCTrCH-PowerCont rollnfo	Class-definitions			
CCTrCH_PowerContr olInfo_r4	CCTrCH-PowerCont rollnfo-r4	Class-definitions			
CCTrCH_PowerContr olInfo_r5	CCTrCH-PowerCont rollnfo-r5	Class-definitions			
CD_AccessSlotSubch annel	CD-AccessSlotSubch annel	Class-definitions			
CD_AccessSlotSubch annelList	CD-AccessSlotSubch annelList	Class-definitions			
CD_CA_ICH_Channe lisationCode	CD-CA-ICH-Chann elisationCode	Class-definitions			
CD_PreambleScrambli ngCode	CD-PreambleScrambli ngCode	Class-definitions			
CD_SignatureCode	CD-SignatureCode	Class-definitions			
CD_SignatureCodeLis t	CD-SignatureCodeLis t	Class-definitions			
CellAndChannelIdentit y	CellAndChannelldentit y	Class-definitions			
CellParametersID	CellParametersID	Class-definitions			
Cfntargetsfnframeoff set	Cfntargetsfnframeoff set	Class-definitions			
ChannelAssignmentAc tive	ChannelAssignmentAc tive	Class-definitions			
ChannelisationCode25	ChannelisationCode25 6	Class-definitions			
ChannelReqParamsFo rUCSM	ChannelReqParamsFo rUCSM	Class-definitions			

Continued from previous pa	ASN.1 Type Definitions By Reference					
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments		
ClosedLoopTimingAdj Mode	ClosedLoopTimingAdj Mode	Class-definitions				
CodeNumberDSCH	CodeNumberDSCH	Class-definitions				
CodeRange	CodeRange	Class-definitions				
CodeWordSet	CodeWordSet	Class-definitions				
CommonTimeslotInfo	CommonTimeslotInfo	Class-definitions				
CommonTimeslotInfoS CCPCH	CommonTimeslotInfoS CCPCH	Class-definitions				
ConstantValue	ConstantValue	Class-definitions				
ConstantValueTdd	ConstantValueTdd	Class-definitions				
CPCH_PersistenceLe vels	CPCH–PersistenceLe vels	Class-definitions				
CPCH_PersistenceLe velsList	CPCH-PersistenceLe velsList	Class-definitions				
CPCH_SetInfo	CPCH-SetInfo	Class-definitions				
CPCH_SetInfoList	CPCH-SetInfoList	Class-definitions				
CPCH_StatusIndicati onMode	CPCH-StatusIndicati onMode	Class-definitions				
CQI_RepetitionFactor	CQI-RepetitionFactor	Class-definitions				
CSICH_PowerOffset	CSICH-PowerOffset	Class-definitions				
DefaultDPCH_Offset ValueFDD	DefaultDPCH-Offset ValueFDD	Class-definitions				
DefaultDPCH_Offset ValueTDD	DefaultDPCH-Offset ValueTDD	Class-definitions				
DeltaPp_m	DeltaPp-m	Class-definitions				
DeltaCQI	DeltaCQI	Class-definitions				
DeltaNACK	DeltaNACK	Class-definitions				
DeltaACK	DeltaACK	Class-definitions				
DeltaSIR	DeltaSIR	Class-definitions				
DL_CCTrCh	DL-CCTrCh	Class-definitions				
DL_CCTrCh_r4	DL-CCTrCh-r4	Class-definitions				
DL_CCTrChList	DL-CCTrChList	Class-definitions				
DL_CCTrChList_r4	DL-CCTrChList-r4	Class-definitions				
DL_CCTrChListToRe move	DL-CCTrChListToRe move	Class-definitions				
DL_ChannelisationCo de	DL-ChannelisationCo de	Class-definitions				
DL_ChannelisationCo deList	DL-ChannelisationCo deList	Class-definitions				
DL_CommonInformati on	DL–CommonInformati on	Class-definitions				
DL_CommonInformati on_r4	DL-CommonInformati on-r4	Class-definitions				
DL_CommonInformati on_r5	DL-CommonInformati on-r5	Class-definitions				
DL_CommonInformati onPredef	DL-CommonInformati onPredef	Class-definitions				
DL_CompressedMode Method	DL-CompressedMode Method	Class-definitions				
DL_DPCH_InfoCom mon	DL-DPCH-InfoCom mon	Class-definitions				

Continued from previous pa	ASN.1 Type Definitions By Reference					
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments		
DL_DPCH_InfoCom mon_r4	DL-DPCH-InfoCom mon-r4	Class-definitions				
DL_DPCH_InfoCom monPredef	DL-DPCH-InfoCom monPredef	Class-definitions				
DL_DPCH_InfoPerRL	DL-DPCH-InfoPerR L	Class-definitions				
DL_DPCH_InfoPerRL _r4	DL-DPCH-InfoPerR L-r4	Class-definitions				
DL_DPCH_InfoPerRL _r5	DL-DPCH-InfoPerR L-r5	Class-definitions				
DL_DPCH_PowerCo ntrolInfo	DL-DPCH-PowerCo ntrolInfo	Class-definitions				
DL_FrameType	DL-FrameType	Class-definitions				
DL_HSPDSCH_Infor mation	DL-HSPDSCH-Infor mation	Class-definitions				
DL_HSPDSCH_TS_C onfiguration	DL-HSPDSCH-TS- Configuration	Class-definitions				
DL_InformationPerRL	DL-InformationPerRL	Class-definitions				
DL_InformationPerRL _r4	DL-InformationPerRL -r4	Class-definitions				
DL_InformationPerRL _r5	DL-InformationPerRL -r5	Class-definitions				
DL_InformationPerRL _r5bis	DL-InformationPerRL -r5bis	Class-definitions				
DL_InformationPerRL _List	DL-InformationPerRL -List	Class-definitions				
DL_InformationPerRL _List_r4	DL-InformationPerRL -List-r4	Class-definitions				
DL_InformationPerRL _List_r5	DL-InformationPerRL -List-r5	Class-definitions				
DL_InformationPerRL _List_r5bis	DL-InformationPerRL -List-r5bis	Class-definitions				
DL_PDSCH_Informat ion	DL-PDSCH-Informa tion	Class-definitions				
DI_rate_matching_res triction	DI-rate-matching-res triction	Class-definitions				
DL_TPC_PowerOffse tPerRL	DL-TPC-PowerOffse tPerRL	Class-definitions				
DL_TPC_PowerOffse tPerRL_List	DL-TPC-PowerOffse tPerRL-List	Class-definitions				
DL_TS_Channelisatio nCode	DL-TS-Channelisatio nCode	Class-definitions				
DL_TS_Channelisatio nCodesShort	DL-TS-Channelisatio nCodesShort	Class-definitions				
DownlinkAdditionalTim eslots	DownlinkAdditionalTim eslots	Class-definitions				
DownlinkAdditionalTim eslots_LCR_r4	DownlinkAdditionalTim eslots–LCR–r4	Class-definitions				
DownlinkTimeslotsCod es	DownlinkTimeslotsCod es	Class-definitions				
DownlinkTimeslotsCod es_LCR_r4	DownlinkTimeslotsCod es-LCR-r4	Class-definitions				
DPC_Mode	DPC-Mode	Class-definitions				

	ASN.1 Type Definitions By Reference					
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments		
DPCCH_PowerOffset	DPCCH-PowerOffse	Class-definitions				
DPCH_CompressedM odeInfo	t DPCH-CompressedM odeInfo	Class-definitions				
DPCH_CompressedM odeStatusInfo	DPCH–CompressedM odeStatusInfo	Class-definitions				
DPCH_FrameOffset	DPCH-FrameOffset	Class-definitions				
DSCH_Mapping	DSCH-Mapping	Class-definitions				
DSCH_MappingList	DSCH-MappingList	Class-definitions				
DSCH_RadioLinkIden tifier	DSCH-RadioLinkIden tifier	Class-definitions				
DSCH_TransportCha nnelsInfo	DSCH-TransportCha nnelsInfo	Class-definitions				
DurationTimeInfo	DurationTimeInfo	Class-definitions				
DynamicPersistenceLe vel	DynamicPersistenceLe vel	Class-definitions				
DynamicPersistenceLe velList	DynamicPersistenceLe velList	Class-definitions				
DynamicPersistenceLe velTF_List	DynamicPersistenceLe velTF-List	Class-definitions				
FACH_PCH_Informat ion	FACH-PCH-Informa tion	Class-definitions				
FACH_PCH_Informat ionList	FACH-PCH-Informa tionList	Class-definitions				
Feedback_cycle	Feedback-cycle	Class-definitions				
FPACH_Info_r4	FPACH-Info-r4	Class-definitions				
FrequencyInfo	FrequencyInfo	Class-definitions				
FrequencyInfoFDD	FrequencyInfoFDD	Class-definitions				
FrequencyInfoTDD	FrequencyInfoTDD	Class-definitions				
HS_ChannelisationCo de_LCR	HS-ChannelisationCo de-LCR	Class-definitions				
HS_PDSCH_Midambl e_Configuration_TDD 128	HS-PDSCH-Midambl e-Configuration-TDD 128	Class-definitions				
HS_SCCH_Info	HS-SCCH-Info	Class-definitions				
HS_SCCH_Codes	HS-SCCH-Codes	Class-definitions				
HS_SCCH_TDD128	HS-SCCH-TDD128	Class-definitions				
HS_SICH_Configurati on_TDD128	HS-SICH-Configurat ion-TDD128	Class-definitions				
HS_SCCH_TDD384	HS-SCCH-TDD384	Class-definitions				
HS_SICH_Configurati on_TDD384	HS-SICH-Configurat ion-TDD384	Class-definitions				
HS_SICH_Power_Co ntrol_Info_TDD384	HS-SICH-Power-C ontrol-Info-TDD384	Class-definitions				
IndividualTimeslotInfo	IndividualTimeslotInfo	Class-definitions				
IndividualTimeslotInfo_ LCR_r4	IndividualTimeslotInfo –LCR–r4	Class-definitions				
IndividualTimeslotInfo_ LCR_r4_ext	IndividualTimeslotInfo -LCR-r4-ext	Class-definitions				
IndividualTS_Interfere nce	IndividualTS-Interfere nce	Class-definitions				

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
IndividualTS_Interfere	IndividualTS-Interfere	Class-definitions			
nceList	nceList	Class definitions			
ITP	ITP	Class-definitions			
NidentifyAbort	NidentifyAbort	Class-definitions			
MaxAllowedUL_TX_P ower	MaxAllowedUL-TX-P ower	Class-definitions			
MaxAvailablePCPCH_ Number	MaxAvailablePCPCH- Number	Class-definitions			
MaxPowerIncrease_r4	MaxPowerIncrease-r4	Class-definitions			
MaxTFCI_Field2Value	MaxTFCI-Field2Value	Class-definitions			
Measurement_Feedbac k_Info	Measurement–Feedba ck–Info	Class-definitions			
MidambleConfiguratio nBurstType1and3	MidambleConfiguratio nBurstType1and3	Class-definitions			
MidambleConfiguratio nBurstType2	MidambleConfiguratio nBurstType2	Class-definitions			
MidambleShiftAndBur stType	MidambleShiftAndBur stType	Class-definitions			
MidambleShiftAndBur stType_LCR_r4	MidambleShiftAndBur stType–LCR–r4	Class-definitions			
MidambleShiftAndBur stType_DL	MidambleShiftAndBur stType-DL	Class-definitions			
MidambleShiftLong	MidambleShiftLong	Class-definitions			
MidambleShiftShort	MidambleShiftShort	Class-definitions			
MinimumSpreadingFac tor	MinimumSpreadingFac tor	Class-definitions			
MultiCodeInfo	MultiCodeInfo	Class-definitions			
N_EOT	N-EOT	Class-definitions			
N_GAP	N-GAP	Class-definitions			
N_PCH	N-PCH	Class-definitions			
N_StartMessage	N-StartMessage	Class-definitions			
NB01	NB01	Class-definitions			
NF_Max	NF-Max	Class-definitions			
NumberOfDPDCH	NumberOfDPDCH	Class-definitions			
NumberOfFBI_Bits	NumberOfFBI-Bits	Class-definitions			
OpenLoopPowerCont rol_TDD	OpenLoopPowerCont rol-TDD	Class-definitions			
OpenLoopPowerCont rol_IPDL_TDD_r4	OpenLoopPowerCont rol-IPDL-TDD-r4	Class-definitions			
PagingIndicatorLengt h	PagingIndicatorLengt h	Class-definitions			
PC_Preamble	PC-Preamble	Class-definitions			
PCP_Length	PCP-Length	Class-definitions			
PCPCH_ChannelInfo	PCPCH-ChannelInfo	Class-definitions			
PCPCH_ChannelInfo List	PCPCH-ChannelInfo List	Class-definitions			
PCPICH_UsageForC hannelEst	PCPICH-UsageForC hannelEst	Class-definitions			
PDSCH_CapacityAllo cationInfo	PDSCH-CapacityAllo cationInfo	Class-definitions			

Type Name		ASN.1 Type Definitions By Reference					
cationInfo_r4 CationInfo_r4 PDSCH_CodeInfoList PDSCH_CodeInfoList PDSCH—CodeInfoList Class-definitions PDSCH_CodeMap PDSCH—CodeMap Class-definitions PDSCH_CodeMapList Class-definitions Class-definitions PDSCH_Identity PDSCH—CodeMapList Class-definitions PDSCH_Info PDSCH—Info_CodeMapping Class-definitions PDSCH_Info_LCR_r PDSCH—Info_LCR_r Class-definitions PDSCH_Info_LCR_r PDSCH—Info_LCR_r Class-definitions PDSCH_PowerContr Ollnfo Class-definitions PDSCH_ShrInd_LCR_r Class-definitions Class-definitions PDSCH_SysInfo_LCR_r Class-definitions Class-definitions PDSCH_SysInfo_LCR_r Class-definitions Class-definitions PDSCH_SysInfo_LCR_r Class-definitions Class-definitions PDSCH_SysInfo_LCR_r Class-definitions Class-definitions PDSCH_SysInfo_LIST_R Class-definitions Class-definitions PDSCH_SysInfo_LIST_SYSInfo_LIST_R Class-definitions Class-definitions PDSCH_SysInfo_LIST_SYSInfo_LIST_SYSInfo_LIST_	Type Name	Type Reference	Module Identifier	Encoding Variation	Comments		
PDSCH_CodeInfoList PDSCH-CodeInfo PDSCH-CodeInfoList To PDSCH-CodeInfoList To PDSCH-CodeMap PDSCH-CodeMap PDSCH-CodeMap PDSCH-CodeMap To PDSCH-Lidentity PDSCH-Info PDSCH-Info PDSCH-Info PDSCH-Info PDSCH-Info PDSCH-Info Class-definitions PDSCH-Info PDSCH-Info Class-definitions PDSCH-Info Class-definitions PDSCH-Info PDSCH-Info Class-definitions PDSCH-Info Class-definitions PDSCH-Info PDSCH-Info Class-definitions PDSCH-Info PDSCH-			Class-definitions				
PDSCH_CodeInfoList PDSCH-CodeInfoList Class-definitions Cl	_		Class definitions				
PDSCH_CodeMap PDSCH—CodeMap PDSCH—CodeMap PDSCH—CodeMap PDSCH—CodeMap PDSCH—CodeMap PDSCH—Info PDSCH—Info PDSCH—Info PDSCH—Info PDSCH—Info Class-definitions PDSCH—Info PDSCH—Info Class-definitions PDSCH—Info PD							
PDSCH_CodeMappin g PDSCH_CodeMappin g PDSCH_LInfo PDSCH_Info PDSCH	PDSCH_CodeInfoList		Class-definitions				
t PDSCH_CodeMappin g PDSCH—CodeMappin g PDSCH_Identity PDSCH_Info PDSCH_Info Class-definitions PDSCH_Info PDSCH_Info Class-definitions PDSCH_Info PDSCH_Info Class-definitions PDSCH_Info_IT PDSCH_Inf	PDSCH_CodeMap	PDSCH-CodeMap	Class-definitions				
PDSCH_Identity		· '	Class-definitions				
PDSCH_Info			Class-definitions				
PDSCH_Info_tA PDSCH_Info_tCR_r 4 PDSCH_PowerContr olInfo PDSCH_PowerContr olInfo PDSCH_SHO_DCH_ Info PDSCH_Sylanfo R-r6 PDSCH_SylanfoList	PDSCH_Identity	PDSCH-Identity	Class-definitions				
PDSCH_Info_LCR_r 4 PDSCH_PowerContr ollinfo PDSCH_Shd_DCH_ Info PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo_HC R_r5 PDSCH_SysInfo_LC R_r4 PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList SFN Class_definitions C	PDSCH_Info	PDSCH-Info	Class-definitions				
4 PDSCH_PowerContr olln/o PDSCH_SHO_DCH_ Info PDSCH_SHO_DCH_ Info PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo R_r5 PDSCH_SysInfoLC R_r6 PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN-HCR_r5 PDSCH_SysInfoList SFN-HCR_r6 PDSCH_SysInfoList SCIass-definitions PDSCH_SysInfoList PDS	PDSCH_Info_r4	PDSCH-Info-r4	Class-definitions				
PDSCH_PowerControllnfo PDSCH_SYSInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo PDSCH_SysInfo LC R_r5 PDSCH_SysInfoList P	PDSCH_Info_LCR_r	PDSCH-Info-LCR-r	Class-definitions				
ollnfo DDSCH_SHO_DCH_ Info DDSCH_SysInfo DDSCH_SysInfo DDSCH_SysInfo_HC R_r5 DDSCH_SysInfo_LC R_r4 DDSCH_SysInfoList DCIass_definitions DD	4						
Info PDSCH_SysInfo PDSCH_SysInfo_HC R_r5 PDSCH_SysInfo_LC R_r4 PDSCH_SysInfo_LC R_r4 PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList HCR_r5 PDSCH_SysInfoList PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN-HCR_r5 PDSCH_SysInfoList SFN-HCR_r5 PDSCH_SysInfoList SFN-HCR_r6 PDSCH_SysInfoList Class-definitions Class-definitions Place Class-definitions			Class-definitions				
PDSCH_SysInfo_HC R_rf5 PDSCH_SysInfo_LC R_r6 PDSCH_SysInfo_LC R_r6 PDSCH_SysInfo_LC R_r4 PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList LCR_r6 PDSCH_SysInfoList PDSCH_SysInfoList LCR_r6 PDSCH_SysInfoList LCR_r6 PDSCH_SysInfoList LCR_r7 PDSCH_SysInfoList LCR_r7 PDSCH_SysInfoList SFN PDSCH_SysInfoList PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN_HCR_r5 PDSCH_SysInfoList SFN_HCR_r5 PDSCH_SysInfoList SFN_HCR_r6 PDSCH_SysInfoList SFN_HCR_r7 PDSCH_SysInfoList SFN_HCR_r6 PDSCH_SysInfoList Class-definitions Class-definitions Class-definitions Class-definitions PCH_Info PICH_Info_LCR_r4 PICH_Info_LCR_r4 PICH_PowerOffset PICH_Info_LCR_r4 PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_SizeS6 PIct Biss 128 Pict Biss			Class-definitions				
R_15 PDSCH_SysInfo_LC R_74 PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN-HCR-75 PDSCH_SysInfoList SFN-HCR-75 PDSCH_SysInfoList SFN-HCR-75 PDSCH_SysInfoList SFN-LCR-74 PersistenceScalingFac tor PersistenceScalingFac tor PersistenceScalingFac tor PersistenceScalingFac tor PersistenceScalingFac tor Plich_dannelisationCo deList_LCR_74 PICH_Info PICH_Info PICH_Info PICH_Info PICH_Info PICH_Info PICH_Info PICH_Info PICH_Info PICH_PowerOffset PIchEpowerOffset PilotBits128 PilotBits256 MeasurementPowerOffset PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl Class-definitions Class-definitions Class-definitions Class-definitions Pichas-definitions Pichas-definiti	PDSCH_SysInfo	PDSCH-SysInfo	Class-definitions				
R_r4 PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList PDSCH_SysInfoList LCR_r4 PDSCH_SysInfoList PDSCH_SysInfoList LCR_r4 PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN PDSCH_SysInfoList SFN_HCR_r5 PDSCH_SysInfoList SFN_HCR_r5 PDSCH_SysInfoList SFN_HCR_r5 PDSCH_SysInfoList SFN_HCR_r5 PDSCH_SysInfoList SFN_HCR_r5 PDSCH_SysInfoList SFN_HCR_r6 PDSCH_SysInfoList SFN_HCR_r6 PDSCH_SysInfoList SFN_HCR_r7 PDSCH_SysInfoList SFN_HCR_r7 PErsistenceScalingFac tor tor PersistenceScalingFac tor tor PersistenceScalingFac torList Pl_CountPerFrame Pl-CountPerFrame PichChannelisationCo deList_LCR_r4 PICH_Info PICH_Info PICH_Info PICH_Info PICH_Info PICH_Info PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PilotBits128 PilotBits256 MeasurementPowerOf fest PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PDSCH-SysInfoList Class_definitions Class_definitions Class_definitions Class_definitions Class_definitions Plass_definitions Plass_defin	-	· · · · · · · · · · · · · · · · · · ·	Class-definitions				
PDSCH_SysInfoList_HCR_r5 PDSCH_SysInfoList_LCR_r4 PDSCH_SysInfoList_LCR_r4 PDSCH_SysInfoList_SFN PDSCH_SysInfoList_SFN PDSCH_SysInfoList_SFN PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_LCR_r4 PersistenceScalingFac tor PersistenceScalingFac tor/List Pl_CountPerFrame PichChannelisationCo deList_LCR_r4 PICH_Info PICH_Info PICH_Info PICH_Info PICH_PowerOffset PIOHD=PowerOffset PiotBits128 PilotBits256 MeasurementPowerOffset PositionFixedOrFlexibl PDSCH—SysInfoList_SFN_HCR_r5 PDSCH—SysInfoList_SFN_HCR_r5 Class—definitions	-	_	Class-definitions				
HCR_r5 PDSCH_SysInfoList_LCR_r4 PDSCH_SysInfoList_SFN PDSCH_SysInfoList_SFN PDSCH_SysInfoList_SFN PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_HCR_r5 PDSCH_SysInfoList_SFN_HCR_r6 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r7 PDSCH_SysInfoList_SFN_HCR_r9 PDSCH_SysInfoList_SFN_HCR_r9 PDSCH_SysInfoList_CR_r4 PersistenceScalingFac tor tor PersistenceScalingFac tor tor PersistenceScalingFac tor tor PersistenceScalingFac tor LClass_definitions Class_definitions Class_definitions DICH_Info_LCR_r4 PICH_Info_LCR_r4 PICH_Info_LCR_r4 PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PilotBits128 PilotBits128 PilotBits256 MeasurementPowerOffset PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl	PDSCH_SysInfoList	PDSCH-SysInfoList	Class-definitions				
LCR_r4 PDSCH_SysInfoList_ SFN PDSCH_SysInfoList_ SFN_HCR_r5 PDSCH_SysInfoList_ SFN_HCR_r5 PDSCH_SysInfoList_ SFN_HCR_r4 PPSCH_SysInfoList_ SFN_HCR_r5 PDSCH_SysInfoList_ SFN_HCR_r4 PPSCH_SysInfoList_ SFN_HCR_r4 PPSCH_SysInfoList_ SFN_HCR_r5 PDSCH_SysInfoList_ SFN_HCR_r5 PDSCH_SysInfoList_ SFN_HCR_r6 POSCH_SysInfoList_ SFN_HCR_r6 POSCH_SysInfoList_ SFN_HCR_r6 POSCH_SysInfoList_ SFN_HCR_r6 POSCH_SysInfoList_ PSN_HCR_r5 PDSCH_SysInfoList_ SFN_HCR_r6 POSCH_SysInfoList_ SFN Class_definitions Class_definitions Class_definitions Class_definitions PICH_Info_LCR_r4 PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICH_PowerOffset PICHSits128 PilotBits128 PilotBits256 PilotBits256 PilotBits256 Class_definitions MeasurementPowerOffset fset PositionFixedOrFlexibl			Class-definitions				
SFN			Class-definitions				
SFN_HCR_r5 PDSCH_SysInfoList_SFN_LCR_r4 PersistenceScalingFac tor PersistenceScalingFac torList PI_CountPerFrame PichChannelisationCo deList_LCR_r4 PICH_Info PICH_Info PICH_Info PICH_Info_LCR_r4 PICH_PowerOffset PICH_PowerOffset PiotBits128 PilotBits256 MeasurementPowerOff fset PDSCH—SysInfoList—SFN_LCR_r5 PDSCH—SysInfoList—SFN_LCR_r6 PDSCH—SysInfoList—SFN_LCR_r6 PDSCH—SysInfoList—SFN_LCR_r6 PERSISTENCEScalingFac Class—definitions			Class-definitions				
SFN_LCR_r4 PersistenceScalingFac tor PersistenceScalingFac torList Pl_CountPerFrame PichChannelisationCo deList_LCR_r4 PICH_Info PICH_Info PICH_Info_LCR_r4 PICH_PowerOffset PilotBits128 PilotBits256 MeasurementPowerOf fset PersistenceScalingFac torList Class-definitions	-		Class-definitions				
tor tor PersistenceScalingFac torList PI_CountPerFrame PI_CountPerFrame PichChannelisationCo deList_LCR_r4 PICH_Info PICH_Info_LCR_r4 PICH_Info_LCR_r4 PICH_PowerOffset PICH_PowerOffset PilotBits128 PilotBits256 PilotBits256 PilotBits256 PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl Pich_Info_Class_definitions Plass_definitions PlotBits128 PositionFixedOrFlexibl Class_definitions PlotBits128 PositionFixedOrFlexibl Class_definitions PlotBits128 PlotBits128 PilotBits256 Class_definitions PlotBits256 Class_definitions Pl			Class-definitions				
torList torList PI_CountPerFrame PI_CountPerFrame PichChannelisationCo deList_LCR_r4 PICH_Info PICH_Info PICH_Info_LCR_r4 PICH_PowerOffset PICH_PowerOffset PilotBits128 PilotBits256 PilotBits256 MeasurementPowerOf fset PositionFixedOrFlexibl PositionFixedOrFlexibl PositionFixedOrFlexibl PICH_CountPerFrame Class_definitions Class	_		Class-definitions				
PichChannelisationCo deList_LCR_r4 PICH_Info PICH_Info PICH_Info_LCR_r4 PICH_Info_LCR_r4 PICH_PowerOffset PICH_PowerOffset PilotBits128 PilotBits256 PilotBits256 MeasurementPowerOffset PositionFixedOrFlexibl PositionFixedOrFlexibl PichChannelisationCo deList_LCR_r4 PichChannelisationS Class_definitions Class_definitions Class_definitions Class_definitions Class_definitions Class_definitions			Class-definitions				
deList_LCR_r4 deList_LCR_r4 Class-definitions PICH_Info PICH-Info Class-definitions PICH_Info_LCR_r4 PICH-Info-LCR-r4 Class-definitions PICH_PowerOffset PICH-PowerOffset Class-definitions PilotBits128 PilotBits128 Class-definitions PilotBits256 PilotBits256 Class-definitions MeasurementPowerOf fset MeasurementPowerOf fset Class-definitions PositionFixedOrFlexibl PositionFixedOrFlexibl Class-definitions	PI_CountPerFrame	PI-CountPerFrame	Class-definitions				
PICH_Info_LCR_r4 PICH—PowerOffset PICH—PowerOffset PilotBits128 PilotBits256 PilotBits256 MeasurementPowerOffset PositionFixedOrFlexibl PositionFixedOrFlexibl PICH—Info—LCR—r4 Class—definitions Class—definitions Class—definitions Class—definitions Class—definitions Class—definitions Class—definitions Class—definitions			Class-definitions				
PICH_PowerOffset PICH-PowerOffset Class-definitions PilotBits128 PilotBits256 PilotBits256 Class-definitions MeasurementPowerOf fset PositionFixedOrFlexibl PositionFixedOrFlexibl Class-definitions	PICH_Info	PICH-Info	Class-definitions				
PICH_PowerOffset PICH-PowerOffset Class-definitions PilotBits128 PilotBits256 PilotBits256 Class-definitions MeasurementPowerOf fset PositionFixedOrFlexibl PositionFixedOrFlexibl Class-definitions	PICH_Info_LCR_r4	PICH-Info-LCR-r4	Class-definitions				
PilotBits256 PilotBits256 Class-definitions MeasurementPowerOf fset PositionFixedOrFlexibl PositionFixedOrFlexibl Class-definitions	PICH_PowerOffset	PICH-PowerOffset	Class-definitions				
MeasurementPowerOf fset PositionFixedOrFlexibl MeasurementPowerOf fset Class-definitions Class-definitions	PilotBits128	PilotBits128	Class-definitions				
fset fset PositionFixedOrFlexibl Class-definitions	PilotBits256	PilotBits256	Class-definitions				
PositionFixedOrFlexibl Class-definitions			Class-definitions				
- 1			Class-definitions				

ASN.1 Type Definitions By Reference					
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
PowerControlAlgorith	PowerControlAlgorith	Class-definitions			
m	m D O'' (D'I	Olares deficies a			
PowerOffsetPilot_pdp dch	PowerOffsetPilot-pd pdch	Class-definitions			
PowerOffsetTPC_pdp dch	PowerOffsetTPC-pdp dch	Class-definitions			
PowerRampStep	PowerRampStep	Class-definitions			
PRACH_ChanCodes_ LCR_r4	PRACH-ChanCodes -LCR-r4	Class-definitions			
PRACH_Definition_L CR_r4	PRACH-Definition-L CR-r4	Class-definitions			
PRACH_Midamble	PRACH-Midamble	Class-definitions			
PRACH_Partitioning	PRACH-Partitioning	Class-definitions			
PRACH_Partitioning_ LCR_r4	PRACH-Partitioning- LCR-r4	Class-definitions			
PRACH_PowerOffset	PRACH-PowerOffset	Class-definitions			
PRACH_RACH_Info	PRACH-RACH-Info	Class-definitions			
PRACH_RACH_Info_ LCR_r4	PRACH-RACH-Info -LCR-r4	Class-definitions			
PRACH_SystemInfor mation	PRACH–SystemInfor mation	Class-definitions			
PRACH_SystemInfor mation_LCR_r4	PRACH–SystemInfor mation–LCR–r4	Class-definitions			
PRACH_SystemInfor mationList	PRACH–SystemInfor mationList	Class-definitions			
PRACH_SystemInfor mationList_LCR_r4	PRACH-SystemInfor mationList-LCR-r4	Class-definitions			
PreambleRetransMax	PreambleRetransMax	Class-definitions			
PreambleScramblingC odeWordNumber	PreambleScramblingC odeWordNumber	Class-definitions			
PreDefPhyChConfigu ration	PreDefPhyChConfigu ration	Class-definitions			
PrimaryCCPCH_Info	PrimaryCCPCH-Info	Class-definitions			
PrimaryCCPCH_Info_ r4	PrimaryCCPCH-Info -r4	Class-definitions			
PrimaryCCPCH_Info_ LCR_r4	PrimaryCCPCH-Info -LCR-r4	Class-definitions			
PrimaryCCPCH_Info_ LCR_r4_ext	PrimaryCCPCH-Info -LCR-r4-ext	Class-definitions			
PrimaryCCPCH_TX_P ower	PrimaryCCPCH-TX- Power	Class-definitions			
PrimaryCPICH_Info	PrimaryCPICH-Info	Class-definitions			
PrimaryCPICH_TX_P ower	PrimaryCPICH-TX-P ower	Class-definitions			
PrimaryScramblingCo de	PrimaryScramblingCo de	Class-definitions			
PuncturingLimit	PuncturingLimit	Class-definitions			
PUSCH_CapacityAllo cationInfo	PUSCH-CapacityAllo cationInfo	Class-definitions			
PUSCH_CapacityAllo cationInfo_r4	PUSCH-CapacityAllo cationInfo-r4	Class-definitions			
PUSCH_Identity	PUSCH-Identity	Class-definitions			

	ASN.1 Type Definitions By Reference					
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments		
PUSCH_Info	PUSCH-Info	Class-definitions				
PUSCH_Info_r4	PUSCH-Info-r4	Class-definitions				
PUSCH_Info_LCR_r 4	PUSCH-Info-LCR-r 4	Class-definitions				
PUSCH_PowerContr olInfo_r4	PUSCH-PowerContr ollnfo-r4	Class-definitions				
PUSCH_SysInfo	PUSCH-SysInfo	Class-definitions				
PUSCH_SysInfo_HC R_r5	PUSCH-SysInfo-HC R-r5	Class-definitions				
PUSCH_SysInfo_LC R_r4	PUSCH-SysInfo-LC R-r4	Class-definitions				
PUSCH_SysInfoList	PUSCH-SysInfoList	Class-definitions				
PUSCH_SysInfoList_ HCR_r5	PUSCH-SysInfoList- HCR-r5	Class-definitions				
PUSCH_SysInfoList_ LCR_r4	PUSCH-SysInfoList- LCR-r4	Class-definitions				
PUSCH_SysInfoList_ SFN	PUSCH-SysInfoList- SFN	Class-definitions				
PUSCH_SysInfoList_ SFN_HCR_r5	PUSCH-SysInfoList- SFN-HCR-r5	Class-definitions				
PUSCH_SysInfoList_ SFN_LCR_r4	PUSCH-SysInfoList- SFN-LCR-r4	Class-definitions				
RACH_TransmissionP arameters	RACH-TransmissionP arameters	Class-definitions				
RepetitionPeriodAndL ength	RepetitionPeriodAndL ength	Class-definitions				
RepetitionPeriodLengt hAndOffset	RepetitionPeriodLengt hAndOffset	Class-definitions				
ReplacedPDSCH_Cod eInfo	ReplacedPDSCH-Co deInfo	Class-definitions				
ReplacedPDSCH_Cod eInfoList	ReplacedPDSCH-Co deInfoList	Class-definitions				
RepPerLengthOffset_ PICH	RepPerLengthOffset- PICH	Class-definitions				
RestrictedTrCH	RestrictedTrCH	Class-definitions				
RestrictedTrCH_InfoLi st	RestrictedTrCH-InfoL ist	Class-definitions				
RL_AdditionInformati on	RL-AdditionInformati on	Class-definitions				
RL_AdditionInformati onList	RL-AdditionInformati onList	Class-definitions				
RL_IdentifierList	RL-IdentifierList	Class-definitions				
RL_RemovalInformati onList	RL-RemovalInformati onList	Class-definitions				
RPP	RPP	Class-definitions				
S_Field	S-Field	Class-definitions				
SCCPCH_Channelisa tionCode	SCCPCH-Channelisa tionCode	Class-definitions				
SCCPCH_Channelisa tionCodeList	SCCPCH-Channelisa tionCodeList	Class-definitions				
SCCPCH_InfoForFA CH	SCCPCH-InfoForFA CH	Class-definitions				

	ASN.1 Type Definitions By Reference					
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments		
SCCPCH_InfoForFA CH_r4	SCCPCH-InfoForFA CH-r4	Class-definitions				
SCCPCH_SystemInfo rmation	SCCPCH–SystemInf ormation	Class-definitions				
SCCPCH_SystemInfo rmation_LCR_r4_ext	SCCPCH-SystemInf ormation-LCR-r4-ex t	Class-definitions				
SCCPCH_SystemInfo rmationList	SCCPCH–SystemInf ormationList	Class-definitions				
SCCPCH_SystemInfo rmationList_LCR_r4_ ext	SCCPCH-SystemInf ormationList-LCR-r4 -ext	Class-definitions				
ScramblingCodeChan ge	ScramblingCodeChan ge	Class-definitions				
ScramblingCodeType	ScramblingCodeType	Class-definitions				
SecondaryCCPCH_In fo	SecondaryCCPCH-In fo	Class-definitions				
SecondaryCCPCH_In fo_r4	SecondaryCCPCH-In fo-r4	Class-definitions				
SecondaryCCPCH_In fo_LCR_r4_ext	SecondaryCCPCH-In fo-LCR-r4-ext	Class-definitions				
SecondaryCPICH_Inf o	SecondaryCPICH-Inf o	Class-definitions				
SecondaryScrambling Code	SecondaryScrambling Code	Class-definitions				
SecondInterleavingMo de	SecondInterleavingMo de	Class-definitions				
SF256_AndCodeNum ber	SF256-AndCodeNum ber	Class-definitions				
SF512_AndCodeNum ber	SF512-AndCodeNum ber	Class-definitions				
SF512_AndPilot	SF512-AndPilot	Class-definitions				
SF_PDSCH	SF-PDSCH	Class-definitions				
SF_PRACH	SF-PRACH	Class-definitions				
SFN_TimeInfo	SFN-TimeInfo	Class-definitions				
SpecialBurstSchedulin g	SpecialBurstSchedulin g	Class-definitions				
SpreadingFactor	SpreadingFactor	Class-definitions				
SRB_delay	SRB-delay	Class-definitions				
SSDT_CellIdentity	SSDT-CellIdentity	Class-definitions				
SSDT_Information	SSDT-Information	Class-definitions				
SSDT_Information_r4	SSDT-Information-r4	Class-definitions				
SSDT_UL	SSDT-UL	Class-definitions				
SynchronisationParam eters_r4	SynchronisationParam eters-r4	Class-definitions				
SYNC_UL_Procedure _r4	SYNC-UL-Procedure -r4	Class-definitions				
SYNC_UL_Info_r4	SYNC-UL-Info-r4	Class-definitions				
TDD_FPACH_CCode 16_r4	TDD-FPACH-CCode 16-r4	Class-definitions				
TDD_UL_Interference	TDD-UL-Interference	Class-definitions				
TDD_PICH_CCode	TDD-PICH-CCode	Class-definitions				

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
TDD_PRACH_CCode	TDD-PRACH-CCode	Class-definitions			
8	8				
TDD_PRACH_CCode 16	TDD-PRACH-CCode	Class-definitions			
TDD_PRACH_CCode _LCR_r4	TDD-PRACH-CCode -LCR-r4	Class-definitions			
TDD_PRACH_CCode List	TDD-PRACH-CCode List	Class-definitions			
TFC_ControlDuration	TFC-ControlDuration	Class-definitions			
TFCI_Coding	TFCI-Coding	Class-definitions			
TGCFN	TGCFN	Class-definitions			
TGD	TGD	Class-definitions			
TGL	TGL	Class-definitions			
TGMP	TGMP	Class-definitions			
TGP_Sequence	TGP-Sequence	Class-definitions			
TGPS_Reconfiguration_CFN	TGPS-Reconfiguratio	Class-definitions			
TGP_SequenceList	TGP-SequenceList	Class-definitions			
TGP_SequenceShort	TGP-SequenceShort	Class-definitions			
TGPL	TGPL	Class-definitions			
TGPRC	TGPRC	Class-definitions			
TGPS_ConfigurationP arams	TGPS–ConfigurationP arams	Class-definitions			
TGPSI	TGPSI	Class-definitions			
TGSN	TGSN	Class-definitions			
TimeInfo	TimeInfo	Class-definitions			
TimeslotList	TimeslotList	Class-definitions			
TimeslotList_r4	TimeslotList-r4	Class-definitions			
TimeslotNumber	TimeslotNumber	Class-definitions			
TimeslotNumber_LCR _r4	TimeslotNumber–LCR –r4	Class-definitions			
TimeslotNumber_PRA CH_LCR_r4	TimeslotNumber-PRA CH-LCR-r4	Class-definitions			
TimeslotSync2	TimeslotSync2	Class-definitions			
TimingOffset	TimingOffset	Class-definitions			
TPC_CombinationInde x	TPC-CombinationInd ex	Class-definitions			
TPC_StepSizeFDD	TPC-StepSizeFDD	Class-definitions			
TPC_StepSizeTDD	TPC-StepSizeTDD	Class-definitions			
TreconfirmAbort	TreconfirmAbort	Class-definitions			
TX_DiversityMode	TX-DiversityMode	Class-definitions			
UARFCN	UARFCN	Class-definitions			
UCSM_Info	UCSM-Info	Class-definitions			
UL_CCTrCH	UL-CCTrCH	Class-definitions			
UL_CCTrCH_r4	UL-CCTrCH-r4	Class-definitions			
UL_CCTrCHList	UL-CCTrCHList	Class-definitions			
UL_CCTrCHList_r4	UL-CCTrCHList-r4	Class-definitions			
UL_CCTrCHListToRe	UL-CCTrCHListToRe	Class-definitions			
move	move				

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Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UL_CCTrChTPCList	UL-CCTrChTPCList	Class-definitions			
UL_ChannelRequireme nt	UL-ChannelRequirem ent	Class-definitions			
UL_ChannelRequireme nt_r4	UL-ChannelRequirem ent-r4	Class-definitions			
UL_ChannelRequireme nt_r5	UL-ChannelRequirem ent-r5	Class-definitions			
UL_ChannelRequireme ntWithCPCH_SetID	UL-ChannelRequirem entWithCPCH-SetID	Class-definitions			
UL_ChannelRequireme ntWithCPCH_SetID_r 4	UL-ChannelRequirem entWithCPCH-SetID -r4	Class-definitions			
UL_ChannelRequireme ntWithCPCH_SetID_r 5	UL-ChannelRequirem entWithCPCH-SetID -r5	Class-definitions			
UL_CompressedMode Method	UL-CompressedMode Method	Class-definitions			
UL_DL_Mode	UL-DL-Mode	Class-definitions			
UL_DPCCH_SlotFor mat	UL-DPCCH-SlotFor mat	Class-definitions			
UL_DPCH_Info	UL-DPCH-Info	Class-definitions			
UL_DPCH_Info_r4	UL-DPCH-Info-r4	Class-definitions			
UL_DPCH_Info_r5	UL-DPCH-Info-r5	Class-definitions			
UL_DPCH_InfoPrede f	UL-DPCH-InfoPrede f	Class-definitions			
UL_DPCH_PowerCo ntrollnfo	UL-DPCH-PowerCo ntrolInfo	Class-definitions			
UL_DPCH_PowerCo ntrollnfo_r4	UL-DPCH-PowerCo ntrolInfo-r4	Class-definitions			
UL_DPCH_PowerCo ntrollnfo_r5	UL-DPCH-PowerCo ntrolInfo-r5	Class-definitions			
UL_DPCH_PowerCo ntrollnfoPredef	UL-DPCH-PowerCo ntrolInfoPredef	Class-definitions			
UL_Interference	UL-Interference	Class-definitions			
UL_ScramblingCode	UL-ScramblingCode	Class-definitions			
UL_SynchronisationP arameters_r4	UL-SynchronisationP arameters-r4	Class-definitions			
UL_TargetSIR	UL-TargetSIR	Class-definitions			
UL_TimingAdvance	UL-TimingAdvance	Class-definitions			
UL_TimingAdvanceCo ntrol	UL-TimingAdvanceCo ntrol	Class-definitions			
UL_TimingAdvanceCo ntrol_r4	UL-TimingAdvanceCo ntrol-r4	Class-definitions			
UL_TS_Channelisatio nCode	UL-TS-Channelisatio nCode	Class-definitions			
UL_TS_Channelisatio nCodeList	UL-TS-Channelisatio nCodeList	Class-definitions			
UplinkAdditionalTimesl ots	UplinkAdditionalTimesl ots	Class-definitions			
UplinkAdditionalTimesl ots_LCR_r4	UplinkAdditionalTimesl ots-LCR-r4	Class-definitions			
UplinkTimeslotsCodes	UplinkTimeslotsCodes	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UplinkTimeslotsCodes _LCR_r4	UplinkTimeslotsCodes -LCR-r4	Class-definitions			
Wi_LCR	Wi-LCR	Class-definitions			
AcquisitionSatInfo	AcquisitionSatInfo	Class-definitions			
AcquisitionSatInfoList	AcquisitionSatInfoList	Class-definitions			
AdditionalMeasuremen tID_List	AdditionalMeasuremen tID-List	Class-definitions			
AlmanacSatInfo	AlmanacSatInfo	Class-definitions			
AlmanacSatInfoList	AlmanacSatInfoList	Class-definitions			
AverageRLC_BufferP ayload	AverageRLC-BufferP ayload	Class-definitions			
AzimuthAndElevation	AzimuthAndElevation	Class-definitions			
BadSatList	BadSatList	Class-definitions			
Frequency_Band	Frequency-Band	Class-definitions			
BCCH_ARFCN	BCCH-ARFCN	Class-definitions			
BLER_MeasurementR esults	BLER-MeasurementR esults	Class-definitions			
BLER_MeasurementR esultsList	BLER-MeasurementR esultsList	Class-definitions			
BLER_TransChldList	BLER-TransChldList	Class-definitions			
BSIC_VerificationReq uired	BSIC-VerificationReq uired	Class-definitions			
BSICReported	BSICReported	Class-definitions			
BurstModeParameters	BurstModeParameters	Class-definitions			
CellDCH_ReportCrite ria	CellDCH-ReportCrite ria	Class-definitions			
CellDCH_ReportCrite ria_LCR_r4	CellDCH-ReportCrite ria-LCR-r4	Class-definitions			
CellIndividualOffset	CellIndividualOffset	Class-definitions			
CellInfo	CellInfo	Class-definitions			
CellInfo_r4	CellInfo-r4	Class-definitions			
CellInfoSI_RSCP	CellInfoSI-RSCP	Class-definitions			
CellInfoSI_RSCP_LC R_r4	CellInfoSI-RSCP-LC R-r4	Class-definitions			
CellInfoSI_ECN0	CellInfoSI-ECN0	Class-definitions			
CellInfoSI_ECN0_LC R_r4	CellInfoSI-ECN0-LC R-r4	Class-definitions			
CellInfoSI_HCS_RSC P	CellInfoSI-HCS-RSC P	Class-definitions			
CellInfoSI_HCS_RSC P_LCR_r4	CellInfoSI-HCS-RSC P-LCR-r4	Class-definitions			
CellInfoSI_HCS_ECN 0	CellInfoSI-HCS-EC N0	Class-definitions			
CellInfoSI_HCS_ECN 0_LCR_r4	CellInfoSI-HCS-EC N0-LCR-r4	Class-definitions			
CellMeasuredResults	CellMeasuredResults	Class-definitions			
CellMeasurementEven tResults	CellMeasurementEven tResults	Class-definitions			
CellMeasurementEven tResults_LCR_r4	CellMeasurementEven tResults-LCR-r4	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
CellReportingQuantitie	CellReportingQuantitie	Class-definitions			
S	S				
CellSelectReselectInfo SIB_11_12	CellSelectReselectInfo SIB-11-12	Class-definitions			
CellSelectReselectInfo SIB_11_12_RSCP	CellSelectReselectInfo SIB-11-12-RSCP	Class-definitions			
CellSelectReselectInfo SIB_11_12_ECN0	CellSelectReselectInfo SIB-11-12-ECN0	Class-definitions			
CellSelectReselectInfo SIB_11_12_HCS_RS CP	CellSelectReselectInfo SIB-11-12-HCS-R SCP	Class-definitions			
CellSelectReselectInfo SIB_11_12_HCS_EC N0	CellSelectReselectInfo SIB-11-12-HCS-E CN0	Class-definitions			
CellSelectReselectInfo _v590ext	CellSelectReselectInfo –v590ext	Class-definitions			
CellSelectReselectInfo PCHFACH_v5b0ext	CellSelectReselectInfo PCHFACH-v5b0ext	Class-definitions			
CellsForInterFreqMeas List	CellsForInterFreqMeas List	Class-definitions			
CellsForInterRATMeas List	CellsForInterRATMeas List	Class-definitions			
CellsForIntraFreqMeas List	CellsForIntraFreqMeas List	Class-definitions			
CellSynchronisationInf o	CellSynchronisationInf o	Class-definitions			
CellToReport	CellToReport	Class-definitions			
CellToReportList	CellToReportList	Class-definitions			
CodePhaseSearchWin dow	CodePhaseSearchWin dow	Class-definitions			
CountC_SFN_Frame_ difference	CountC-SFN-Frame -difference	Class-definitions			
CPICH_Ec_N0	CPICH-Ec-N0	Class-definitions			
CPICH_RSCP	CPICH-RSCP	Class-definitions			
DeltaPRC	DeltaPRC	Class-definitions			
DeltaQrxlevmin	DeltaQrxlevmin	Class-definitions			
DeltaRSCP	DeltaRSCP	Class-definitions			
DeltaRSCPPerCell	DeltaRSCPPerCell	Class-definitions			
DeltaRRC	DeltaRRC	Class-definitions			
DGPS_CorrectionSatInfo	DGPS-CorrectionSat Info	Class-definitions			
DGPS_CorrectionSatI nfoList	DGPS–CorrectionSat InfoList	Class-definitions			
DiffCorrectionStatus	DiffCorrectionStatus	Class-definitions			
DL_TransportChannel BLER	DL-TransportChannel BLER	Class-definitions			
DopplerUncertainty	DopplerUncertainty	Class-definitions			
EllipsoidPoint	EllipsoidPoint	Class-definitions			
EllipsoidPointAltitude	EllipsoidPointAltitude	Class-definitions			
EllipsoidPointAltitudeE Ilipsoide	EllipsoidPointAltitudeE Ilipsoide	Class-definitions			

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Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
EllipsoidPointUncertCi rcle	EllipsoidPointUncertCi rcle	Class-definitions			
EllipsoidPointUncertEl lipse	EllipsoidPointUncertEl lipse	Class-definitions			
EnvironmentCharacte risation	EnvironmentCharacte risation	Class-definitions			
Event1a	Event1a	Class-definitions			
Event1a_r4	Event1a-r4	Class-definitions			
Event1a_LCR_r4	Event1a-LCR-r4	Class-definitions			
Event1b	Event1b	Class-definitions			
Event1b_r4	Event1b-r4	Class-definitions			
Event1b_LCR_r4	Event1b-LCR-r4	Class-definitions			
Event1c	Event1c	Class-definitions			
Event1e	Event1e	Class-definitions			
Event1f	Event1f	Class-definitions			
Event2a	Event2a	Class-definitions			
Event2b	Event2b	Class-definitions			
Event2c	Event2c	Class-definitions			
Event2d	Event2d	Class-definitions			
Event2e	Event2e	Class-definitions			
Event2f	Event2f	Class-definitions			
Event3a	Event3a	Class-definitions			
Event3b	Event3b	Class-definitions			
Event3c	Event3c	Class-definitions			
Event3d	Event3d	Class-definitions			
EventlDInterFreq	EventIDInterFreq	Class-definitions			
EventIDInterRAT	EventIDInterRAT	Class-definitions			
EventlDIntraFreq	 EventIDIntraFreq	Class-definitions			
EventResults	EventResults	Class-definitions			
ExtraDopplerInfo	ExtraDopplerInfo	Class-definitions			
FACH_MeasurementO ccasionInfo	FACH–MeasurementO ccasionInfo	Class-definitions			
FACH_MeasurementO ccasionInfo_LCR_r4_ ext	FACH–MeasurementO ccasionInfo–LCR–r4– ext	Class-definitions			
FilterCoefficient	FilterCoefficient	Class-definitions			
FineSFN_SFN	FineSFN-SFN	Class-definitions			
ForbiddenAffectCell	ForbiddenAffectCell	Class-definitions			
ForbiddenAffectCell_r 4	ForbiddenAffectCell-r 4	Class-definitions			
ForbiddenAffectCell_L CR_r4	ForbiddenAffectCell– LCR-r4	Class-definitions			
ForbiddenAffectCellLi st	ForbiddenAffectCellLi st	Class-definitions			
ForbiddenAffectCellLi st_r4	ForbiddenAffectCellLi st-r4	Class-definitions			
ForbiddenAffectCellLi st_LCR_r4	ForbiddenAffectCellLi st-LCR-r4	Class-definitions			
FreqQualityEstimateQu antity_FDD	FreqQualityEstimateQu antity–FDD	Class-definitions			

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Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
FreqQualityEstimateQu antity_TDD	FreqQualityEstimateQu antity=TDD	Class-definitions			
GPS_MeasurementPar am	GPS-MeasurementPa ram	Class-definitions			
GPS_MeasurementPar amList	GPS-MeasurementPa ramList	Class-definitions			
GSM_CarrierRSSI	GSM-CarrierRSSI	Class-definitions			
GSM_MeasuredResult s	GSM-MeasuredResult s	Class-definitions			
GSM_MeasuredResult sList	GSM–MeasuredResult sList	Class-definitions			
GPS_TOW_1msec	GPS-TOW-1msec	Class-definitions			
GPS_TOW_Assist	GPS-TOW-Assist	Class-definitions			
GPS_TOW_AssistList	GPS-TOW-AssistList	Class-definitions			
HCS_CellReselectInfo rmation_RSCP	HCS-CellReselectInfo rmation-RSCP	Class-definitions			
HCS_CellReselectInfo rmation_ECN0	HCS-CellReselectInfo rmation-ECN0	Class-definitions			
HCS_NeighbouringCe IlInformation_RSCP	HCS-NeighbouringCe IlInformation-RSCP	Class-definitions			
HCS_NeighbouringCe IlInformation_ECN0	HCS-NeighbouringCe IlInformation-ECN0	Class-definitions			
HCS_PRIO	HCS-PRIO	Class-definitions			
HCS_ServingCellInfor mation	HCS-ServingCellInfo rmation	Class-definitions			
Hysteresis	Hysteresis	Class-definitions			
HysteresisInterFreq	HysteresisInterFreq	Class-definitions			
InterFreqCell	InterFreqCell	Class-definitions			
InterFreqCell_LCR_r4	InterFreqCell-LCR-r4	Class-definitions			
InterFreqCellID	InterFreqCellID	Class-definitions			
InterFreqCellInfoList	InterFreqCellInfoList	Class-definitions			
InterFreqCellInfoList_ r4	InterFreqCellInfoList- r4	Class-definitions			
InterFreqCellInfoSI_Li st_RSCP	InterFreqCellInfoSI-Li st-RSCP	Class-definitions			
InterFreqCellInfoSI_Li st_ECN0	InterFreqCellInfoSI-Li st-ECN0	Class-definitions			
InterFreqCellInfoSI_Li st_HCS_RSCP	InterFreqCellInfoSI-Li st-HCS-RSCP	Class-definitions			
InterFreqCellInfoSI_Li st_HCS_ECN0	InterFreqCellInfoSI-Li st-HCS-ECN0	Class-definitions			
InterFreqCellInfoSI_Li st_RSCP_LCR	InterFreqCellInfoSI-Li st-RSCP-LCR	Class-definitions			
InterFreqCellInfoSI_Li st_ECN0_LCR	InterFreqCellInfoSI-Li st-ECN0-LCR	Class-definitions			
InterFreqCellInfoSI_Li st_HCS_RSCP_LCR	InterFreqCellInfoSI-Li st-HCS-RSCP-LCR	Class-definitions			
InterFreqCellInfoSI_Li st_HCS_ECN0_LCR	InterFreqCellInfoSI-Li st-HCS-ECN0-LCR	Class-definitions			
InterFreqCellList	InterFreqCellList	Class-definitions			
InterFreqCellList_LCR _r4_ext	InterFreqCellList-LCR -r4-ext	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
InterFreqCellMeasured ResultsList	InterFreqCellMeasured ResultsList	Class-definitions			
InterFreqEvent	InterFreqEvent	Class-definitions			
InterFreqEventList	InterFreqEventList	Class-definitions			
InterFrequencyMeasur edResultsList_v590ex t	InterFrequencyMeasur edResultsList-v590ex t	Class-definitions			
Inter_FreqEventCriter ia_v590ext	Inter–FreqEventCriter ia–v590ext	Class-definitions			
Inter_FreqEventCriter iaList_v590ext	Inter-FreqEventCriter iaList-v590ext	Class-definitions			
Intra_FreqEventCriter iaList_v590ext	Intra-FreqEventCriter iaList-v590ext	Class-definitions			
IntraFrequencyMeasur edResultsList_v590ex t	IntraFrequencyMeasur edResultsList-v590ex t	Class-definitions			
IntraFreqReportingCri teria_1b_r5	IntraFreqReportingCri teria-1b-r5	Class-definitions			
PeriodicReportingInfo _1b	PeriodicReportingInfo –1b	Class-definitions			
InterFreqEventResults	InterFreqEventResults	Class-definitions			
InterFreqEventResults _LCR_r4_ext	InterFreqEventResults -LCR-r4-ext	Class-definitions			
InterFreqMeasQuantit y	InterFreqMeasQuantit y	Class-definitions			
InterFreqMeasuredRes ults	InterFreqMeasuredRes ults	Class-definitions			
InterFreqMeasuredRes ultsList	InterFreqMeasuredRes ultsList	Class-definitions			
InterFreqMeasurement SysInfo_RSCP	InterFreqMeasurement SysInfo-RSCP	Class-definitions			
InterFreqMeasurement SysInfo_ECN0	InterFreqMeasurement SysInfo-ECN0	Class-definitions			
InterFreqMeasurement SysInfo_HCS_RSCP	InterFreqMeasurement SysInfo-HCS-RSCP	Class-definitions			
InterFreqMeasurement SysInfo_HCS_ECN0	InterFreqMeasurement SysInfo-HCS-ECN0	Class-definitions			
InterFreqMeasurement SysInfo_RSCP_LCR_ r4	InterFreqMeasurement SysInfo-RSCP-LCR -r4	Class-definitions			
InterFreqMeasurement SysInfo_ECN0_LCR_ r4	InterFreqMeasurement SysInfo-ECN0-LCR -r4	Class-definitions			
InterFreqMeasurement SysInfo_HCS_RSCP _LCR_r4	InterFreqMeasurement SysInfo-HCS-RSCP -LCR-r4	Class-definitions			
InterFreqMeasurement SysInfo_HCS_ECN0 _LCR_r4	InterFreqMeasurement SysInfo-HCS-ECN0 -LCR-r4	Class-definitions			
InterFreqReportCriteri a	InterFreqReportCriteri a	Class-definitions			
InterFreqReportCriteri a_r4	InterFreqReportCriteri a-r4	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
InterFreqReportingCri teria	InterFreqReportingCri teria	Class-definitions			
InterFreqReportingQu antity	InterFreqReportingQu antity	Class-definitions			
InterFrequencyMeasur ement	InterFrequencyMeasur ement	Class-definitions			
InterFrequencyMeasur ement_r4	InterFrequencyMeasur ement-r4	Class-definitions			
InterRAT_TargetCellD escription	InterRAT-TargetCellD escription	Class-definitions			
InterRATCellID	InterRATCellID	Class-definitions			
InterRATCellInfoIndica tion	InterRATCellInfoIndica tion	Class-definitions			
InterRATCellInfoList	InterRATCellInfoList	Class-definitions			
InterRATCellInfoList_ B	InterRATCellInfoList- B	Class-definitions			
InterRATCellInfoList_r 4	InterRATCellInfoList-r 4	Class-definitions			
InterRATCellIndividual Offset	InterRATCellIndividual Offset	Class-definitions			
InterRATEvent	InterRATEvent	Class-definitions			
InterRATEventList	InterRATEventList	Class-definitions			
InterRATEventResults	InterRATEventResults	Class-definitions			
InterRATInfo	InterRATInfo	Class-definitions			
InterRATMeasQuantity	InterRATMeasQuantity	Class-definitions			
InterRATMeasuredRes ults	InterRATMeasuredRes ults	Class-definitions			
InterRATMeasuredRes ultsList	InterRATMeasuredRes ultsList	Class-definitions			
InterRATMeasurement	InterRATMeasurement	Class-definitions			
InterRATMeasurement _r4	InterRATMeasurement –r4	Class-definitions			
InterRATMeasurement SysInfo	InterRATMeasurement SysInfo	Class-definitions			
InterRATMeasurement SysInfo_B	InterRATMeasurement SysInfo-B	Class-definitions			
InterRATReportCriteri a	InterRATReportCriteri a	Class-definitions			
InterRATReportingCrit eria	InterRATReportingCrit eria	Class-definitions			
InterRATReportingQua ntity	InterRATReportingQua ntity	Class-definitions			
IntraFreqCellID	IntraFreqCellID	Class-definitions			
IntraFreqCellInfoList	IntraFreqCellInfoList	Class-definitions			
IntraFreqCellInfoList_ r4	IntraFreqCellInfoList- r4	Class-definitions			
IntraFreqCellInfoSI_Li st_RSCP	IntraFreqCellInfoSI-Li st-RSCP	Class-definitions			
IntraFreqCellInfoSI_Li st_ECN0	IntraFreqCellInfoSI-Li st-ECN0	Class-definitions			
IntraFreqCellInfoSI_Li st_HCS_RSCP	IntraFreqCellInfoSI-Li st-HCS-RSCP	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
IntraFreqCellInfoSI_Li st_HCS_ECN0	IntraFreqCellInfoSI-Li st-HCS-ECN0	Class-definitions			
IntraFreqCellInfoSI_Li st_RSCP_LCR_r4	IntraFreqCellInfoSI-Li st-RSCP-LCR-r4	Class-definitions			
IntraFreqCellInfoSI_Li st_ECN0_LCR_r4	IntraFreqCellInfoSI-Li st-ECN0-LCR-r4	Class-definitions			
IntraFreqCellInfoSI_Li st_HCS_RSCP_LCR _r4	IntraFreqCellInfoSI-Li st-HCS-RSCP-LCR -r4	Class-definitions			
IntraFreqCellInfoSI_Li st_HCS_ECN0_LCR _r4	IntraFreqCellInfoSI-Li st-HCS-ECN0-LCR -r4	Class-definitions			
IntraFreqEvent	IntraFreqEvent	Class-definitions			
IntraFreqEvent_r4	IntraFreqEvent-r4	Class-definitions			
IntraFreqEvent_LCR_ r4	IntraFreqEvent-LCR -r4	Class-definitions			
IntraFreqEvent_1d_r5	IntraFreqEvent–1d–r 5	Class-definitions			
IntraFreqEventCriteria	IntraFreqEventCriteria	Class-definitions			
IntraFreqEventCriteria _r4	IntraFreqEventCriteria -r4	Class-definitions			
IntraFreqEventCriteria _LCR_r4	IntraFreqEventCriteria -LCR-r4	Class-definitions			
IntraFreqEventCriteria List	IntraFreqEventCriteria List	Class-definitions			
IntraFreqEventCriteria List_r4	IntraFreqEventCriteria List-r4	Class-definitions			
IntraFreqEventCriteria List_LCR_r4	IntraFreqEventCriteria List-LCR-r4	Class-definitions			
IntraFreqEventResults	IntraFreqEventResults	Class-definitions			
IntraFreqMeasQuantit y	IntraFreqMeasQuantit y	Class-definitions			
IntraFreqMeasQuantit y_FDD	IntraFreqMeasQuantit y–FDD	Class-definitions			
IntraFreqMeasQuantit y_TDD	IntraFreqMeasQuantit y-TDD	Class-definitions			
IntraFreqMeasQuantit y_TDDList	IntraFreqMeasQuantit y–TDDList	Class-definitions			
IntraFreqMeasuredRes ultsList	IntraFreqMeasuredRes ultsList	Class-definitions			
IntraFreqMeasurement SysInfo_RSCP	IntraFreqMeasurement SysInfo-RSCP	Class-definitions			
IntraFreqMeasurement SysInfo_ECN0	IntraFreqMeasurement SysInfo-ECN0	Class-definitions			
IntraFreqMeasurement SysInfo_HCS_RSCP	IntraFreqMeasurement SysInfo-HCS-RSCP	Class-definitions			
IntraFreqMeasurement SysInfo_HCS_ECN0	IntraFreqMeasurement SysInfo-HCS-ECN0	Class-definitions			
IntraFreqMeasurement SysInfo_RSCP_LCR_ r4	IntraFreqMeasurement SysInfo-RSCP-LCR -r4	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
IntraFreqMeasurement SysInfo_ECN0_LCR_ r4	IntraFreqMeasurement SysInfo-ECN0-LCR -r4	Class-definitions			
IntraFreqMeasurement SysInfo_HCS_RSCP _LCR_r4	IntraFreqMeasurement SysInfo-HCS-RSCP -LCR-r4	Class-definitions			
IntraFreqMeasurement SysInfo_HCS_ECN0 _LCR_r4	IntraFreqMeasurement SysInfo-HCS-ECN0 -LCR-r4	Class-definitions			
IntraFreqReportCriteri a	IntraFreqReportCriteri a	Class-definitions			
IntraFreqReportCriteri a_r4	IntraFreqReportCriteri a-r4	Class-definitions			
IntraFreqReportingCri teria	IntraFreqReportingCri teria	Class-definitions			
IntraFreqReportingCri teria_r4	IntraFreqReportingCri teria-r4	Class-definitions			
IntraFreqReportingCri teria_LCR_r4	IntraFreqReportingCri teria-LCR-r4	Class-definitions			
IntraFreqReportingQu antity	IntraFreqReportingQu antity	Class-definitions			
IntraFreqReportingQu antityForRACH	IntraFreqReportingQu antityForRACH	Class-definitions			
IntraFreqRepQuantity RACH_FDD	IntraFreqRepQuantity RACH-FDD	Class-definitions			
IntraFreqRepQuantity RACH_TDD	IntraFreqRepQuantity RACH-TDD	Class-definitions			
IntraFreqRepQuantity RACH_TDDList	IntraFreqRepQuantity RACH-TDDList	Class-definitions			
IntraFrequencyMeasur ement	IntraFrequencyMeasur ement	Class-definitions			
IntraFrequencyMeasur ement_r4	IntraFrequencyMeasur ement-r4	Class-definitions			
IODE	IODE	Class-definitions			
IP_Length	IP-Length	Class-definitions			
IP_PCCPCH_r4	IP-PCCPCH-r4	Class-definitions			
IP_Spacing	IP-Spacing	Class-definitions			
IP_Spacing_TDD	IP-Spacing-TDD	Class-definitions			
IS_2000SpecificMeasI nfo	IS-2000SpecificMeasI nfo	Class-definitions			
MaxNumberOfReporti ngCellsType1	MaxNumberOfReporti ngCellsType1	Class-definitions			
MaxNumberOfReporti ngCellsType2	MaxNumberOfReporti ngCellsType2	Class-definitions			
MaxNumberOfReporti ngCellsType3	MaxNumberOfReporti ngCellsType3	Class-definitions			
MaxReportedCellsOn RACH	MaxReportedCellsOn RACH	Class-definitions			
MeasuredResults	MeasuredResults	Class-definitions			
MeasuredResults_v39 0ext	MeasuredResults-v39 0ext	Class-definitions			
MeasuredResults_v59 0ext	MeasuredResults-v59 0ext	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
MeasuredResults_LCR _r4	MeasuredResults-LCR -r4	Class-definitions			
MeasuredResultsList	MeasuredResultsList	Class-definitions			
MeasuredResultsList_ LCR_r4_ext	MeasuredResultsList- LCR-r4-ext	Class-definitions			
MeasuredResultsOnRA CH	MeasuredResultsOnRA CH	Class-definitions			
MeasurementComman d	MeasurementComman d	Class-definitions			
MeasurementComman d_r4	MeasurementComman d-r4	Class-definitions			
MeasurementControlS ysInfo	MeasurementControlS ysInfo	Class-definitions			
MeasurementControlS ysInfo_LCR_r4_ext	MeasurementControlS ysInfo-LCR-r4-ext	Class-definitions			
MeasurementIdentity	MeasurementIdentity	Class-definitions			
MeasurementQuantity GSM	MeasurementQuantity GSM	Class-definitions			
MeasurementReportin gMode	MeasurementReportin gMode	Class-definitions			
MeasurementType	MeasurementType	Class-definitions			
MeasurementType_r4	MeasurementType-r4	Class-definitions			
MeasurementValidity	MeasurementValidity	Class-definitions			
MonitoredCellRACH_ List	MonitoredCellRACH- List	Class-definitions			
MonitoredCellRACH_ Result	MonitoredCellRACH- Result	Class-definitions			
MultipathIndicator	MultipathIndicator	Class-definitions			
N_CR_T_CRMaxHyst	N-CR-T-CRMaxHys t	Class-definitions			
NavigationModelSatIn fo	NavigationModelSatIn fo	Class-definitions			
NavigationModelSatIn foList	NavigationModelSatIn foList	Class-definitions			
EphemerisParameter	EphemerisParameter	Class-definitions			
NC_Mode	NC-Mode	Class-definitions			
Neighbour	Neighbour	Class-definitions			
Neighbour_v390ext	Neighbour-v390ext	Class-definitions			
NeighbourList	NeighbourList	Class-definitions			
NeighbourList_v390e xt	NeighbourList-v390e xt	Class-definitions			
NeighbourQuality	NeighbourQuality	Class-definitions			
NewInterFreqCell	NewInterFreqCell	Class-definitions			
NewInterFreqCell_r4	NewInterFreqCell-r4	Class-definitions			
NewInterFreqCellList	NewInterFreqCellList	Class-definitions			
NewInterFreqCellList_ r4	NewInterFreqCellList- r4	Class-definitions			
NewInterFreqCellSI_R SCP	NewInterFreqCellSI-R SCP	Class-definitions			
NewInterFreqCellSI_E CN0	NewInterFreqCellSI-E CN0	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
NewInterFreqCellSI_H CS_RSCP	NewInterFreqCellSI- HCS-RSCP	Class-definitions			
NewInterFreqCellSI_H CS_ECN0	NewInterFreqCellSI– HCS–ECN0	Class-definitions			
NewInterFreqCellSI_R SCP_LCR_r4	NewInterFreqCellSI-R SCP-LCR-r4	Class-definitions			
NewInterFreqCellSI_E CN0_LCR_r4	NewInterFreqCellSI-E CN0-LCR-r4	Class-definitions			
NewInterFreqCellSI_H CS_RSCP_LCR_r4	NewInterFreqCellSI- HCS-RSCP-LCR-r4	Class-definitions			
NewInterFreqCellSI_H CS_ECN0_LCR_r4	NewInterFreqCellSI- HCS-ECN0-LCR-r4	Class-definitions			
NewInterFreqCellSI_Li st_ECN0	NewInterFreqCellSI-L ist-ECN0	Class-definitions			
NewInterFreqCellSI_Li st_HCS_RSCP	NewInterFreqCellSI-L ist-HCS-RSCP	Class-definitions			
NewInterFreqCellSI_Li st_HCS_ECN0	NewInterFreqCellSI-L ist-HCS-ECN0	Class-definitions			
NewInterFreqCellSI_Li st_RSCP	NewInterFreqCellSI-L ist-RSCP	Class-definitions			
NewInterFreqCellSI_Li st_ECN0_LCR_r4	NewInterFreqCellSI-L ist-ECN0-LCR-r4	Class-definitions			
NewInterFreqCellSI_Li st_HCS_RSCP_LCR _r4	NewInterFreqCellSI-L ist-HCS-RSCP-LCR -r4	Class-definitions			
NewInterFreqCellSI_Li st_HCS_ECN0_LCR _r4	NewInterFreqCellSI-L ist-HCS-ECN0-LCR -r4	Class-definitions			
NewInterFreqCellSI_Li st_RSCP_LCR_r4	NewInterFreqCellSI-L ist-RSCP-LCR-r4	Class-definitions			
NewInterRATCell	NewInterRATCell	Class-definitions			
NewInterRATCell_B	NewInterRATCell-B	Class-definitions			
NewInterRATCellList	NewInterRATCellList	Class-definitions			
NewInterRATCellList_ B	NewInterRATCellList- B	Class-definitions			
NewIntraFreqCell	NewIntraFreqCell	Class-definitions			
NewIntraFreqCell_r4	NewIntraFreqCell-r4	Class-definitions			
NewIntraFreqCellList	NewIntraFreqCellList	Class-definitions			
NewIntraFreqCellList_	NewIntraFreqCellList-	Class-definitions			
r4 NewIntraFreqCellSI_R SCP	r4 NewIntraFreqCellSI-R SCP	Class-definitions			
NewIntraFreqCellSI_E CN0	NewIntraFreqCellSI-E	Class-definitions			
NewIntraFreqCellSI_H CS_RSCP	NewIntraFreqCellSI- HCS-RSCP	Class-definitions			
NewIntraFreqCellSI_H CS_ECN0	NewIntraFreqCellSI- HCS-ECN0	Class-definitions			
NewIntraFreqCellSI_R SCP_LCR_r4	NewIntraFreqCellSI-R SCP-LCR-r4	Class-definitions			
NewIntraFreqCellSI_E CN0_LCR_r4	NewIntraFreqCellSI-E CN0-LCR-r4	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
NewIntraFreqCellSI_H CS_RSCP_LCR_r4	NewIntraFreqCellSI- HCS-RSCP-LCR-r4	Class-definitions			
NewIntraFreqCellSI_H CS_ECN0_LCR_r4	NewIntraFreqCellSI- HCS-ECN0-LCR-r4	Class-definitions			
NewIntraFreqCellSI_Li st_RSCP	NewIntraFreqCellSI-L ist-RSCP	Class-definitions			
NewIntraFreqCellSI_Li st_ECN0	NewIntraFreqCellSI-L ist-ECN0	Class-definitions			
NewIntraFreqCellSI_Li st_HCS_RSCP	NewIntraFreqCellSI-L ist-HCS-RSCP	Class-definitions			
NewIntraFreqCellSI_Li st_HCS_ECN0	NewIntraFreqCellSI-L ist-HCS-ECN0	Class-definitions			
NewIntraFreqCellSI_Li st_RSCP_LCR_r4	NewIntraFreqCellSI-L ist-RSCP-LCR-r4	Class-definitions			
NewIntraFreqCellSI_Li st_ECN0_LCR_r4	NewIntraFreqCellSI-L ist-ECN0-LCR-r4	Class-definitions			
NewIntraFreqCellSI_Li st_HCS_RSCP_LCR _r4	NewIntraFreqCellSI-L ist-HCS-RSCP-LCR -r4	Class-definitions			
NewIntraFreqCellSI_Li st_HCS_ECN0_LCR _r4	NewIntraFreqCellSI-L ist-HCS-ECN0-LCR -r4	Class-definitions			
NonUsedFreqParamet er	NonUsedFreqParamet er	Class-definitions			
NonUsedFreqParamet erList	NonUsedFreqParamet erList	Class-definitions			
ObservedTimeDifferen ceToGSM	ObservedTimeDifferen ceToGSM	Class-definitions			
OTDOA_SearchWindo wSize	OTDOA-SearchWindo wSize	Class-definitions			
Pathloss	Pathloss	Class-definitions			
PenaltyTime_RSCP	PenaltyTime-RSCP	Class-definitions			
PenaltyTime_ECN0	PenaltyTime-ECN0	Class-definitions			
PendingTimeAfterTrigg er	PendingTimeAfterTrigg er	Class-definitions			
PeriodicalOrEventTrig ger	PeriodicalOrEventTrig ger	Class-definitions			
PeriodicalReportingCri teria	PeriodicalReportingCri teria	Class-definitions			
PeriodicalWithReportin gCellStatus	PeriodicalWithReportin gCellStatus	Class-definitions			
PLMNIdentitiesOfNeig hbourCells	PLMNIdentitiesOfNeig hbourCells	Class-definitions			
PLMNsOfInterFreqCel IsList	PLMNsOfInterFreqCel IsList	Class-definitions			
PLMNsOfIntraFreqCel IsList	PLMNsOfIntraFreqCel IsList	Class-definitions			
PLMNsOfInterRATCell sList	PLMNsOfInterRATCell sList	Class-definitions			
PositionEstimate	PositionEstimate	Class-definitions			
PositioningMethod	PositioningMethod	Class-definitions			
PRC	PRC	Class-definitions			

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
PrimaryCCPCH_RSC	PrimaryCCPCH-RSC	Class-definitions			
P	P	Olassa Jaffalffara			
Q_HCS	Q-HCS	Class-definitions			
Q_OffsetS_N	Q-OffsetS-N	Class-definitions			
Q_QualMin	Q-QualMin	Class-definitions			
Q_RxlevMin	Q-RxlevMin	Class-definitions Class-definitions			
QualityEventResults QualityMeasuredResult	QualityEventResults	Class-definitions Class-definitions			
s	QualityMeasuredResult s	Class-definitions			
QualityMeasurement	QualityMeasurement	Class-definitions			
QualityReportCriteria	QualityReportCriteria	Class-definitions			
QualityReportingCriter ia	QualityReportingCriter ia	Class-definitions			
QualityReportingCriter iaSingle	QualityReportingCriter iaSingle	Class-definitions			
QualityReportingQuant ity	QualityReportingQuant ity	Class-definitions			
RAT_Type	RAT-Type	Class-definitions			
ReferenceCellPosition	ReferenceCellPosition	Class-definitions			
ReferenceLocation	ReferenceLocation	Class-definitions			
ReferenceTimeDifferen ceToCell	ReferenceTimeDifferen ceToCell	Class-definitions			
RemovedInterFreqCell List	RemovedInterFreqCell List	Class-definitions			
RemovedInterRATCell List	RemovedInterRATCell List	Class-definitions			
RemovedIntraFreqCell List	RemovedIntraFreqCell List	Class-definitions			
ReplacementActivation Threshold	ReplacementActivation Threshold	Class-definitions			
ReportDeactivationThr eshold	ReportDeactivationThr eshold	Class-definitions			
ReportingAmount	ReportingAmount	Class-definitions			
ReportingCellStatus	ReportingCellStatus	Class-definitions			
ReportingCellStatusO pt	ReportingCellStatusO pt	Class-definitions			
ReportingInfoForCell DCH	ReportingInfoForCell DCH	Class-definitions			
ReportingInfoForCell DCH_LCR_r4	ReportingInfoForCell DCH-LCR-r4	Class-definitions			
ReportingInterval	ReportingInterval	Class-definitions			
ReportingIntervalLong	ReportingIntervalLong	Class-definitions			
ReportingRange	ReportingRange	Class-definitions			
RL_AdditionInfoList	RL-AdditionInfoList	Class-definitions			
RL_InformationLists	RL-InformationLists	Class-definitions			
RLC_BuffersPayload	RLC-BuffersPayload	Class-definitions			
RRC	RRC	Class-definitions			
SatData	SatData	Class-definitions			
SatDataList	SatDataList	Class-definitions			
SatelliteStatus	SatelliteStatus	Class-definitions			

Continued from previous pa	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
SatID	SatID	Class-definitions			
SFN_Offset_Validity	SFN-Offset-Validity	Class-definitions			
SFN_SFN_Drift	SFN-SFN-Drift	Class-definitions			
SFN_SFN_ObsTimeDi fference	SFN-SFN-ObsTimeDi fference	Class-definitions			
SFN_SFN_ObsTimeDi fference1	SFN-SFN-ObsTimeDi fference1	Class-definitions			
SFN_SFN_ObsTimeDi fference2	SFN-SFN-ObsTimeDi fference2	Class-definitions			
SFN_SFN_OTD_Type	SFN-SFN-OTD-Type	Class-definitions			
SFN_SFN_RelTimeDif ference1	SFN-SFN-RelTimeDif ference1	Class-definitions			
SFN_TOW_Uncertaint y	SFN-TOW-Uncertain ty	Class-definitions			
SIR	SIR	Class-definitions			
SIR_MeasurementList	SIR-MeasurementList	Class-definitions			
SIR_MeasurementRes ults	SIR-MeasurementRes ults	Class-definitions			
SIR_TFCS	SIR-TFCS	Class-definitions			
SIR_TFCS_List	SIR-TFCS-List	Class-definitions			
SIR_TimeslotList	SIR-TimeslotList	Class-definitions			
SubFrame1Reserved	SubFrame1Reserved	Class-definitions			
T_ADVinfo	T-ADVinfo	Class-definitions			
T_CRMax	T-CRMax	Class-definitions			
T_CRMaxHyst	T-CRMaxHyst	Class-definitions			
TemporaryOffset1	TemporaryOffset1	Class-definitions			
TemporaryOffset2	TemporaryOffset2	Class-definitions			
TemporaryOffsetList	TemporaryOffsetList	Class-definitions			
Threshold	Threshold	Class-definitions			
ThreholdNonUsedFreq uency_deltaList	ThreholdNonUsedFreq uency-deltaList	Class-definitions			
ThresholdPositionCha nge	ThresholdPositionCha nge	Class-definitions			
ThresholdSFN_GPS_T OW	ThresholdSFN-GPS- TOW	Class-definitions			
ThresholdSFN_SFN_ Change	ThresholdSFN-SFN- Change	Class-definitions			
ThresholdUsedFreque ncy	ThresholdUsedFreque ncy	Class-definitions			
TimeInterval	TimeInterval	Class-definitions			
TimeslotInfo	TimeslotInfo	Class-definitions			
TimeslotInfo_LCR_r4	TimeslotInfo-LCR-r4	Class-definitions			
TimeslotInfoList	TimeslotInfoList	Class-definitions			
TimeslotInfoList_LCR _r4	TimeslotInfoList–LCR –r4	Class-definitions			
TimeslotInfoList_r4	TimeslotInfoList-r4	Class-definitions			
TimeslotISCP	TimeslotISCP	Class-definitions			
TimeslotISCP_List	TimeslotISCP-List	Class-definitions			
TimeslotListWithISCP	TimeslotListWithISCP	Class-definitions			
TimeslotWithISCP	TimeslotWithISCP	Class-definitions			

Continued from previous pag	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
TimeToTrigger	TimeToTrigger	Class-definitions			
TrafficVolumeEventPa ram	TrafficVolumeEventPa ram	Class-definitions			
TrafficVolumeEventRe sults	TrafficVolumeEventRe sults	Class-definitions			
TrafficVolumeEventTy pe	TrafficVolumeEventTy pe	Class-definitions			
TrafficVolumeMeasQua ntity	TrafficVolumeMeasQua ntity	Class-definitions			
TrafficVolumeMeasSys Info	TrafficVolumeMeasSys Info	Class-definitions			
TrafficVolumeMeasure dResults	TrafficVolumeMeasure dResults	Class-definitions			
TrafficVolumeMeasure dResultsList	TrafficVolumeMeasure dResultsList	Class-definitions			
TrafficVolumeMeasure ment	TrafficVolumeMeasure ment	Class-definitions			
TrafficVolumeMeasure mentObjectList	TrafficVolumeMeasure mentObjectList	Class-definitions			
TrafficVolumeReportC riteria	TrafficVolumeReportC riteria	Class-definitions			
TrafficVolumeReportC riteriaSysInfo	TrafficVolumeReportC riteriaSysInfo	Class-definitions			
TrafficVolumeReportin gCriteria	TrafficVolumeReportin gCriteria	Class-definitions			
TrafficVolumeReportin gQuantity	TrafficVolumeReportin gQuantity	Class-definitions			
TrafficVolumeThreshol d	TrafficVolumeThreshol d	Class-definitions			
TransChCriteria	TransChCriteria	Class-definitions			
TransChCriteriaList	TransChCriteriaList	Class-definitions			
TransferMode	TransferMode	Class-definitions			
TransmittedPowerThre shold	TransmittedPowerThre shold	Class-definitions			
TriggeringCondition1	TriggeringCondition1	Class-definitions			
TriggeringCondition2	TriggeringCondition2	Class-definitions			
TX_InterruptionAfterT rigger	TX-InterruptionAfterT rigger	Class-definitions			
UDRE	UDRE	Class-definitions			
UE_6AB_Event	UE-6AB-Event	Class-definitions			
UE_6FG_Event	UE-6FG-Event	Class-definitions			
UE_AutonomousUpda teMode	UE-AutonomousUpda teMode	Class-definitions			
UE_InternalEventPara m	UE-InternalEventPar am	Class-definitions			
UE_InternalEventPara mList	UE-InternalEventPar amList	Class-definitions			
UE_InternalEventRes ults	UE-InternalEventRes ults	Class-definitions			
UE_InternalMeasQuan tity	UE-InternalMeasQuan tity	Class-definitions			

	ASN.1 T	ype Definitions By F	Reference	
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
UE_InternalMeasured Results	UE-InternalMeasured Results	Class-definitions		
UE_InternalMeasured Results_LCR_r4	UE-InternalMeasured Results-LCR-r4	Class-definitions		
UE_InternalMeasurem ent	UE-InternalMeasurem ent	Class-definitions		
UE_InternalMeasurem ent_r4	UE-InternalMeasurem ent-r4	Class-definitions		
UE_InternalMeasurem entSysInfo	UE-InternalMeasurem entSysInfo	Class-definitions		
UE_InternalReportCri teria	UE-InternalReportCri teria	Class-definitions		
UE_InternalReporting Criteria	UE-InternalReporting Criteria	Class-definitions		
UE_InternalReporting Quantity	UE-InternalReporting Quantity	Class-definitions		
UE_InternalReporting Quantity_r4	UE-InternalReporting Quantity-r4	Class-definitions		
UE_MeasurementQua ntity	UE-MeasurementQua ntity	Class-definitions		
UE_RX_TX_ReportEn try	UE-RX-TX-ReportE	Class-definitions		
UE_RX_TX_ReportEn tryList	UE-RX-TX-ReportE ntryList	Class-definitions		
UE_RX_TX_TimeDiffe renceType1	UE-RX-TX-TimeDiffe renceType1	Class-definitions		
UE_RX_TX_TimeDiffe renceType2	UE-RX-TX-TimeDiffe renceType2	Class-definitions		
UE_RX_TX_TimeDiffe renceType2Info	UE-RX-TX-TimeDiffe renceType2Info	Class-definitions		
UE_RX_TX_TimeDiffe renceThreshold	UE-RX-TX-TimeDiffe renceThreshold	Class-definitions		
UE_TransmittedPower	UE-TransmittedPowe	Class-definitions		
UE_TransmittedPower TDD_List	UE-TransmittedPowe rTDD-List	Class-definitions		
UL_TrCH_Identity	UL-TrCH-Identity	Class-definitions		
UE_Positioning_Accur acy	UE-Positioning-Accu racy	Class-definitions		
UE_Positioning_Ciph erParameters	UE-Positioning-Ciph erParameters	Class-definitions		
UE_Positioning_Error	UE-Positioning-Erro	Class-definitions		
UE_Positioning_Error Cause	UE-Positioning-Erro rCause	Class-definitions		
UE_Positioning_Even tParam	UE-Positioning-Even tParam	Class-definitions		
UE_Positioning_Even tParamList	UE-Positioning-Even tParamList	Class-definitions		
UE_Positioning_Even tSpecificInfo	UE-Positioning-Even tSpecificInfo	Class-definitions		

	ASN.1 Type Definitions By Reference						
Type Name	Type Name Type Reference Module Identifier Encoding Variation Comments						
UE_Positioning_GPS _AcquisitionAssistance	UE-Positioning-GPS -AcquisitionAssistanc e	Class-definitions					
UE_Positioning_GPS _AdditionalAssistance DataRequest	UE-Positioning-GPS -AdditionalAssistance DataRequest	Class-definitions					
UE_Positioning_GPS _Almanac	UE-Positioning-GPS -Almanac	Class-definitions					
UE_Positioning_GPS _AssistanceData	UE-Positioning-GPS -AssistanceData	Class-definitions					
UE_Positioning_GPS _DGPS_Corrections	UE-Positioning-GPS -DGPS-Corrections	Class-definitions					
UE_Positioning_GPS _lonosphericModel	UE-Positioning-GPS -lonosphericModel	Class-definitions					
UE_Positioning_GPS _MeasurementResults	UE-Positioning-GPS -MeasurementResults	Class-definitions					
UE_Positioning_GPS _NavigationModel	UE-Positioning-GPS -NavigationModel	Class-definitions					
UE_Positioning_GPS _NavModelAddDataR	UE-Positioning-GPS -NavModelAddDataR	Class-definitions					
eq UE_Positioning_GPS _ReferenceCellInfo	eq UE-Positioning-GPS -ReferenceCellInfo	Class-definitions					
UE_Positioning_GPS _ReferenceTime	UE-Positioning-GPS -ReferenceTime	Class-definitions					
UE_Positioning_GPS _UTC_Model	UE-Positioning-GPS -UTC-Model	Class-definitions					
UE_Positioning_IPDL _Parameters	UE-Positioning-IPDL -Parameters	Class-definitions					
UE_Positioning_IPDL _Parameters_r4	UE-Positioning-IPDL -Parameters-r4	Class-definitions					
UE_Positioning_IPDL _Parameters_TDD_r4 _ext	UE-Positioning-IPDL -Parameters-TDD-r4 -ext	Class-definitions					
UE_Positioning_Meas uredResults	UE-Positioning-Meas uredResults	Class-definitions					
UE_Positioning_Meas uredResults_v390ext	UE-Positioning-Meas uredResults-v390ext	Class-definitions					
UE_Positioning_Meas urement	UE-Positioning-Meas urement	Class-definitions					
UE_Positioning_Meas urement_v390ext	UE-Positioning-Meas urement-v390ext	Class-definitions					
UE_Positioning_Meas urement_r4	UE-Positioning-Meas urement-r4	Class-definitions					
UE_Positioning_Meas urementEventResults	UE-Positioning-Meas urementEventResults	Class-definitions					
UE_Positioning_Meas urementInterval	UE-Positioning-Meas urementInterval	Class-definitions					
UE_Positioning_Meth odType	UE-Positioning-Meth odType	Class-definitions					
UE_Positioning_OTD OA_AssistanceData	UE-Positioning-OTD OA-AssistanceData	Class-definitions					

	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UE_Positioning_OTD OA_AssistanceData_r 4	UE-Positioning-OTD OA-AssistanceData-r 4	Class-definitions			
UE_Positioning_OTD OA_AssistanceData_r 4ext	UE-Positioning-OTD OA-AssistanceData-r 4ext	Class-definitions			
UE_Positioning_OTD OA_AssistanceData_ UEB	UE-Positioning-OTD OA-AssistanceData- UEB	Class-definitions			
UE_Positioning_IPDL _Parameters_TDDList _r4_ext	UE-Positioning-IPDL -Parameters-TDDList -r4-ext	Class-definitions			
UE_Positioning_OTD OA_Measurement	UE-Positioning-OTD OA-Measurement	Class-definitions			
UE_Positioning_OTD OA_Measurement_v3 90ext	UE-Positioning-OTD OA-Measurement-v3 90ext	Class-definitions			
UE_Positioning_OTD OA_NeighbourCellInfo	UE-Positioning-OTD OA-NeighbourCellInf o	Class-definitions			
UE_Positioning_OTD OA_NeighbourCellInfo _r4	UE-Positioning-OTD OA-NeighbourCellInf o-r4	Class-definitions			
UE_Positioning_OTD OA_NeighbourCellInfo _UEB	UE-Positioning-OTD OA-NeighbourCellInf o-UEB	Class-definitions			
UE_Positioning_OTD OA_NeighbourCellList	UE-Positioning-OTD OA-NeighbourCellList	Class-definitions			
UE_Positioning_OTD OA_NeighbourCellList _r4	UE-Positioning-OTD OA-NeighbourCellList -r4	Class-definitions			
UE_Positioning_OTD OA_NeighbourCellList _UEB	UE-Positioning-OTD OA-NeighbourCellList -UEB	Class-definitions			
UE_Positioning_OTD OA_Quality	UE-Positioning-OTD OA-Quality	Class-definitions			
UE_Positioning_OTD OA_ReferenceCellInfo	UE-Positioning-OTD OA-ReferenceCellInfo	Class-definitions			
UE_Positioning_OTD OA_ReferenceCellInfo _r4	UE-Positioning-OTD OA-ReferenceCellInfo -r4	Class-definitions			
UE_Positioning_OTD OA_ReferenceCellInfo _UEB	UE-Positioning-OTD OA-ReferenceCellInfo -UEB	Class-definitions			
UE_Positioning_Positi onEstimateInfo	UE-Positioning-Posit ionEstimateInfo	Class-definitions			
UE_Positioning_Repo rtCriteria	UE-Positioning-Repo rtCriteria	Class-definitions			
UE_Positioning_Repo rtingQuantity	UE-Positioning-ReportingQuantity	Class-definitions			
UE_Positioning_Repo rtingQuantity_v390ex t	UE-Positioning-Repo rtingQuantity-v390ex t	Class-definitions			
UE_Positioning_Repo rtingQuantity_r4	UE-Positioning-ReportingQuantity-r4	Class-definitions			

Continued from previous pa	ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments	
UE_Positioning_Resp onseTime	UE-Positioning-Resp onseTime	Class-definitions			
UTRA_CarrierRSSI	UTRA-CarrierRSSI	Class-definitions			
UTRAN_GPS_DriftRa te	UTRAN-GPS-DriftRa te	Class-definitions			
UTRAN_GPSReferenc eTime	UTRAN-GPSReferenc eTime	Class-definitions			
UTRAN_GPSReferenc eTimeResult	UTRAN-GPSReferenc eTimeResult	Class-definitions			
VarianceOfRLC_Buffe rPayload	VarianceOfRLC-Buffe rPayload	Class-definitions			
W	W	Class-definitions			
BCC	BCC	Class-definitions			
BCCH_ModificationIn fo	BCCH–ModificationIn fo	Class-definitions			
BCCH_ModificationTi me	BCCH–ModificationTi me	Class-definitions			
BSIC	BSIC	Class-definitions			
CBS_DRX_Level1Info rmation	CBS-DRX-Level1Inf ormation	Class-definitions			
CDMA2000_Message	CDMA2000-Message	Class-definitions			
CDMA2000_Message List	CDMA2000-Message List	Class-definitions			
CDMA2000_UMTS_F requency_List	CDMA2000-UMTS-F requency-List	Class-definitions			
CellValueTag	CellValueTag	Class-definitions			
ExpirationTimeFactor	ExpirationTimeFactor	Class-definitions			
FDD_UMTS_Frequenc y_List	FDD-UMTS-Frequen cy-List	Class-definitions			
FrequencyInfoCDMA2 000	FrequencyInfoCDMA2 000	Class-definitions			
GERAN_SystemInfoBI ock	GERAN-SystemInfoB lock	Class-definitions			
GERAN_SystemInfor mation	GERAN–SystemInfor mation	Class-definitions			
GSM_BA_Range	GSM-BA-Range	Class-definitions			
GSM_BA_Range_List	GSM-BA-Range-List	Class-definitions			
GSM_Classmark2	GSM-Classmark2	Class-definitions			
GSM_Classmark3	GSM-Classmark3	Class-definitions			
GSM_MessageList	GSM-MessageList	Class-definitions			
GsmSecurityCapability	GsmSecurityCapability	Class-definitions			
IdentificationOfReceiv edMessage	IdentificationOfReceiv edMessage	Class-definitions			
InterRAT_ChangeFailu reCause	InterRAT-ChangeFailu reCause	Class-definitions			
GERANIu_MessageLis t	GERANIu-MessageLis t	Class-definitions			
GERANIu_RadioAcces sCapability	GERANIu-RadioAcces sCapability	Class-definitions			
InterRAT_UE_RadioA ccessCapability	InterRAT-UE-RadioA ccessCapability	Class-definitions			

	ASN.1 Type Definitions By Reference			
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
InterRAT_UE_RadioA	InterRAT-UE-RadioA	Class-definitions		
ccessCapabilityList	ccessCapabilityList			
InterRAT_UE_RadioA ccessCapability_v590e	InterRAT-UE-RadioA ccessCapability-v590	Class-definitions		
xt	ext			
InterRAT_UE_Security	InterRAT-UE-Securit	Class-definitions		
Capability	yCapability			
InterRAT_UE_Security CapList	InterRAT-UE-Securit yCapList	Class-definitions		
InterRAT_HO_Failure Cause	InterRAT-HO-Failure Cause	Class-definitions		
MasterInformationBlo ck	MasterInformationBlo ck	Class-definitions		
MIB_ValueTag	MIB-ValueTag	Class-definitions		
NCC	NCC	Class-definitions		
PLMN_ValueTag	PLMN-ValueTag	Class-definitions		
PredefinedConfigIden tityAndValueTag	PredefinedConfiglden tityAndValueTag	Class-definitions		
ProtocolErrorInformat ion	ProtocolErrorInformat ion	Class-definitions		
ReceivedMessageType	ReceivedMessageType	Class-definitions		
Rplmn_Information	Rplmn-Information	Class-definitions		
Rplmn_Information_r4	Rplmn–Information–r 4	Class-definitions		
SchedulingInformation	SchedulingInformation	Class-definitions		
SchedulingInformation SIB	SchedulingInformation SIB	Class-definitions		
SchedulingInformation SIBSb	SchedulingInformation SIBSb	Class-definitions		
SegCount	SegCount	Class-definitions		
SegmentIndex	SegmentIndex	Class-definitions		
SFN_Prime	SFN-Prime	Class-definitions		
SIB_Data_fixed	SIB-Data-fixed	Class-definitions		
SIB_Data_variable	SIB-Data-variable	Class-definitions		
SIBOccurldentity	SIBOccurldentity	Class-definitions		
SIBOccurrenceIdentity AndValueTag	SIBOccurrenceIdentity AndValueTag	Class-definitions		
SIBOccurValueTag	SIBOccurValueTag	Class-definitions		
SIB_ReferenceList	SIB-ReferenceList	Class-definitions		
SIBSb_ReferenceList	SIBSb-ReferenceList	Class-definitions		
SIB_ReferenceListFA CH	SIB-ReferenceListFA CH	Class-definitions		
SIB_Type	SIB-Type	Class-definitions		
SIB_TypeAndTag	SIB-TypeAndTag	Class-definitions		
SIBSb_TypeAndTag	SIBSb-TypeAndTag	Class-definitions		
SibOFF	SibOFF	Class-definitions		
SibOFF_List	SibOFF-List	Class-definitions		
SysInfoType1	SysInfoType1	Class-definitions		
SysInfoType1_v3a0ex t_IEs	SysInfoType1-v3a0ex t-IEs	Class-definitions		

	ASN.1 Type Definitions By Reference			
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SysInfoType2	SysInfoType2	Class-definitions		
SysInfoType3	SysInfoType3	Class-definitions		
SysInfoType3_v4b0ex t_IEs	SysInfoType3-v4b0ex t-IEs	Class-definitions		
SysInfoType3_v590ex t	SysInfoType3-v590ex t	Class-definitions		
SysInfoType4	SysInfoType4	Class-definitions		
SysInfoType4_v4b0ex t_IEs	SysInfoType4-v4b0ex t-IEs	Class-definitions		
SysInfoType4_v590ex t	SysInfoType4-v590ex t	Class-definitions		
SysInfoType4_v5b0ex t_IEs	SysInfoType4-v5b0ex t-IEs	Class-definitions		
SysInfoType5	SysInfoType5	Class-definitions		
SysInfoType5_v4b0ex t_IEs	SysInfoType5-v4b0ex t-IEs	Class-definitions		
SysInfoType5_v590ex t_IEs	SysInfoType5-v590ex t-IEs	Class-definitions		
SysInfoType6	SysInfoType6	Class-definitions		
SysInfoType6_v4b0ex t_IEs	SysInfoType6-v4b0ex t-IEs	Class-definitions		
SysInfoType6_v590ex t_IEs	SysInfoType6-v590ex t-IEs	Class-definitions		
SysInfoType7	SysInfoType7	Class-definitions		
SysInfoType8	SysInfoType8	Class-definitions		
SysInfoType9	SysInfoType9	Class-definitions		
SysInfoType10	SysInfoType10	Class-definitions		
SysInfoType11	SysInfoType11	Class-definitions		
SysInfoType11_v4b0e xt_IEs	SysInfoType11-v4b0e xt-IEs	Class-definitions		
SysInfoType11_v590e xt_IEs	SysInfoType11-v590e xt-IEs	Class-definitions		
SysInfoType12	SysInfoType12	Class-definitions		
SysInfoType12_v4b0e xt_IEs	SysInfoType12-v4b0e xt-IEs	Class-definitions		
SysInfoType12_v590e xt_IEs	SysInfoType12-v590e xt-IEs	Class-definitions		
SysInfoType13	SysInfoType13	Class-definitions		
SysInfoType13_v3a0e xt_IEs	SysInfoType13-v3a0e xt-IEs	Class-definitions		
SysInfoType13_v4b0e xt_IEs	SysInfoType13-v4b0e xt-IEs	Class-definitions		
SysInfoType13_1	SysInfoType13-1	Class-definitions		
SysInfoType13_2	SysInfoType13-2	Class-definitions		
SysInfoType13_3	SysInfoType13-3	Class-definitions		
SysInfoType13_4	SysInfoType13-4	Class-definitions		
SysInfoType14	SysInfoType14	Class-definitions		
SysInfoType15	SysInfoType15	Class-definitions		
SysInfoType15_v4b0e xt_IEs	SysInfoType15-v4b0e xt-IEs	Class-definitions		
SysInfoType15_1	SysInfoType15-1	Class-definitions		

ASN.1 Type Definitions By Reference				
Type Name	Type Reference	Module Identifier	Encoding Variation	Comments
SysInfoType15_2	SysInfoType15-2	Class-definitions		
SysInfoType15_3	SysInfoType15-3	Class-definitions		
SysInfoType16	SysInfoType16	Class-definitions		
SysInfoType17	SysInfoType17	Class-definitions		
SysInfoType17_v4b0e xt_IEs	SysInfoType17-v4b0e xt-IEs	Class-definitions		
SysInfoType17_v590e xt_IEs	SysInfoType17-v590e xt-IEs	Class-definitions		
SysInfoType18	SysInfoType18	Class-definitions		
SysInfoTypeSB1	SysInfoTypeSB1	Class-definitions		
SysInfoTypeSB2	SysInfoTypeSB2	Class-definitions		
TDD_UMTS_Frequenc y_List	TDD-UMTS-Frequen cy-List	Class-definitions		
ANSI_41_GlobalServi ceRedirectInfo	ANSI-41-GlobalServi ceRedirectInfo	Class-definitions		
ANSI_41_PrivateNeig hbourListInfo	ANSI-41-PrivateNeig hbourListInfo	Class-definitions		
ANSI_41_RAND_Info rmation	ANSI-41-RAND-Inf ormation	Class-definitions		
ANSI_41_UserZonel D_Information	ANSI-41-UserZonel D-Information	Class-definitions		
ANSI_41_NAS_Para meter	ANSI-41-NAS-Para meter	Class-definitions		
Min_P_REV	Min-P-REV	Class-definitions		
NAS_SystemInformati onANSI_41	NAS-SystemInformati onANSI-41	Class-definitions		
NID	NID	Class-definitions		
P_REV	P-REV	Class-definitions		
SID	SID	Class-definitions		

Encoding Definitions						
Encoding Rule Name Reference Default Comments						
PER_Unaligned	X.691		Packet encoding rules (X.691) unaligned and with adapted padding			
Detailed Comments :						

Operation Name: o_ComputeSM_ContentsSpec(p_NumOfChars: INTEGER; p_Text: IA5String)

Result Type : OCTETSTRING

Comments: max. 160 characters, i.e. 140 octets.

Description

This operation provides a short message's contents with a specified number of characters 'p_NumOfChars', each represented by 7 bits. 'p_Text' is used as contents of the short message. If 'p_Text' contains less than 'p_NumOfChars' characters, 'p_Text' is repeated until the short message reaches the 'p_NumOfChars' characters long. The bits are arranged acc. to 3G TS 23.038, cl. 6.1.2.1.1.

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_GetSC_TimeStamp(p_timezone : TZONES)

Result Type : TP_ServCentreTimeSt

Comments : TPSCTS is HEXSTRING[14]

Description

This operation provides the hexstring containing the service center time stamp (SCTS) according to 3G TS 23.040, cl.s 9.2.2.1 and 9.2.3.11. The TSO reads the current time of the test systems clock and transforms the time in combination with the input parameter 'timezone' into a service center time stamp.

Example:

2002 April 18, 15:32:46, timezone=4

o_GetSC_TimeStamp returns 20408151236440

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_IntToIA5(p_N:INTEGER; p_L:INTEGER)

Result Type : IA5String

Comments :

Description

o_IntToIA5 converts the INTEGER 'p_N' into IA5 String with length = 'p_L'.

for example:

o_IntToIA5(160,3) = "160"; o_IntToIA5(160,4) = " 160"; o_IntToIA5(160,2) = "60".

Operation Name: o_IA5_IP_ToOct (p_String: IA5String; p_IP_V4: BOOLEAN)

Result Type : OCTETSTRING

Comments :

Description

o_IA5_IP_ToOct converts the string p_String from IA5String type to OCTETSTRING. p_String represents an IP address consisting of a number of fields of digits, separated by dots. Each one of the numbers of which the IP address consists is converted into one octet. The dots separating the numbers are ignored.

p_IP_V4 is a BOOLEAN. When TRUE, an IP Version 4 address is to be converted, the maximum length of which is 4 octets, otherwise an IP Version 6 address is to be converted, the maximum length of which is 16 octets. See 3G TS 24008, clause 10.5.6.4

For example:

o_IA5_IP_ToOct ("200.1.1.80", TRUE) = 'C8010150'O

o_IA5_IP_ToOct ("200.1.1.80.100", TRUE) should result in an appropriate error message

o_IA5_IP_ToOct ("300.1.1.80", TRUE) should result in an appropriate error message

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_CheckStringStartWith (p_SourceString, p_StartString: IA5String)

Result Type : BOOLEAN

Comments :

Description

o_CheckStringStartWith returns TRUE if the p_SourceString start with the p_StartString. Otherwise it returns FALSE.

For example:

o_CheckStringStartWith ("+CLCC:1,0,0,2,0;", "+CLCC:1,0,0")=TRUE

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_ConcatStrg (p_String1, p_String2: IA5String)

Result Type : IA5String

Comments :

Description

o_ConcatString concatenates p_String1 and p_String2 and returns the resulting string.

For example:

o_ConcatString ("AT+CBST=0" , ",0") = "AT+CBST=0,0"

 $\textbf{Operation Name :} \ o_IntToOct(p_N:INTEGER; p_L:INTEGER)$

Result Type : OCTETSTRING

Comments :

Description

o_IntToOct converts the INTEGER p_N into OCTETSTRING with length = p_L .

for example:

o_IntToOct(14,1) = '0E'O; o_IntToOct(18,1) = '12'O; o_IntToOct(18,2) = '0012'O.

Operation Name: o_AuthRspChk(p_AuthRsp: AuthRsp; p_AuthRspExt; AuthRspExt; p_K:BITSTRING; p_RAND:

BITSTRING; p_Ext: BOOLEAN)

Result Type : BOOLEAN

Comments :

Description

Checks the input parameter p_AuthRsp and p_AuthRspExt, both received in an Authentication Response, according to the authentication algorithm defined in the following procedure.

The extension, p_AuthRspExt, is optional. Its presence is indicated by p_Ext.

Returns TRUE if the Authentication Response contained in parameters p_AuthRsp and eventually p_AuthRspExt is correct, FALSE otherwise.

The value of tcv_AuthN indicates whether the AuthRspExt has been provided by the UE or not (n=31, or 31 < n < 128). See 3G TS 34.108 cl. 8.1.2.

If not the parameter p_AuthRspExt is not to be used.

Algorithm (without the knowledge of tcv_AuthN):

if NOT p_Ext EvaluateAuthRsp else EvaluateAuthRspAndAuthRspExt

EvaluateAuthRsp:

resultbitstring = o_BitstringXOR(XRES, AuthRsp) if resultbitstring is all 0s then there is a match.

EvaluateAuthRspAndAuthRspExt:

XREShigh = o_BitstringXtract(XRES, 32, 32, 0)

/* XRES divides into 2 parts: the higher part of 32 bits related to AuthRsp and the lower part related to AuthRspExt */

/* SourceLength of 32 is only to ensure usage of the procedure */

resultbitstring = o_BitstringXOR(XREShigh, AuthRsp)

if resultbitstring is all 0s then there is a match for the first 32 bits: Evaluate AuthRspExt else Authentication failed.

EvaluateAuthRspExt:

/* As AuthRespExt may not be octet aligned the last octet indicated in AuthRspExt is not used for checking */

```
if (AuthRspExt.iel = 1) then Authentication passed
```

```
/* there was only 1 possibly incomplete octet which is not used */ else
```

AuthRspExthigh = o_BitstringXtract(AuthRspExt.authRsp, ((AuthRspExt.iel -1)* 8), (AuthRspExt.iel -1)* 8, 0)

/* extract (AuthRspExt.iel -1)* 8 bits starting from bit 0 */

XRESlow = o_BitstringXtract(XRES, ((AuthRspExt.iel -1)* 8 + 32), (AuthRspExt.iel -1)* 8, 32)

/* extract (AuthRspExt.iel -1)* 8 bits starting from bit 32 */

 $result bits tring = o_Bits tring XOR(XRESlow, AuthRspExthigh, (AuthRspExt.iel - 1) * 8)$

if resultbitstring is all 0s then there is a match for the bits following the first 32 bits else Authentication failed

Operation Name: o_BitstringConcat(p_Str1, p_Str2: BITSTRING; p_Len1, p_Len2: INTEGER)

Result Type : BITSTRING

Comments :

Description

Performs the concatenation of 2 bitstrings of possibly different lengths. The bit significance is from left to right, ie the MSB is at the lefthand side.

Returns a resulting bitstring p_Str1 \parallel p_Str2 of length p_ Len1 + p_Len.

Example

o_BitstringConcat('010101'B,'11'B) produces '01010111'B of length 6 + 2 = 8..

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_BitstringXOR(p_Str1, p_Str2: BITSTRING; p_Len: INTEGER)

Result Type : BITSTRING

Comments :

Description

Performs an XOR operation using 2 bitstrings of the same length (p_Len).

Returns a resulting Bitstring of length p_Len.

Example

o_BitstringXOR('0011'B, '0101'B, 4) produces '0110'B

Operation Name: o_BitstringXtract(p_Str: BITSTRING; p_SrcLen, p_TargetLen, p_Offset: INTEGER)

Result Type : BITSTRING

Comments :

Description

Performs the wrap around extract of a bitstring. The length of the string from

which extraction is to be made is specified in p_SrcLen. The length of the bitstring to be extracted is indicated as p_TargetLen, the offset in the original

string is indicated in p_Offset. The bit position 0 is at the left.

Returns a resulting bitstring of length p_TargetLen.

Examples:

o_BitstringXtract('101010'B, 6, 2, 1) produces '01'B.

- o_BitstringXtract('101010'B, 6, 4, 3) produces '0101'B, wrapping around.
- o_BitstringXtract('111000'B, 6, 4, 5) produces '0111'B, wrapping around.

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_ConvertIMSI(p_Imsi: HEXSTRING)

Result Type : IMSI_GSM_MAP

Comments : The input parameter 'imsi' is a BCD string (subset of HEXSTRING), the result is of type

IMSI_GSM_MAP.

Description

The input parameter p_Imsi is a BCD string (subset of HEXSTRING), the result is of type IMSI_GSM_MAP.

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_ConvertPTMSI(p_PTMSI: OCTETSTRING)

Result Type : P_TMSI_GSM_MAP

Comments: The input parameter 'PTMSI' is a OCTETSTRING, the result is of type TMSI_GSM_MAP.

Description

The input parameter 'PTMSI' is a OCTETSTRING, the result is of type P_TMSI_GSM_MAP.

Operation Name: o_ConvertTMSI(p_Tmsi: OCTETSTRING)

Result Type : TMSI_GSM_MAP

Comments: The input parameter 'tmsi' is a OCTETSTRING, the result is of type TMSI_GSM_MAP.

Description

The input parameter p_Tmsi is a OCTETSTRING, the result is of type TMSI_GSM_MAP.

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_ConvtPLMN(p_MCC, p_MNC: HEXSTRING)

Result Type : OCTETSTRING

Comments :

Description

the functions of o_ConvtPLMN are as following:

- 1. The least significant HEX of p_MNC is removed from p_MNC and inserted into p_MCC in the position left to the third HEX to form a new p_MCC of 4 HEXs, then swap the first HEX (left most, most significant Hex) with the second HEX of the new p_MCC.
- 2. Swap the first Hex with the second HEX of the remaining part of p_MNC and append it to the new p_MCC formed in Step1 above.

For example:

o_ConvtPLMN('123'H, '456'H) = '216354'O o_ConvtPLMN ('234'H, '01F'H) = '32F410'O

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_GetPI (p_Imsi: HEXSTRING; p_Np: INTEGER)

Result Type : BITSTRING

Comments: The operation is used to calculate the PI (Page Indicator) from the given input parameters.

Description

The PI is calculated as following:

PI = drx_index mod np

The drx_index is calculated as described hereafter:

drx_index = (p_lmsi / 8192))

This calculation is defined in TS 25.304 clause 8.3.

NOTE: the IMSI is passed as HEXSTRING, the relevant conversion shall be done.

Operation Name: o_HexToDigitsMCC(p_BCDdigits: HEXSTRING)

Result Type : MCC
Comments :

Description

The input parameter p_BCDdigits shall be a BCD string (subset of HEXSTRING), the result is a SEQUENCE (SIZE(3)) OF digit (MCC).

NOTE: The length of p_BCDdigits shall be 3. User shall take the responsibility of fulfilling this requirement.

for example:

o_HexToDigitsMCC('111'H) = $\{1, 1, 1\}$ o_HexToDigitsMCC('123'H) = $\{1, 2, 3\}$.

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_HexToDigitsMNC(p_BCDdigits: HEXSTRING)

Result Type : MNC Comments :

Description

The length of the input parameter p_BCDdigits shall be 3 HEX DIGITS, the first two shall be BCDdigit (subset of HEXSTRING) the result is a SEQUENCE (SIZE(2..3)) OF Digit (MNC).

The function of this operation is:

- 1. the least significant HEX is removed if it is 'F' and the operation returns SEQUENCE (SIZE(2)) OF Digit.
- 2. the operation returns SEQUENCE (SIZE(3)) OF Digit if all 3 HEX digits in p_BCDdigits are BCD Digit.

for example:

o_HexToDigitsMNC('123'H) = $\{1, 2, 3\}$ o_HexToDigitsMNC('13F'H) = $\{1, 3\}$.

Operation Name: o_IA5_ToOct (p_String: IA5String)

Result Type : OCTETSTRING

Comments :

Description

o_IA5_ToOct converts the string p_String from IA5String type to OCTETSTRING.

Each character is mapped onto an octet, and bit 8 is set to 0. This TSO shall be used to convert Access Point Numbers for example. See 3G TS 24008, clause 10.5.6.1

For example:

o_IA5_ToOct ("15A") = '313541'O

Detailed Comments:

Test Suite Operation Definition

Operation Name: o_OctetstringConcat(p_Str1, p_Str2: OCTETSTRING)

Result Type : OCTETSTRING

Comments :

Description

o_OctetstringConcat Performs the concatenation of 2 octetstrings of possibly different lengths.

The octet significance is from left to right, i.e. the MSB is at the lefthand side.

Returns a resulting octetstring p_Str1 || p_Str2 .

Example

o_OctetstringConcat('135'O, '9A38'O) = '1359A38'O.

Operation Name: o_SIB_PER_Encoding(p_SIB: SIB)

Result Type : BITSTRING

Comments : generate the unaligned PER codes without "Encoder added (0-7) bits padding" from the input system

information block

Description

The function of the o_SIB_PER_Encoding is as the follows:

it returns the unaligned PER encoding (BIT STRING) of the input system information block p_SIB (without "Encoder added (1–7) bits padding"). The bits corresponding to the encoding of the CHOICE of the SIB type shall be removed.

```
Example:
for the following SIBType1 value:
  SysInfoType1 ::=
 cn_CommonGSM_MAP_NAS_SysInfo
                                      '0080'O.
 cn_DomainSysInfoList
                                     {{cn_DomainIdentity ps_domain,
                                                        gsm_MAP: '0000'O,
                                      cn_Type
                                      cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength
                                      {cn_DomainIdentity cs_domain,
                                      cn_Type
                                                       gsm_MAP: o_OctetstringConcat(p_T3212,
o_IntToOct(p_ATTFlag, 1)),
                                      cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength
                                      }
                                      },
 ue_ConnTimersAndConstants
                               t_301
                                      ms2000,
                               n_301 2,
                               t 302 ms4000,
                               n_302 3,
                               t_304 ms1000,
                               n_304 3,
                               t_305 m60,
                               t_307
                                      s50,
                               t_308 ms320,
                               t_309 8,
                               t_310 ms320,
                               n_310 5,
                               t_311 ms500,
                               t_312 5,
                               n_312 s200,
                               t_313 10,
                               n_313 s20,
                               t_314 s20,
                               t 315 s30,
                               n_315 s200,
                               t_316 s50,
                               t_317 s1800
 ue IdleTimersAndConstants
                                       t_300 ms400,
                                      n_300 7,
                                      t_312
                                             10,
                                      n_312 s200
 nonCriticalExtensions
                                      {}
```

The operation returns

Detailed Comments: 3GPP TS 25.331 clause 12.1

Test Suite Operation Definition

Operation Name: o_SIB_Segmentation(p_SIBBitString: BITSTRING)

Result Type : SegmentsOfSysInfoBlock

Comments: The returned result is a structured type.

Description

The function of the o_SIB_Segmentation is as following:

- 1. If the p_SIBBitString is less than or equal to 226 bits, the bit string is fit into one segment. If the bit string is less than 226 bits but more than 214 bits, the segment shall be padded to 226 bits long with padding bits set to '0'B.
- 2. If the input operand p_SIBBitString is longer than 226 bits it is segmented from left to right into segments, each segment except the last one is 222 bits . The last segment may be 222 bits or shorter. If the length of last segment is greater than 214 bits pad it to 222 bits with padding bits set to '0'B.
 - 3. The number of segments is assigned to segCount field of the result.
 - 4. The first segment is assigned to seg1 field of the result, the second segment is assigned to the seg2 field of the result, the third segment is assigned to the seg3 field of the result, and so on till the last segment.

Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments
pc_Rel4	BOOLEAN	PICS Table ???	UE supporting Release 4
pc_Rel5	BOOLEAN	PICS Table ???	UE supporting Release 5
pc_Rel99	BOOLEAN	PICS Table ???	UE supporting Release 99
pc_SMS_CS_MT	BOOLEAN	PICS Table A.2 Item 3	SMS CS mode Mobile Terminated supported
pc_SMS_MultiCallEx	BOOLEAN	PICS Table A.20 Item 16	SMS Sending of concatenated multiple short messages when there is a call in progress supported
pc_SMS_MultiNoCall	BOOLEAN	PICS Table A.20 Item 15	SMS Sending of multiple short messages on the same RR connection when there is no call in progress supported
pc_SMS_PS_MT	BOOLEAN	PICS Table A.2 Item 5	SMS PS mode Mobile Terminated supported
px_MaxCP_DataRetx	INTEGER	PIXIT Table B.4	max. number of CP data retransmissions for SMS valid range:1 to 3
px_SMS_MsgFrmt	IA5String	PIXIT Table B.4	SMS Message Format <mode> of TS 27.005 cl. 3.2.3 Default value: "0"</mode>
px_SMS_PrefMem1	IA5String	PIXIT Table B.4	SMS Preferred Memory 1 <mem1> of TS 27.005 cl. 3.1 Default value: "SM"</mem1>
px_SMS_PrefMem2	IA5String	PIXIT Table B.4	SMS Preferred Memory 2 <mem2> of TS 27.005 cl. 3.1 Default value: "SM"</mem2>
px_SMS_PrefMem3	IA5String	PIXIT Table B.4	SMS Preferred Memory 3 <mem3> of TS 27.005 cl. 3.1 Default value: "MT"</mem3>
px_SMS_Service	IA5String	PIXIT Table B.4	SMS Service <service> of TS 27.005 cl. 3.2.1 Default value: "0"</service>
px_TC1M	INTEGER	PIXIT Table B.4	timer value for timer TC1M (for SMS) in seconds
pc_SMS_PS_MO	BOOLEAN	PICS Table A.2 Item 6	SMS PS mode Mobile Originated supported

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
pc_AT_SupportToInit_PS_C all	BOOLEAN	PICS, Table A	This PIXIT when set to TRUE, AT command set (CGACT, CGEQREQ, CGDCONT, CGEQMIN)will be used to initiate PS call and strict check of desired QoS parameters is done. IF it is set to FALSE, only CGACT command to act PDP context will be used to initiate the call, and checking of QoS Parameters sent by UE in PDP Context Req will not be performed. Default value: TRUE	
pc_AltSpeechFax_TS61	BOOLEAN	PICS, Table A.10/2	Teleservice 61: alternate speech/fax supported	
pc_Async31kHz_14400	BOOLEAN	PICS, Table A.4/2	Asynchronous 3.1 kHz audio with FNUR 14400bit/s general bearer service supported	
pc_Async31kHz_19200	BOOLEAN	PICS, Table A.4/3	Asynchronous 3.1 kHz audio with FNUR 19200 bit/s general bearer service supported	
pc_Async31kHz_28800	BOOLEAN	PICS, Table A.4/4	Asynchronous 3.1 kHz audio with FNUR 28800 bit/s general bearer service supported	
pc_Async31kHz_9600	BOOLEAN	PICS, Table A.4/1	Asynchronous 3.1 kHz audio with FNUR 9600 bit/s general bearer service supported	
pc_Async31kHz_AutoBandi ng1	BOOLEAN	PICS, Table A.4/5	Asynchronous 3.1 kHz audio with modem AutoBauding 1 general bearer service supported	
pc_AsyncFTM_56000	BOOLEAN	PICS, Table A.4/20	Asynchronous Frame Tunneling Mode (FTM) 56000bit/s general bearer service supported	
pc_AsyncFTM_64000	BOOLEAN	PICS, Table A.4/21	Asynchronous Frame Tunneling Mode (FTM) 64000bit/s general bearer service supported	
pc_AsyncPIAFS_32000	BOOLEAN	PICS, Table A.4/18	Asynchronous PIAFS 32000bit/s general bearer service supported	
pc_AsyncPIAFS_64000	BOOLEAN	PICS, Table A.4/19	Asynchronous PIAFS 64000bit/s general bearer service supported	
pc_AsyncV110_14400	BOOLEAN	PICS, Table A.4/7	Asynchronous V110 UDI 14400bit/s general bearer service supported	
pc_AsyncV110_19200	BOOLEAN	PICS, Table A.4/8	Asynchronous V110 UDI 19200bit/s general bearer service supported	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
pc_AsyncV110_28800	BOOLEAN	PICS, Table A.4/9	Asynchronous V110 UDI 28800bit/s general bearer service supported	
pc_AsyncV110_38400	BOOLEAN	PICS, Table A.4/10	Asynchronous V110 UDI 38400bit/s general bearer service supported	
pc_AsyncV110_9600	BOOLEAN	PICS, Table A.4/6	Asynchronous V110 UDI 9600bit/s general bearer service supported	
pc_AsyncV120_14400	BOOLEAN	PICS, Table A.4/12	Asynchronous V120 14400bit/s general bearer service supported	
pc_AsyncV120_19200	BOOLEAN	PICS, Table A.4/13	Asynchronous V120 19200bit/s general bearer service supported	
pc_AsyncV120_28800	BOOLEAN	PICS, Table A.4/14	Asynchronous V120 28800bit/s general bearer service supported	
pc_AsyncV120_38400	BOOLEAN	PICS, Table A.4/15	Asynchronous V120 38400bit/s general bearer service supported	
pc_AsyncV120_48000	BOOLEAN	PICS, Table A.4/16	Asynchronous V120 48000bit/s general bearer service supported	
pc_AsyncV120_56000	BOOLEAN	PICS, Table A.4/17	Asynchronous V120 56000bit/s general bearer service supported	
pc_AsyncV120_9600	BOOLEAN	PICS, Table A.4/11	Asynchronous V120 9600bit/s general bearer service supported	
pc_CHUP_AT_CommandSu pp	BOOLEAN	PICS, Table A20 27.007 clause 6.5	TRUE if the AT command +CHUP (to hangup an alternating mode call is supported. Otherwise AT+ CVHU=0 command used. Default value: FALSE	
pc_EmergSpeech	BOOLEAN	PICS, Table A.2/2	Emergency speech call teleservice supported	
pc_SMS_CS_MO	BOOLEAN	PICS Table A.2 Item 4	SMS CS mode Mobile Originated supported	
pc_Speech	BOOLEAN	PICS, Table A.2/1	Speech (narrow band speech AMR) teleservice supported	
pc_Sync31kHzA_14400	BOOLEAN	PICS, Table A.5/2	Synchronous 3.1kHz Audio 14400bit/s general bearer service supported	
pc_Sync31kHzA_19200	BOOLEAN	PICS, Table A.5/3	Synchronous 3.1kHz Audio 19200bit/s general bearer service supported	
pc_Sync31kHzA_28800	BOOLEAN	PICS, Table A.5/4	Synchronous 3.1kHz Audio 28800bit/s general bearer service supported	
pc_Sync31kHzA_9600	BOOLEAN	PICS, Table A.5/1	Synchronous 3.1kHz Audio 9600bit/s general bearer service supported	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
pc_SyncBTM_56000	BOOLEAN	PICS, Table A.5/22	Synchronous Bit TransparentMode (BTM) 56000bit/s general bearer service supported	
pc_SyncBTM_64000	BOOLEAN	PICS, Table A.5/23	Synchronous Bit TransparentMode (BTM) 64000bit/s general bearer service supported	
pc_SyncMmediaCall_28800	BOOLEAN	PICS, Table A.5/24	Synchronous Multimedia Call 28000bit/s general bearer service supported	
pc_SyncMmediaCall_32000	BOOLEAN	PICS, Table A.5/25	Synchronous Multimedia Call 32000bit/s general bearer service supported	
pc_SyncMmediaCall_33600	BOOLEAN	PICS, Table A.5/26	Synchronous Multimedia Call 33600bit/s general bearer service supported	
pc_SyncMmediaCall_56000	BOOLEAN	PICS, Table A.5/27	Synchronous Multimedia Call 56000bit/s general bearer service supported	
pc_SyncMmediaCall_64000	BOOLEAN	PICS, Table A.5/28	Synchronous Multimedia Call 64000bit/s general bearer service supported	
pc_SyncV110_28800	BOOLEAN	PICS, Table A.5/5	Synchronous V110 28800bit/s general bearer service supported	
pc_SyncV110_48000	BOOLEAN	PICS, Table A.5/6	Synchronous V110 48000bit/s general bearer service supported	
pc_SyncV110_56000	BOOLEAN	PICS, Table A.5/7	Synchronous V110 56000bit/s general bearer service supported	
pc_SyncV120_14400	BOOLEAN	PICS, Table A.5/16	Synchronous V120 14400bit/s general bearer service supported	
pc_SyncV120_19200	BOOLEAN	PICS, Table A.5/17	Synchronous V120 19200bit/s general bearer service supported	
pc_SyncV120_28800	BOOLEAN	PICS, Table A.5/18	Synchronous V120 28800bit/s general bearer service supported	
pc_SyncV120_38400	BOOLEAN	PICS, Table A.5/19	Synchronous V120 38400bit/s general bearer service supported	
pc_SyncV120_48000	BOOLEAN	PICS, Table A.5/20	Synchronous V120 48000bit/s general bearer service supported	
pc_SyncV120_56000	BOOLEAN	PICS, Table A.5/21	Synchronous V120 56000bit/s general bearer service supported	
pc_SyncV120_9600	BOOLEAN	PICS, Table A.5/15	Synchronous V120 9600bit/s general bearer service supported	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
pc_SyncX31_14400	BOOLEAN	PICS, Table A.5/9	Synchronous X.31 flag stuffing UDI 14400bit/s general bearer service supported	
pc_SyncX31_19200	BOOLEAN	PICS, Table A.5/10	Synchronous X.31 flag stuffing UDI 19200bit/s general bearer service supported	
pc_SyncX31_28800	BOOLEAN	PICS, Table A.5/11	Synchronous X.31 flag stuffing UDI 28800bit/s general bearer service supported	
pc_SyncX31_38400	BOOLEAN	PICS, Table A.5/12	Synchronous X.31 flag stuffing UDI 38400bit/s general bearer service supported	
pc_SyncX31_48000	BOOLEAN	PICS, Table A.5/13	Synchronous X.31 flag stuffing UDI 48000bit/s general bearer service supported	
pc_SyncX31_56000	BOOLEAN	PICS, Table A.5/14	Synchronous X.31 flag stuffing UDI 56000bit/s general bearer service supported	
pc_SyncX31_9600	BOOLEAN	PICS, Table A.5/8	Synchronous X.31 flag stuffing UDI 9600bit/s general bearer service supported	
px_BcapDataCompression	B1	PIXIT Table B.2	Data compression supported(used in the Bearer Capability). Default value: '0'B	
px_BcapFNUR	B5	PIXIT Table B.2	Fixed Network User rate supported: '00001'B: FNUR 9.6 kbit/s '00010'B: FNUR 14.4 kbit/s '00011'B: FNUR 19.2 kbit/s '00100'B: FNUR 28.8 kbit/s '00101'B: FNUR 38.4 kbit/s '00110'B: FNUR 48.0 kbit/s '00111'B: FNUR 56.0 kbit/s '01000'B: FNUR 64.0 kbit/s '01001'B: FNUR 33.6 kbit/s '01010'B: FNUR 32.0 kbit/s	
px_BcapITC	ITC_Int	PIXIT Table B.2	Default value: '00001'B Information transfer capability supported (used for the generation of the Bearer Capability) 0 – UDI 1 – RDI 2 – 31 kHz Audio 3 – Other.	
px_BcapModemType	B5	PIXIT Table B.2	Default value: 2 Modem type supported(used in the Bearer Capability). Default value: '00110'B	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
px_BcapNumberDataBits	B1	PIXIT Table B.2	Number of data bits supported(used in the Bearer Capability). Default value: '1'B	
px_BcapNumberStopBits	B1	PIXIT Table B.2	Number of Stops bits supported(used in the Bearer Capability). Default value: '1'B	
px_BcapOtherModemType	B2	PIXIT Table B.2	Other modem type supported (used in the Bearer Capability). Default value: '10'B	
px_BcapParity	B3	PIXIT Table B.2	Parity supported(used in the Bearer Capability). Default value: '011'B	
px_BcapSACP	B3	PIXIT Table B.2	Signalling access protocol supported (used in the Bearer Capability). Default value: '001'B	
px_BcapSyncAsync	B1	PIXIT Table B.2	Synchronous '0'B or Asynchronous '1'B mode supported by IUT. Default value: '1'B	
px_BcapUeFlowControl	FlowControl	PIXIT Table B.2	UE flow control. 0-outband, 1-inband, 2-no flow control. 3- X.25 4- X.75 default: 0, outband flow control. Default value: 0	
px_CC_Serv	Services	PIXIT Table B.2	Service selected for Mobile Originated calls and Mobile Terminated calls. The possible values are ("Telephony", "EmergencyCall", "31kHz", "V110", "V120", "PIAFS", "FTM", "X31", "BTM", "MmediaCall", "Alternate Speech/Fascimile"). Default value: "31kHz"	
px_NwOrgPDP_Support	BOOLEAN	PIXIT Table B.2	This indicates if the UE implementation supports network originated PDP Context. TRUE indicates, supported FALSE indicate, not	
px_PDP_IP_AddrInfoDCH	IA5String	PIXIT Table B.2	Default value : FALSE A string parameter that identifies the MT in the address space applicable to the IP PDP for DCH. Default value: "200.1.1.80"	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
px_PDP_IP_AddrInfoFACH	IA5String	PIXIT Table B.2	A string parameter that identifies the MT in the address space applicable to the IP PDP for FACH. Default value: "200.1.1.90"	
px_SMS_IndexOffset	INTEGER	PIXIT Table B.2	SMS index offset for the numbering of short messages value range: (0,1) Default value: 0	
pc_AutomaticAttachSwitch ON	BOOLEAN	PICS, Table A	Paramter is TRUE if UE supports automatic triggering of GMM Attach procedure when switched on	
pc_Background	BOOLEAN	PICS, Table A.6/4	Background QoS/traffic class supported	
pc_CS	BOOLEAN	PICS, Table A.3/1	Circuit Switched	
pc_Interactive	BOOLEAN	PICS, Table A.6/3	Interactive QoS/traffic class supported	
pc_MS_ClsmkA5_1	B1	PICS Table A.20/44	default Algorithm A5/1 supported. Default value: '0'B(i.e. A5/1 is supported)	
pc_MS_ClsmkA5_2	B1	PICS Table A.20/46	default Algorithm A5/2 supported. Default value: '0'B (encryption algorithm A5/2 not available)	
pc_MS_ClsmkA5_3	B1	PICS Table A.20/47	default Algorithm A5/3 supported. Default value: '0'B(encryption algorithm A5/3 not available)	
pc_MS_ClsmkA5_4	B1	PICS Table A.20/48	default Algorithm A5/3 supported. Default value: '0'B(encryption algorithm A5/4 not available)	
pc_MS_ClsmkA5_5	B1	PICS Table A.20/49	default Algorithm A5/3 supported. Default value: '0'B(encryption algorithm A5/5 not available)	
pc_MS_ClsmkA5_6	B1	PICS Table A.20/50	default Algorithm A5/3 supported. Default value: '0'B(encryption algorithm A5/6 not available)	
pc_MS_ClsmkA5_7	B1	PICS Table A.20/51	default Algorithm A5/7 supported. Default value: '0'B(encryption algorithm A5/7 not available)	
pc_PS	BOOLEAN	PICS, Table A.3/2	Packet Switched	
pc_SwitchOnOff	BOOLEAN	PICS, Table A.20/35	switch on/off supported	
pc_UEA1_Supp	BOOLEAN	PICS, Table A.20/27	Support of UMTS encryption algorithm UEA1	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
pc_UMTS_GSM	BOOLEAN	PICS, Table A.1/4	To check if the UE supports both UMTS as well as GSM. If the variable is set as TRUE, means that both UMTS and GSM is supported. If the variable is set as FALSE, means that UE supports only UMTS	
pc_USIM_Rmv	BOOLEAN	PICS, Table A.20/36	USIM removable without power down supported	
px_AuthAMF	BITSTRING	PIXIT Table B.1	Authentication Management Field (16 bits). The value shall be different from '1111 1111 1111 1118 (AMFresynch). Default value: no default value can be proposed	
px_AuthK	BITSTRING	PIXIT Table B.1	Authentication Key (128 bits). Default value: '000000000000000100000 0100000011000001110 0001000000	
px_AuthN	INTEGER	PIXIT Table B.1	value of n to initialize tcv_AuthN (length of extended response) min 31, max 127 (TS 34.108 cl. 8.1.2). Default value: 127	
px_AuthRAND	BITSTRING	PIXIT Table B.1	Random Challenge (128 bits). Default value: '01010101'B The value shall not be repeatable with 3 bits i.e. something like '001001001001001001'B not allowed.	
px_CipherAlg	B3	PIXIT Table B.1	Cipher algorithm. Default value: (A5/1) '000'B	
px_CipheringOnOff	BOOLEAN	PIXIT Table B.1	Security mode – TRUE if ciphering is applicable. Default value: TRUE	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
px_FDD_OperationBand	INTEGER	PIXIT Table B.1	The operation band under test, as defined in 34.108 clause 5.1.1. Value 1 means Band 1, 2 means Band 2, 3 means Band 3, 6 means Band 6. Rest of the values are not defined. This pixit shall be set in synchronisation with the values that are being set to 6 other Pixits viz: px_UARFCN_D_High,px_U ARFCN_U_High, px_UARFCN_D_Mid,px_U ARFCN_L_Mid, px_UARFCN_D_Low, px_UARFCN_U_Low	
px_FRESH	Fresh	PIXIT Table B.1	FRESH. Default value: no default value can be proposed	
px_IMSI_Def	HEXSTRING	PIXIT Table B.1	default IMSI. Default value: '001010123456063'H	
px_PTMSI_Def	OCTETSTRING	PIXIT Table B.1	default PTMSI . Default value: '12345678'O	
px_PTMSI_SigDef	OCTETSTRING	PIXIT Table B.1	default PTMSI signature (3 octets, 3GPP 24.008 / 10.5.5.8). Default value: 'AB1234'O	
px_PriScrmCode	PrimaryScramblingCode	PIXIT Table B.1	Primary scrambling code. Default value: 100	
px_RAT	RatType	PIXIT Table B.1	This parameter is used to specify which radio access technology is being used for the current test execution. Valid values: fdd and tdd. Default value: fdd	
px_RRC_PS_ServTested	RRC_ServTested	PIXIT Table B.1	PS service to be tested for RRC test cases. Default value: Speech	
px_SRNC_ld	SRNC_Identity	PIXIT Table B.1	SRNC Id. Default value: '000000000001'B	
px_SRNTI	S_RNTI	PIXIT Table B.1	S RNTI. Default value: '000000000000000000001'B	
px_TCellA	Tcell	PIXIT Table B.1	TCell value for cell A. Default value: 0	
px_TCellB	Tcell	PIXIT Table B.1	TCell value for cell B. Default value: 512	
px_TCellC	Tcell	PIXIT Table B.1	TCell value for cell C. Default value: 1536	
px_TCellD	Tcell	PIXIT Table B.1	TCell value for cell D. Default value: 321	
px_TCellE	Tcell	PIXIT Table B.1	TCell value for cell E. Default value: 833	

	Test Suite Parameter Declarations			
Parameter Name	Туре	PICS/PIXIT Ref	Comments	
px_TCellF	Tcell	PIXIT Table B.1	TCell value for cell F. Default value: 6577	
px_TCellG	Tcell	PIXIT Table B.1	TCell value for cell G. Default value: 7253	
px_TCellH	Tcell	PIXIT Table B.1	TCell value for cell H. Default value: 4351	
px_TMSI_Def	OCTETSTRING	PIXIT Table B.1	default TMSI. Default value: '12345678'O	
px_UARFCN_D_High	INTEGER	PIXIT Table B.1	High Range downlink UARFCN value. Default value: 10837	
px_UARFCN_D_Low	INTEGER	PIXIT Table B.1	Low Range downlink UARFCN value Default value: 10563	
px_UARFCN_D_Mid	INTEGER	PIXIT Table B.1	Mid Range downlink UARFCN value Default value: 10700	
px_UARFCN_U_High	INTEGER	PIXIT Table B.1	High Range uplink UARFCN value. This value shall be set based on the operation band supported. Default value: 9887	
px_UARFCN_U_Low	INTEGER	PIXIT Table B.1	Low Range uplink UARFCN value. This value shall be set based on the operation band supported. Default value: 9613	
px_UARFCN_U_Mid	INTEGER	PIXIT Table B.1	Mid Range uplink UARFCN value. This value shall be set based on the operation band supported. Default value: 9750	
px_UE_OpModeDef	UE_OperationMode	PIXIT Table B.1	Default UE operation mode (either opModeA or opModeC). (For most UEs thiscorresponds class–A or class–C, and can not be changed by the user). Default value: opModeA	
px_UL_ScramblingCode	UL_ScramblingCode	PIXIT Table B.1	UL scrambling code value to be used by UE. Default value: 0	
px_UTRAN_GERAN	UTRAN_GERAN	PIXIT Table B.1	This parameter is used to specify for which region the system information blocks are broadcast in the test execution. Valid values: "UTRAN only" and "UTRAN and GERAN". Default value: "UTRAN and GERAN"	
Detailed Comments :				

Test Case Selection Expression Definitions			
Expression Name	Selection Expression	Comments	
SMS_SelExp01	pc_CS AND pc_SMS_CS_MT		
SMS_SelExp02	pc_CS AND pc_SMS_CS_MO		
SMS_SelExp10	pc_CS AND pc_SMS_MultiNoCall AND pc_Rel99		
SMS_SelExp11	pc_CS AND pc_SMS_MultiCallEx AND pc_Rel99		
SMS_SelExp12	pc_CS AND pc_SMS_CS_MT AND pc_SMS_CS_MO		
SMS_SelExp21	pc_PS AND pc_SMS_PS_MT		
SMS_SelExp22	pc_PS AND pc_SMS_PS_MO		
SMS_SelExp32	pc_PS AND pc_SMS_PS_MT AND pc_SMS_PS_MO		
Detailed Comments :			

Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments
tsc_Fox	IA5String	"The quick brown fox jumps over the lazy dog's back. Kaufen Sie Ihrer Frau vier bequeme Pelze. – 0123456789 – THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG'S BACK."	Fox String of maximum SMS length of 160 characters
tsc_Fox_PDU	IA5String	"068122222222211000A9 174097538740000A7a0547 41914afa7c76b9058febebb 41e6371ea4aeb7e173d0db5 e9683e8e832881dd6e741e4 f7f9340789c3e3b50bb40cd 7cd6537689a2e839268795 90e32cac375903d5d9683c4 e578bddc2e83a065b6beec0 2b540b0986c46abd96eb81 ca805a2228ba06835395c82 84d2e7d509323eb12065b5 099d829ed6a21444451641 cca0360b223e8fa72948181 c2e5d"	Fox String of maximum SMS length of 160 characters, embedded in a TP-PDU, preceeded by an SMSC address
tsc_SMS_MaxNumOfChars	INTEGER	160	max. number of ASCII characters in an SMS
tsc_CM_ServTypeShortMsg	CMServType	'0100'B	CM Service Type Short Message
tsc_RejCauServNotSupp	RejCau	'20'O	reject cause: Service option not supported
tsc_SMS_CmdDel	INTEGER	3	MO SMS mode: send Command Deletion
tsc_SMS_CmdEnq	INTEGER	2	MO SMS mode: send Command Enquiry
tsc_SMS_OneMsg	INTEGER	0	MO SMS mode: send 1 MO message
tsc_SMS_ThreeMsgs	INTEGER	1	MO SMS mode: send 3 MO messages
tsc_TWait1Sec	INTEGER	1000	Wait 1 sec
tsc_TWait5Sec	INTEGER	5000	Wait 5 sec
tsc_TWait15Sec	INTEGER	15000	Wait 15 sec
tsc_TWait25Sec	INTEGER	25000	Wait 25 sec
tsc_TWait60Sec	INTEGER	60000	Wait 60 sec
tsc_Tzone0	TZONES	0	Time Zone 0
tsc_Tzone4	TZONES	4	Time Zone 4
tsc_AccessPtNameDCH	IA5String	"ABCDEF"	The logical name for the GGSN or the external packet world for the DCH PDP context. Default value: "ABCDEF"
tsc_AccessPtNameFACH	IA5String	"GHIJK"	The logical name for the GGSN or the external packet world for the FACH PDP context. Default value: "GHIJK"
tsc_Bcap14400	B5	'00010'B	FNUR 14.4 kbit/s
tsc_Bcap19200	B5	'00011'B	FNUR 19.2 kbit/s

Continued from previous page

Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments
tsc_Bcap28800	B5	'00100'B	FNUR 28.8 kbit/s
tsc_Bcap32000	B5	'01010'B	FNUR 32.0 kbit/s
tsc_Bcap33600	B5	'01001'B	FNUR 33.6 kbit/s
tsc_Bcap38400	B5	'00101'B	FNUR 38.4 kbit/s
tsc_Bcap48000	B5	'00110'B	FNUR 48.0 kbit/s
tsc_Bcap56000	B5	'00111'B	FNUR 56.0 kbit/s
tsc_Bcap64000	B5	'01000'B	FNUR 64.0 kbit/s
tsc_Bcap9600	B5	'00001'B	FNUR 9.6 kbit/s
tsc_BcapASync	B1	'1'B	Synchronous
tsc_BcapCE_NT	B2	'01'B	Connection element NT – used for the generation of the Bcap
tsc_BcapCE_T	B2	'00'B	Connection element Transparent – used for the generation of the Bcap
tsc_BcapDataB8	B1	'1'B	Number of data bits: 8 bits
tsc_BcapDataBitSpare	B1	'0'B	Number of data bits: spare (7 bits)
tsc_BcapFlowInband	FlowControl	1	1-inband
tsc_BcapFlowNoFlowCtrl	FlowControl	2	2-no flow control
tsc_BcapFlowNoX25	FlowControl	3	3-X25
tsc_BcapFlowNoX75	FlowControl	4	4–X75
tsc_BcapFlowOutband	FlowControl	0	0-outband
tsc_BcapITC_31kHz	B3	'010'B	ITC 3.1 kHz audio
tsc_BcapITC_Fax3	B3	'011'B	ITC facsimile group 3
tsc_BcapITC_Int31kHzA	ITC_Int	2	ITC : 3.1 kHzA (integer value)
tsc_BcapITC_IntRDI	ITC_Int	1	ITC : RDI (integer value)
tsc_BcapITC_IntUDI	ITC_Int	0	ITC : UDI (integer value)
tsc_BcapITC_Other	B3	'101'B	ITC: other ITC
tsc_BcapITC_UDI	B3	'001'B	ITC : UDI
tsc_BcapMT_Autobaud1	B5	'01000'B	Modem type : autobauding type 1
tsc_BcapMT_None	B5	'00000'B	Modem type : none
tsc_BcapMT_V32	B5	'00110'B	ModemType: V32
tsc_BcapOtherITC_RDI	B2	'00'B	Other ITC : RDI
tsc_BcapOtherITC_Spare	B2	'00'B	Other ITC : spare
tsc_BcapOtherMT_None	B2	'00'B	Other modem type: none
tsc_BcapOtherMT_V34	B2	'10'B	Other modem type: V34
tsc_BcapOtherRA_H223	B2	'01'B	Other rate adaptation: H.223&H.245
tsc_BcapOtherRA_PIAFS	B2	'10'B	Other rate adaptation: PIAFS
tsc_BcapOtherRA_Spare	B2	'00'B	Other rate adaptation: spare
tsc_BcapOtherRA_V120	B2	'00'B	Other rate adaptation: V120
tsc_BcapParityNone	B3	'011'B	parity: none
tsc_BcapRA_No	B2	'00'B	rate Adaptation: No rate adaptation

Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments
tsc_BcapRA_Other	B2	'11'B	rate Adaptation: Other rate adaptation
tsc_BcapRA_V110	B2	'01'B	rate adaptation : V.110
tsc_BcapRA_X31	B2	'10'B	rate adaptation : X.31 flag
tsc_BcapSACP_I440450	B3	'001'B	SACP I.440/I.450
tsc_BcapSACP_X32	B3	'110'B	SACP X.32
tsc_BcapStopBitSpare	B1	'0'B	Number of stops bits: spare
tsc_BcapSync	B1	'0'B	Asynchronous
tsc_BcapU2_CopNoFlct	B5	'01100'B	User info layer 2 protocol: No flow control
tsc_BcapU2_lso6429	B5	'01000'B	User info layer 2 protocol: Inband flow control
tsc_BcapU2_X25	B5	'00110'B	User info layer 2 protocol: X.25
tsc_BcapU2_X75	B5	'01101'B	User info layer 2 protocol: X.75
tsc_DL_DCH2	INTEGER	7	identity for transport channel DCH2 (downlink), in AMR speech this transport channel is used for RAB subflow#2
tsc_DL_DCH3	INTEGER	8	identity for transport channel DCH4 (downlink), in AMR speech this transport channel is used for RAB subflow#3
tsc_DL_DPCH1_ChC_Spe ech	SF512_AndCodeNumber	sf128:0	Channelization code for tsc_DL_DPCH1 for a speech configuration
tsc_DL_DPCH1_ChC_Stre aming	SF512_AndCodeNumber	sf32:0	Channelization code for tsc_DL_DPCH1 for a Streaming 57.6 kbps configuration
tsc_DL_DPCH1_SFP_64k_ CS	SF512_AndPilot	sfd32 : NULL	Spreading factor and pilot bits for tsc_DL_DPCH1 for a 64 kbps CS configuration
tsc_DL_DPCH1_SFP_64k_ PS	SF512_AndPilot	sfd32 : NULL	Spreading factor and pilot bits for tsc_DL_DPCH1 for a 64 kbps PS configuration
tsc_DL_DPCH1_SFP_Spee ch	SF512_AndPilot	sfd128 : pb4	Spreading factor and pilot bits for tsc_DL_DPCH1 for a speech configuration
tsc_DL_DPCH1_SFP_Stre aming	SF512_AndPilot	sfd32 : NULL	Spreading factor and pilot bits for tsc_DL_DPCH1 for a Streaming 57.6 kbps configuration
tsc_DL_DTCH2	INTEGER	8	Logical channel identity for DTCH2 (downlink)
tsc_DL_DTCH3	INTEGER	9	Logical channel identity for DTCH3 (downlink)
tsc_PDP_TypeNo	PDP_TypeNo	'21'0	Indicates IP v4 or IP v6. Default is IPv4 (0 0 1 0 0 0 0 1). Default value: '21'O

	Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments	
tsc_PDP_TypeOrg	B4	'0001'B	Default value can be ETSI provided. A string parameter which specifies the type of packet data protocol X.25 IP OSPIH PPP. Default value: '0000'B	
tsc_RejCauGPRS_NotAllow ed	RejCau	'07'O	reject cause: GPRS services not allowed	
tsc_RejCauPDP_CtxtDeact	RejCau	'24'O	reject cause: regular PDP Context Deactivation	
tsc_Srv31kHz	Services	"31kHz"	Service: 3.1kHz Audio	
tsc_SrvAltSpeechFax	Services	"Alternate Speech/Facsimile"	TeleService: Alternate Speech/Fascimile (TS61)	
tsc_SrvBTM	Services	"ВТМ"	Service: Bit Transfer Mode	
tsc_SrvEmgCall	Services	"EmergencyCall"	Service: Emergency Call	
tsc_SrvFTM	Services	"FTM"	Service: Frame Tunneling Mode	
tsc_SrvMmediaCall	Services	"MmediaCall"	Service: Multimedia Call	
tsc_SrvPIAFS	Services	"PIAFS"	Service: PIAFS	
tsc_SrvTelephony	Services	"Telephony"	Service: Telephony	
tsc_SrvV110	Services	"V110"	Service: V.110 UDI	
tsc_SrvV120	Services	"V120"	Service: V.120	
tsc_SrvX31	Services	"X31"	Service: X.31 flag stuffing UDI	
tsc_StateU10	B6	'001010'B	Call state U10: active	
tsc_UL_DCH3	INTEGER	3	identity for transport channel DCH3 (uplink), in AMR speech this transport channel is used for RAB subflow#3	
tsc_UL_DPDCH_SF_64k_ CS	SpreadingFactor	sf16	Channelization code for UL DPDCH for a 64 kbps CS configuration	
tsc_UL_DPDCH_SF_64k_ PS	SpreadingFactor	sf16	Channelization code for UL DPDCH for a 64 kbps PS configuration	
tsc_UL_DPDCH_SF_Speec h	SpreadingFactor	sf64	Channelization code for UL DPDCH for a speech configuration	
tsc_UL_DPDCH_SF_Strea ming	SpreadingFactor	sf16	Channelization code for UL DPDCH for a Streaming 57.6 kbps configuration	
tsc_UL_DTCH2	INTEGER	8	Logical channel identity for DTCH2 (uplink)	
tsc_UL_DTCH3	INTEGER	9	Logical channel identity for DTCH3 (uplink)	
maxLogCHperTrCH	INTEGER	15	This constant is from MCI ASP proposal, but there is no value for it in the proposal. value 8 is for temporary use	

Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments
maxdlTrCH	INTEGER	16	
maxulTrCH	INTEGER	16	
tsc_AICH1	INTEGER	7	Physical channel identity for AICH channel associated with first PRACH
tsc_AICH1_ChC	ChannelisationCode256	3	Channelization code for tsc_AICH1
tsc_AICH2	INTEGER	12	Physical channel identity for AICH2 channel associated with second PRACH
tsc_AT_ResultOK	IA5String	" <cr><lf>OK<cr><lf>"</lf></cr></lf></cr>	
tsc_AttOn	INTEGER	1	Attach flag value On
tsc_AttenuationServingCell	INTEGER	0	Value of attenuator to be used when setting a Serving Cell.
tsc_BCCH1	INTEGER	1	Logical channel identity for logical channel BCCH mapped on BCH
tsc_BCCH6	INTEGER	6	Logical channel identity for logical channel BCCH mapped on FACH
tsc_BCH1	INTEGER	11	Identity for transport channel BCH
tsc_CRNTI	C_RNTI	'000000000000001'B	C RNTI. Default value: '0000 0000 0000 0001'B
tsc_CS_Domain	CN_DomainIdentity	cs_domain	
tsc_CellA	INTEGER	0	Identity of Cell A
tsc_CellB	INTEGER	1	Identity of Cell B
tsc_CellC	INTEGER	2	Identity of Cell C
tsc_CellD	INTEGER	3	Identity of Cell D
tsc_CellDedicated	INTEGER	_1	Identity of the dedicated cell.
tsc_CellE	INTEGER	4	Identity of Cell E
tsc_CellF	INTEGER	5	Identity of Cell F
tsc_CellG	INTEGER	6	Identity of Cell G
tsc_CellH	INTEGER	7	Identity of Cell H
tsc_CellIdCellA	BITSTRING	'0000000000000000000000000000000000000	
tsc_CellIdCellB	BITSTRING	'0000000000000000000000 0000001'B	
tsc_CellIdCellC	BITSTRING	'0000000000000000000000 0000010'B	
tsc_CellIdCelID	BITSTRING	'0000000000000000000000 0000011'B	
tsc_CellIdCellE	BITSTRING	'0000000000000000000000 0000100'B	
tsc_CellIdCellF	BITSTRING	'0000000000000000000000 0000101'B	
tsc_CellIdCellG	BITSTRING	'0000000000000000000000000000000000000	
tsc_CellIdCellH	BITSTRING	'000000000000000000000 0000111'B	

	Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments	
tsc_DC_ControlPDU	DC_Field	'0'B	Value for D/C field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.1	
tsc_DL_CCCH5	INTEGER	5	Logical channel identity for logical channel CCCH mapped on FACH (downlink)	
tsc_DL_DCCH1	INTEGER	1	Logical channel identity for DCCH1 (downlink), used by signalling radio bearer 1	
tsc_DL_DCCH2	INTEGER	2	Logical channel identity for DCCH2 (downlink), used by signalling radio bearer 2	
tsc_DL_DCCH3	INTEGER	3	Logical channel identity for DCCH3 (downlink), used by signalling radio bearer 3	
tsc_DL_DCCH4	INTEGER	4	Logical channel identity for DCCH4 (downlink), used by signalling radio bearer 4	
tsc_DL_DCH1	INTEGER	6	identity for transport channel DCH1 (downlink), in AMR speech this transport channel is used for RAB subflow#1	
tsc_DL_DCH5	INTEGER	10	identity for transport channel DCH5 (downlink), in most case this transport channel is used for signalling bearers.	
tsc_DL_DPCH1	INTEGER	26	physical channel identity for DPCH1(downlink)	
tsc_DL_DPCH1_2ndScrC	SecondaryScramblingCode	1	secondary scrambling code for DL DPCH1	
tsc_DL_DPCH1_ChC_64k _CS	SF512_AndCodeNumber	sf32:0	Channelization code for tsc_DL_DPCH1 for a 64 kbps CS configuration	
tsc_DL_DPCH1_ChC_64k _PS	SF512_AndCodeNumber	sf32:0	Channelization code for tsc_DL_DPCH1 for a 64 kbps PS configuration	
tsc_DL_DPCH1_ChC_SRB	SF512_AndCodeNumber	sf128:0	Channelization code for tsc_DL_DPCH1 for a SRB connection with a RAB established	
tsc_DL_DPCH1_SFP_SRB	SF512_AndPilot	sfd128:pb4	Spreading factor and pilot bits for tsc_DL_DPCH1 for an SRB connection with a RAB established	
tsc_DL_DTCH1	INTEGER	7	Logical channel identity for DTCH1 (downlink)	
tsc_DL_PDSCH1	INTEGER	16	Physical channel identity for primaryPDSCH channel	
tsc_DL_TxPower_DPCH	DL_TxPower	- 5	down link transmit power level of DPCH used for CS RABS. Default value is –5 dBm	

	Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments	
tsc_DL_TxPower_DPCH_6 4k	DL_TxPower	-2	down link transmit power level of DPCH used 64 KBPS PS RAB's Default value is–2 dBm	
tsc_DPCCH_PowerOffset	DPCCH_PowerOffset	_40	DPCCH power offset value. Defalut value: –80 (IE Value *2),	
tsc_DPCH_PowerOffsetPIL OT	INTEGER	0	Power offsett value of PILOT on DPCH	
tsc_DPCH_PowerOffsetTF CI	INTEGER	0	Power offsett value of TFCI on DPCH	
tsc_DPCH_PowerOffsetTP C	INTEGER	0	Power offsett value of TPC on DPCH	
tsc_DefaultDPCH_OffsetVa lue	DefaultDPCH_OffsetValueF DD	459	Default DPCH offset value. Actual value DefaultDPCH-OffsetValueF DD = IE value * 512 Default value : 459	
tsc_DelayAfterRRC_ConnR el	INTEGER	1000	Delay before sending after receiving RRC CONNECTION RELEASE complete in AM Mode (value in ms), so as to allow SS RLC layer to send ACK to UE.	
tsc_DelayBeforeRRC_Conn Rel	INTEGER	1000	Delay before sending RRC CONNECTION RELEASE (value in ms)	
tsc_FACH1	INTEGER	13	transport channel identity for FACH	
tsc_FACH2	INTEGER	14	transport channel identity for second FACH when it is connected to a secondary CCPCH together with PCH (transport channel identity = 14)	
tsc_GMM_PD	ProtocolDiscriminator	'1000'B	GMM protocol discriminator 3GPP 24.008 clause 10.4	
tsc_GainFactorBetaC_Belo w64k	INTEGER	11	Gain factor Beta C value to be used for RAB UL below 64kbps	
tsc_GainFactorBetaC_Highe r64k	INTEGER	9	Gain factor Beta C value to be used for RAB UL higher than 64kbps	
tsc_GainFactorBetaD	INTEGER	15		
tsc_IntegrProtAlgCap	B16	'0000000000000010'B	Integrity Protection Algorithm Capability	
tsc_KeySeqDef	KeySeq	'111'B	default Key Sequence. Default value: '111'B	
tsc_LAC_Def	OCTETSTRING	'0001'O		
tsc_MCC_Def	HEXSTRING	'001'H		
tsc_MNC_Def	HEXSTRING	'01F'H		
tsc_MSN	INTEGER	0		
tsc_MaxAllowPwr	MaxAllowedUL_TX_Power	33		

	Test Suite Constant Declarations				
Constant Name	Туре	Value	Comments		
tsc_MessAuthCode	BITSTRING	'0000000000000000000000000000000000000			
tsc_Mui	INTEGER	0			
tsc_N300	INTEGER	3			
tsc_NMO_I	OCTETSTRING	'00'O	Network Mode of Operation I (3GPP 24.008 / 10.5.1.12.3)		
tsc_NMO_II	OCTETSTRING	'01'O	Network Mode of Operation II (3GPP 24.008 / 10.5.1.12.3)		
tsc_Now	INTEGER	512	To indicate the system information change starts immediately.		
tsc_PCCH1	INTEGER	1	Logical channel identity for logical channel PCCH		
tsc_PCH1	INTEGER	12	identity for transport channel PCH1		
tsc_PDU_TypeStatus	CtrlPDU_Type	'000'B	Value for PDU type field within a STATUS PDU. Ref 3G TS 25.322 clause 9.2.2.2		
tsc_PICH1	INTEGER	6	Physical channel identity for PICH channel associated with first secondary CCPCH		
tsc_PICH1_ChC	ChannelisationCode256	2	Channelization code for tsc_PICH1		
tsc_PICH2	INTEGER	11	Physical channel identity for PICH2 channel associated with second secondary CCPCH		
tsc_PRACH1	INTEGER	8	Physical channel identity for first PRACH channel		
tsc_PRACH1_SF	SF_PRACH	sfpr64	Channelization code for UL DPDCH for PRACH1		
tsc_PRACH1_ScrC	PreambleScramblingCodeWo rdNumber	0	Scrambling code for preamble of PRACH1		
tsc_PRACH1_Signatures	AvailableSignatures	'00000000111111111'B	available signatures for PRACH. (from 34.108 cl. 6.1 (SIB5))		
tsc_PRACH2	INTEGER	9	Physical channel identity for second PRACH channel		
tsc_PS_Domain	CN_DomainIdentity	ps_domain			
tsc_P_CCPCH	INTEGER	4	Physical channel identity for primary CCPCH channel		
tsc_P_CPICH	INTEGER	0	Physical channel identity for primary CPICH channel		
tsc_P_SCH	INTEGER	1	Physical channel identity for primary SCH channel		
tsc_PowerAICH	AICH_PowerOffset	- 5	relative transmission power level of AICH. The power level is specified relatively to power leve of CPICH in terms of AICH_Ec. Default is -5 dBm/3.84MHz		

	Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments	
tsc_PowerPICH	PICH_PowerOffset	-5	relative transmission power level of PICH. The power level is specified relatively to power level of CPICH in terms of PICH_Ec. Default is -5 dBm/3.84MHz	
tsc_PowerpCCPCH	DL_TxPower	-2	transmission power level of primary CCPCH relative to CPICH. Default is -2 dBm.	
tsc_PowerpCPICH	DL_TxPower_PCPICH	-60	transmission power level of primary CPICH. The power level is specified in terms of CPICH_Ec. Default is -60 dBm.	
tsc_PowerpSCH	DL_TxPower	-5	transmission power level of primary SCH relative to CPICH. Default is -5 dBm.	
tsc_PowersCCPCH1	DL_TxPower	-2	transmission power level of secondary CCPCH1 relative to CPICH. Default is -2 dBm	
tsc_PowersSCH	DL_TxPower	-5	transmission power level of secondary SCH relative to CPICH. Default is –5 dBm	
tsc_PuncLimit	PuncturingLimit	pl1	puncturing limit for PRACH. default value is 1. Default value: Pl1	
tsc_RAB_DefCS	B8	'00000001'B	Default AB ld for the CS domain	
tsc_RAB_DefPS	B8	'00000101'B	Default AB Id for the PS domain	
tsc_RACH1	INTEGER	15	transport channel identity for RACH	
tsc_RAC_Def	OCTETSTRING	'05'O	Routing Area Code, 1 octet, 3GPP 24.008 clause 10.5.1.12.3	
tsc_RB0	INTEGER	0	signalling radio bearer on TM + CCCH	
tsc_RB1	INTEGER	1	sibnalling radio bearer on UM + DCCH	
tsc_RB10	INTEGER	10	radio access bearer identity, in AMR speech this RB is RAB subflow#1, in other cases this is a radio access bearer	
tsc_RB11	INTEGER	11	radio access bearer identity, in AMR speech this RB is RAB subflow#2, in some other cases this is the signalling radio bearer for TM + BCCH_FACH.	

	Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments	
tsc_RB12	INTEGER	12	radio access bearer, in AMR speech this RB is RAB subflow#3, in some other cases this is the bearer for TM PCCH	
tsc_RB13	INTEGER	13	radio access bearer, in AMR speech this RB is RAB subflow#3, in some other cases this is the bearer for TM PCCH	
tsc_RB2	INTEGER	2	signalling radio bearer on AM + DCCH	
tsc_RB20	INTEGER	20	radio access bearer for PS RAB	
tsc_RB21	INTEGER	21	radio access bearer for PS RAB	
tsc_RB22	INTEGER	22	Second AM radio access bearer for PS	
tsc_RB24	INTEGER	24	Second AM radio access bearer for PS	
tsc_RB25	INTEGER	25	PS Radio Bearer associated with a DTCH on HS-DSCH	
tsc_RB29	INTEGER	29	RB Id for Radio bearer that carries the 2nd CCCH in the DL	
tsc_RB3	INTEGER	3	signalling radio bearer on AM + DCCH for high priority NAS_DT	
tsc_RB30	INTEGER	30	radio access bearer for CBS RAB	
tsc_RB31	INTEGER	31		
tsc_RB4	INTEGER	4	signalling radio bearer on AM + DCCH for low priority NAS_DT	
tsc_RB_2ndCCCH	INTEGER	-5	uplink signalling radio bearer on TM + second CCCH	
tsc_RB_2ndPCCH	INTEGER	-4	radio bearer idenity for bearer on TM + PCCH + PCH used for sending paging message when there is no RAB subflows for speech.	
tsc_RB_AM_15_RLC	SS_RB_Identity	-13	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate an AM RLC entity using 15 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated.	
			A negative value is used to indicate that the SS configuration is not identical to the UE configuration.	

Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments
tsc_RB_AM_7_RLC	SS_RB_Identity	-12	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate an AM RLC entity using 7 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated.
			A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_BCCH	INTEGER	-1	radio bearer idenity for bearer on TM + BCCH + BCH used for broadcasting system information blocks
tsc_RB_BCCH_FACH	INTEGER	-3	signalling radio bearer on TM + BCCH + FACH + sCCPCH1
tsc_RB_BCCH_FACH_RAB	INTEGER	-19	RB Id for Radio bearer that carries the 2nd BCCH
tsc_RB_CCCH_FACH_MA C	SS_RB_Identity	-18	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the CCCH mapped to FACH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated.
			A negative value is used to indicate that the SS configuration is not identical to the UE configuration.
tsc_RB_DCCH_DCH_MAC	SS_RB_Identity	-15	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the high priority NAS SRB mapped to DCH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated.
			A negative value is used to indicate that the SS configuration is not identical to the UE configuration.

	Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments	
tsc_RB_DCCH_FACH_MA C	SS_RB_Identity	-14	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate the high priority NAS SRB mapped to FACH. The RB identity can be used by the SS decoder to determine which MAC configuration is being simulated.	
			A negative value is used to indicate that the SS configuration is not identical to the UE configuration.	
tsc_RB_PCCH	INTEGER	-2	radio bearer idenity for bearer on TM + PCCH + PCH used for sending paging message when there is no RAB subflows for speech.	
tsc_RB_PCCH2	INTEGER	-4		
tsc_RB_UM_15_RLC	SS_RB_Identity	_11	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate a UM RLC entity using 15 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated.	
			A negative value is used to indicate that the SS configuration is not identical to the UE configuration.	
tsc_RB_UM_7_RLC	SS_RB_Identity	-10	RB Identity used for configuration of a TM RLC entity in the SS that will be used to simulate a UM RLC entity using 7 bit length indicators. The RB identity can be used by the SS decoder to determine which RLC mode is being simulated.	
			A negative value is used to indicate that the SS configuration is not identical to the UE configuration.	
tsc_SFN_OffsetA	INTEGER	0	SFN offset values for cell A Default value: 0	
tsc_SFN_OffsetB	INTEGER	0	SFN offset values for cell B Default value: 0	
tsc_SFN_OffsetC	INTEGER	0	SFN offset values for cell C	
			Default value: 0	

	Test Suite Constant Declarations			
Constant Name	Туре	Value	Comments	
tsc_SFN_OffsetD	INTEGER	3000	SFN offset values for cell D	
			Default value: 3000	
tsc_SFN_OffsetE	INTEGER	3000	SFN offset values for cell E Default value: 3000	
tsc_SFN_OffsetF	INTEGER	678	SFN offset values for cell F Default value: 678	
tsc_SFN_OffsetG	INTEGER	1356	SFN offset values for cell G	
			Default value: 1356	
tsc_SFN_OffsetH	INTEGER	2034	SFN offset values for cell H	
			Default value: 2034	
tsc_SMPD	ProtocolDiscriminator	'1010'B	SM protocol discriminator	
tsc_SS_CS_Domain	SS_CN_DomainIdentity	0	Citi protecti disciminate.	
tsc_SS_PS_Domain	SS_CN_DomainIdentity	1		
	1		Dhuaisal abancal identity for	
tsc_S_CCPCH1	INTEGER	5	Physical channel identity for first secondary CCPCH channel	
tsc_S_CCPCH1_ChC	SF256_AndCodeNumber	sf64:1	Channelization code for tsc_S_CCPCH1	
tsc_S_CCPCH2	INTEGER	10	Physical channel identity for second secondary CCPCH channel	
tsc_S_CCPCH3	INTEGER	13	Physical channel identity forThird secondary CCPCH channel	
tsc_S_CCPCH_2ndScrCod e	INTEGER	0	Secondary scrambling code for S–CCPCH channels	
tsc_S_SCH	INTEGER	2	Physical channel identity for secondary SCH channel	
tsc_SlotFormatsCCPCH1	SCCPCHSlotFormat	8	channelization code for secondary CCPCH1 when spreading factor = 64, default value is 8. Default value: 8	
tsc_T3212_Def	OCTETSTRING	'1E'O	infinite	
tsc_TPC_CombinationIndex	TPC_CombinationIndex	0		
tsc_TWaitSysInfo	INTEGER	5000	Wait for the completion of SysInfo sending	
tsc_TimingsCCPCH1	INTEGER	0	timing offset for secondary CCPCH1. default is 0. Default value: 0	
tsc_TpcStepSize	TPC_StepSizeFDD	0	Value 0 corresponds to 1 dB	
tsc_UL_CCCH5	INTEGER	5	Logical channel identity for logical channel CCCH mapped RACH (uplink)	
tsc_UL_DCCH1	INTEGER	1	Logical channel identity for DCCH1 (uplink), used by signalling radio bearer 1	
tsc_UL_DCCH2	INTEGER	2	Logical channel identity for DCCH2 (uplink), used by signalling radio bearer 2	

Test Suite Constant Declarations				
Constant Name	Туре	Value	Comments	
tsc_UL_DCCH3	INTEGER	3	Logical channel identity for DCCH3 (uplink), used by signalling radio bearer 3	
tsc_UL_DCCH4	INTEGER	4	Logical channel identity for DCCH4 (uplink), used by signalling radio bearer 4	
tsc_UL_DCH1	INTEGER	1	identity for transport channel DCH1 (uplink), in AMR speech this transport channel is used for RAB subflow#1	
tsc_UL_DCH2	INTEGER	2	identity for transport channel DCH2 (uplink), in AMR speech this transport channel is used for RAB subflow#2	
tsc_UL_DCH5	INTEGER	5	identity for transport channel DCH5 (uplink), in most case this transport channel is used for signalling bearers.	
tsc_UL_DPCH1	INTEGER	20	physical channel identity for DPCH1(uplink)	
tsc_UL_DPDCH_SF_SRB	SpreadingFactor	sf64	Channelization code for UL DPDCH for an SRB connection with a RAB established	
tsc_UL_DTCH1	INTEGER	7	Logical channel identity for DTCH1 (uplink)	
tsc_UL_MAC_Prt1	MAC_LogicalChannelPriorit y	1		
tsc_UL_MAC_Prt2	MAC_LogicalChannelPriorit y	2		
tsc_UL_MAC_Prt3	MAC_LogicalChannelPriorit y	3		
tsc_UL_MAC_Prt4	MAC_LogicalChannelPriorit y	4		
tsc_URA_IdCelIA	BITSTRING	'00000000000001'B		
tsc_URA_IdCellB	BITSTRING	'00000000000001'B		
tsc_URA_IdCellC	BITSTRING	'000000000000010'B		
tsc_URA_IdCelID	BITSTRING	'000000000000010'B		
tsc_URA_IdCellE	BITSTRING	'000000000000011'B		
tsc_URA_IdCellF	BITSTRING	'000000000000011'B		
tsc_URA_IdCellG	BITSTRING	'0000000000000100'B		
tsc_URA_IdCellH	BITSTRING	'000000000000100'B		
tsc_USIM_NeedRmv	BOOLEAN	TRUE	Removal of USIM is needed in a test case (USIM is not always inserted)	
tsc_WaitBeforePaging	INTEGER	5000	Waiting time before PAGING (ms)	
tsc_sCCPCH_PowerOffset PILOT	INTEGER	6	Power offsett value of PILOT on sCCPCH	
tsc_sCCPCH_PowerOffset TFCI	INTEGER	6	Power offsett value of TFCI on sCCPCH	
Detailed Comments :	Detailed Comments :			

	Test Suite Constant Declarations By Reference				
Constant Name	Туре	Value Reference	Module Identifier	Comments	
hiPDSCHidentities	INTEGER	hiPDSCHidentities	Class-definitions		
hiPUSCHidentities	INTEGER	hiPUSCHidentities	Class-definitions		
hiRM	INTEGER	hiRM	Class-definitions		
maxAC	INTEGER	maxAC	Class-definitions		
maxAdditionalMeas	INTEGER	maxAdditionalMeas	Class-definitions		
maxASC	INTEGER	maxASC	Class-definitions		
maxASCmap	INTEGER	maxASCmap	Class-definitions		
maxASCpersist	INTEGER	maxASCpersist	Class-definitions		
maxCCTrCH	INTEGER	maxCCTrCH	Class-definitions		
maxCellMeas	INTEGER	maxCellMeas	Class-definitions		
maxCellMeas_1	INTEGER	maxCellMeas-1	Class-definitions		
maxCNdomains	INTEGER	maxCNdomains	Class-definitions		
maxCPCHsets	INTEGER	maxCPCHsets	Class-definitions		
maxDPCH_DLchan	INTEGER	maxDPCH-DLchan	Class-definitions		
maxDPDCH_UL	INTEGER	maxDPDCH-UL	Class-definitions		
maxDRACclasses	INTEGER	maxDRACclasses	Class-definitions		
maxFACHPCH	INTEGER	maxFACHPCH	Class-definitions		
maxFreq	INTEGER	maxFreq	Class-definitions		
maxFreqBandsFDD	INTEGER	maxFreqBandsFDD	Class-definitions		
maxFreqBandsTDD	INTEGER	maxFreqBandsTDD	Class-definitions		
maxFreqBandsGSM	INTEGER	maxFreqBandsGSM	Class-definitions		
maxGERAN_SI	INTEGER	maxGERAN-SI	Class-definitions		
maxHProcesses	INTEGER	maxHProcesses	Class-definitions		
maxHSSCCHs	INTEGER	maxHSSCCHs	Class-definitions		
maxInterSysMessages	INTEGER	maxInterSysMessages	Class-definitions		
maxLoCHperRLC	INTEGER	maxLoCHperRLC	Class-definitions		
maxMAC_d_PDUsize s	INTEGER	maxMAC-d-PDUsize s	Class-definitions		
maxMeasEvent	INTEGER	maxMeasEvent	Class-definitions		
maxMeasIntervals	INTEGER	maxMeasIntervals	Class-definitions		
maxMeasParEvent	INTEGER	maxMeasParEvent	Class-definitions		
maxNumCDMA2000F reqs	INTEGER	maxNumCDMA2000F reqs	Class-definitions		
maxNumGSMFreqRan ges	INTEGER	maxNumGSMFreqRan ges	Class-definitions		
maxNumFDDFreqs	INTEGER	maxNumFDDFreqs	Class-definitions		
maxNumTDDFreqs	INTEGER	maxNumTDDFreqs	Class-definitions		
maxOtherRAT	INTEGER	maxOtherRAT	Class-definitions		
maxOtherRAT_16	INTEGER	maxOtherRAT-16	Class-definitions		
maxPage1	INTEGER	maxPage1	Class-definitions		
maxPCPCH_APsig	INTEGER	maxPCPCH-APsig	Class-definitions		
maxPCPCH_APsubC h	INTEGER	maxPCPCH-APsubC h	Class-definitions		
maxPCPCH_CDsig	INTEGER	maxPCPCH-CDsig	Class-definitions		
maxPCPCH_CDsubC h	INTEGER	maxPCPCH-CDsubC	Class-definitions		
maxPCPCH_SF	INTEGER	maxPCPCH-SF	Class-definitions		
maxPCPCHs	INTEGER	maxPCPCHs	Class-definitions		
maxPDCPAlgoType	INTEGER	maxPDCPAlgoType	Class-definitions		

	Test Suite Constant Declarations By Reference				
Constant Name	Туре	Value Reference	Module Identifier	Comments	
maxPDSCH	INTEGER	maxPDSCH	Class-definitions		
maxPDSCH_TFClgro ups	INTEGER	maxPDSCH-TFClgro ups	Class-definitions		
maxPRACH	INTEGER	maxPRACH	Class-definitions		
maxPRACH_FPACH	INTEGER	maxPRACH-FPACH	Class-definitions		
maxPUSCH	INTEGER	maxPUSCH	Class-definitions		
maxQueuelDs	INTEGER	maxQueueIDs	Class-definitions		
maxRABsetup	INTEGER	maxRABsetup	Class-definitions		
maxRAT	INTEGER	maxRAT	Class-definitions		
maxRB	INTEGER	maxRB	Class-definitions		
maxRBallRABs	INTEGER	maxRBallRABs	Class-definitions		
maxRBMuxOptions	INTEGER	maxRBMuxOptions	Class-definitions		
maxRBperRAB	INTEGER	maxRBperRAB	Class-definitions		
maxReportedGSMCell s	INTEGER	maxReportedGSMCell s	Class-definitions		
maxRL	INTEGER	maxRL	Class-definitions		
maxRL_1	INTEGER	maxRL-1	Class-definitions		
maxROHC_PacketSiz es_r4	INTEGER	maxROHC-PacketSiz es-r4	Class-definitions		
maxROHC_Profile_r4	INTEGER	maxROHC-Profile-r4	Class-definitions		
maxSat	INTEGER	maxSat	Class-definitions		
maxSCCPCH	INTEGER	maxSCCPCH	Class-definitions		
maxSIB	INTEGER	maxSIB	Class-definitions		
maxSIB_FACH	INTEGER	maxSIB-FACH	Class-definitions		
maxSIBperMsg	INTEGER	maxSIBperMsg	Class-definitions		
maxSRBsetup	INTEGER	maxSRBsetup	Class-definitions		
maxSystemCapability	INTEGER	maxSystemCapability	Class-definitions		
maxTF	INTEGER	maxTF	Class-definitions		
maxTF_CPCH	INTEGER	maxTF-CPCH	Class-definitions		
maxTFC	INTEGER	maxTFC	Class-definitions		
maxTFCsub	INTEGER	maxTFCsub	Class-definitions		
maxTFCI_2_Combs	INTEGER	maxTFCI-2-Combs	Class-definitions		
maxTGPS	INTEGER	maxTGPS	Class-definitions		
maxTrCH	INTEGER	maxTrCH	Class-definitions		
maxTrCHpreconf	INTEGER	maxTrCHpreconf	Class-definitions		
maxTS	INTEGER	maxTS	Class-definitions		
maxTS_1	INTEGER	maxTS-1	Class-definitions		
maxTS_2	INTEGER	maxTS-2	Class-definitions		
maxTS_LCR	INTEGER	maxTS-LCR	Class-definitions		
maxTS_LCR_1	INTEGER	maxTS-LCR-1	Class-definitions		
maxURA	INTEGER	maxURA	Class-definitions		
maxURNTI_Group	INTEGER	maxURNTI-Group	Class-definitions		
Detailed Comments :					

Test Suite Variable Declarations					
Variable Name	Туре	Value	Comments		
tsv_AuthSQN	BITSTRING	'0000000000000000000000000000000000000	48 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2) used and updated whenever an authentication is performed		
Detailed Comments :					

Test Case Variable Declarations				
Variable Name	Туре	Value	Comments	
tcv_CP_Data	CPDATA	cs_CP_DATA_01(cs_TI_MT, cs_CP_UserData04 ('00'O)	to hold a CPDATA PDU	
tcv_CP_DataRetx	INTEGER	0	Counter for number of CP Data retransmissions for SMS	
tcv_IA5_String2	IA5String	""	to hold a temporary IA5 String	
tcv_RP_MsgRef	RP_MsgRef	O'00'	RP message reference for SMS	
tcv_RP_OrigAddrMT	BCDN	O'00'	RP originating address digits for MT short messages	
tcv_SM_Contents	OCTETSTRING	"O	short message contents	
tcv_TP_OrigAddr01	BCDN	'00'O	TP originating address digits	
tcv_TTC1Mmin	INTEGER	px_TC1M * 900	TC1M in UE – 10%	
tcv_TTwiceTC1Mmax	INTEGER	px_TC1M * 2200	Twice TC1M in UE +10%	
tcv_ActiveService	Services	"31kHz"	Service that is currently used in a test case	
tcv_ActPDP_ContextReq	ACTIVATEPDPCONTEXTRE QUESTul		To hold the received ACTIVATE PDPD CONTEXT REQUEST PDU	
tcv_AT_Cmd	IA5String	""	To hold acommandline to be sent to the UT	
tcv_AttachFlag	BOOLEAN	TRUE	A boolean variable to indicate if the UE is in GMM attached state or not.	
tcv_BcapCE	B2	'00'B	To hold the connection element value that shall be used in setup MO pdu.	
tcv_CallConf	CALLCONFIRMED		to hold the CALL CONFIRMEDmessage received from UE	
tcv_CC_RB_ConfigType	RB_ConfigType	cell_DCH_Speech	To hold the CC RAB to be used. This variable is used by CC test steps and test cases only.	
tcv_DeactPDP_ContextReq	DEACTIVATEPDPCONTEX TREQUEST			
tcv_DlyClass	В3	'011'B	To store Delay class	
tcv_EstCause	EstablishmentCause	terminatingConversationalC all	Establishment cause used to setup the RRC connection. This variable is assigned in the steps: ts_CC_BasicServiceMO or ts_CC_BasicServiceMT	
tcv_IA5_String1	IA5String	""	to hold a temporary IA5 String	
tcv_Len	INTEGER	0		
tcv_Len1	INTEGER	1	Used for calculation of length	
tcv_Len1_Oct	Length	'01'O	Length in octets	
tcv_LenBit	Length	'00'O		

Test Case Variable Declarations				
Variable Name	Туре	Value	Comments	
tcv_PagingCau	PagingCause	terminatingConversationalC all	To hold the paging cause corresponding to the CC service – this tcv is assigned in ts_CC_InitTCVMT	
tcv_PktDataProtoAddr	PktDataProtoAddr_lv	cs_PktDataProtoAddrMT_lv ('00'O, px_PDP_IP_AddrInfoDCH)	To hold the Packet Data Protocol address	
tcv_RecdNSAPI	B4		This is to store the value of the received NSAPI	
tcv_ReqPDP_ContextAct	REQUESTPDPCONTEXTA CTIVATIONdl			
tcv_SetupMT	SETUPdl	cs_SetupMT(cs_BcapSpeechMT)	to hold the SETUP MT pdu prepared in the ts_BasicSrvMT step	
tcv_StaticPDP_AddressRec eived	BOOLEAN	FALSE	This variable is used to flag if in the PDP Context Req message UE has requested for Static PDP context address, so that PDP address will not be re allocated in PDP context Accept.	
tcv_TI_1_R	ТІ	cs_TI_MT	Transaction Identifier value used to receive CC PDU	
tcv_TI_1_S	ТІ	cs_TI_MT	Transaction Identifier value used to send CC PDU	
tcv_TI_R	ТІ	cs_TI_MT	Transaction Identifier value used to receive CC PDU	
tcv_TI_S	ТІ	cs_TI_MT	Transaction Identifier value used to send CC PDU	
tcv_TrafficClass	B3	'011'B	To store Traffic class	
tcv_ActTime	ActivationTime	0	Activation Time	
tcv_Assigned_PTMSI_Sig	O3	px_PTMSI_SigDef	Current assigned PTMSI signature	
tcv_AssignedPTMSI	OCTETSTRING	px_PTMSI_Def	Current assigned PTMSI	
tcv_AssignedTMSI	OCTETSTRING	px_TMSI_Def	Current assigned TMSI	
tcv_AuthAK	BITSTRING	INT_TO_BIT (0, 48)	Anonymity Key 48 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)	
tcv_AuthAMF	BITSTRING	px_AuthAMF	Authentication Management Field 16 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)	
tcv_AuthAUTN	B128	INT_TO_BIT (0, 128)	to hold complete calculated AUTN 128 bits (TS24.008 cl 10.5.3.1.1)	
tcv_AuthAUTN_1	B48	INT_TO_BIT (0, 48)	to hold first part of calculated AUTN 64 bits	
tcv_AuthAUTN_2	B80	INT_TO_BIT (0, 80)	to hold second part of calculated AUTN 64 bits	
tcv_AuthCDOUT	BITSTRING	INT_TO_BIT (0, 64)	CDOUT 64 bits (TS 34.108 cl. 8.1.2)	
tcv_AuthCK	BITSTRING	INT_TO_BIT (0, 128)	Ciphering Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)	

Test Case Variable Declarations				
Variable Name	Туре	Value	Comments	
tcv_AuthCK_1	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 1st part (bits 0–63) 64 bits (TS 33.102 cl. 6.8.1.2)	
tcv_AuthCK_2	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 2nd part (bits 64–127) 64 bits (TS 33.102 cl. 6.8.1.2)	
tcv_AuthCK_XOR	BITSTRING	INT_TO_BIT (0, 64)	Ciphering Key 1st and 2nd part, XORed 64 bits (TS 33.102 cl. 6.8.1.2)	
tcv_AuthIK	BITSTRING	INT_TO_BIT (0, 128)	Integrity Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)	
tcv_AuthIK_1	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 1st part (bits 0–63) 64 bits (TS 33.102 cl. 6.8.1.2)	
tcv_AuthIK_2	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 2nd part (bits 64–127) 64 bits (TS 33.102 cl. 6.8.1.2)	
tcv_AuthIK_XOR	BITSTRING	INT_TO_BIT (0, 64)	Integrity Key 1st and 2nd part, XORed 64 bits (TS 33.102 cl. 6.8.1.2)	
tcv_AuthK	BITSTRING	px_AuthK	Authentication Key 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)	
tcv_AuthKcGSM	BITSTRING	INT_TO_BIT (0, 64)	GSM Cipher Key 64 bits (TS 33.102 cl. 6.8.1.2)	
tcv_AuthMAC	BITSTRING	INT_TO_BIT (0, 64)	Message Authentication Code 64 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)	
tcv_AuthN	INTEGER	px_AuthN	min 31, max 127 (TS 34.108 cl. 8.1.2)	
tcv_AuthRAND	BITSTRING	px_AuthRAND	Random Challenge 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)	
tcv_AuthRsp	AuthRsp	INT_TO_BIT (0,32)	to hold a Authentication Response parameter value received from the UE 32 bits (TS 24.008 cl 10.5.3.2)	
tcv_AuthRspExt	AuthRspExt		to hold a Authentication Response Extension parameter value received from the UE 96 bits (TS24.008 cl 10.5.3.2.1)	
tcv_AuthRspPDU	AUTHENTICATIONRESPO NSE		to hold a Authentication Response PDU	
tcv_AuthXDOUT	BITSTRING	INT_TO_BIT (0, 128)	XDOUT 128 bits (TS 34.108 cl. 8.1.2)	
tcv_AuthXDOUT_Half	BITSTRING	INT_TO_BIT (0, 64)	lower half of XDOUT 64 bits (TS 34.108 cl. 8.1.2)	

Test Case Variable Declarations				
Variable Name	Туре	Value	Comments	
tcv_AuthXRES	BITSTRING	INT_TO_BIT (0, 32)	XRES min 32, max 128 bits (TS 34.108 cl. 8.1.2)	
tcv_BCCH_ModifyTime	INTEGER	512	To hold the BCCH modification time to be used by PAGING TYPE1 or SYSTEM INFORMATION CHANGE INDICATION. The initial value indicates changing now.	
tcv_CellIndInfo	CellIndependantInfo	c_CellIndInfoDef		
tcv_CellInfoA	CellInfoCfg	c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode)		
tcv_CellInfoB	CellInfoCfg	c_CellInfoDef (tsc_CellB, px_PriScrmCode, tsc_URA_IdCellB, px_TCellB, tsc_SFN_OffsetB, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 1000) MOD 16777216))		
tcv_CellInfoC	CellInfoCfg	c_CellInfoDef (tsc_CellC, px_PriScrmCode, tsc_URA_IdCellC, px_TCellC, tsc_SFN_OffsetC, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 2000) MOD 16777216))		
tcv_CellInfoD	CellInfoCfg	c_CellInfoDef (tsc_CellD, px_PriScrmCode, tsc_URA_IdCellD, px_TCellD, tsc_SFN_OffsetD, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 3000) MOD 16777216))		

Test Case Variable Declarations				
Variable Name	Туре	Value	Comments	
tcv_CellInfoE	CellInfoCfg	c_CellInfoDef (tsc_CellE, px_PriScrmCode, tsc_URA_IdCellE, px_TCellE, tsc_SFN_OffsetE, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 4000) MOD 16777216))		
tcv_CellInfoF	CellInfoCfg	c_CellInfoDef (tsc_CellF, px_PriScrmCode, tsc_URA_IdCellF, px_TCellF, tsc_SFN_OffsetF, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 5000) MOD 16777216))		
tcv_CellInfoG	CellInfoCfg	c_CellInfoDef (tsc_CellG, px_PriScrmCode, tsc_URA_IdCellG, px_TCellG, tsc_SFN_OffsetG, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 6000) MOD 16777216))		
tcv_CellInfoH	CellInfoCfg	c_CellInfoDef (tsc_CellH, px_PriScrmCode, tsc_URA_IdCellH, px_TCellH, tsc_SFN_OffsetH, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), ((px_UL_ScramblingCode + 7000) MOD 16777216))		
tcv_CipherActTime	ActivationTime	0	Activation Time	
tcv_CN_Domain	CN_DomainIdentity	cs_domain		
tcv_Count	INTEGER	0	To hold a temporary counter value.	
tcv_CS_KeySeq tcv_DefaultRadioCnf	KeySeq BOOLEAN	tsc_KeySeqDef TRUE	To be used in test cases that require a non deault radio configuration. TRUE: a default radio configuration is to be used FALSE: a non default radio configuration is to be used.	
tcv_dRX_CycleLengthPagin	UTRAN_DRX_CycleLength Coefficient		DRX cycleLength value to be used for PAGING	

	Test Case Variable Declarations			
Variable Name	Туре	Value	Comments	
tcv_E_PLMN	PLMN_List	c_PLMN_List1 (o_ConvtPLMN(tsc_MCC_ Def, tsc_MNC_Def))		
tcv_FrameNumber	INTEGER	0	Values 04095	
tcv_FreqInfoHigh	FrequencyInfo	c_FreqInfo (px_UARFCN_D_High – 950 , px_UARFCN_D_High)		
tcv_FreqInfoLow	FrequencyInfo	c_FreqInfo (px_UARFCN_D_Low - 950 , px_UARFCN_D_Low)		
tcv_FreqInfoMid	FrequencyInfo	c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid)		
tcv_GMM_AttachExpect	BOOLEAN	FALSE	This TCV is to be used in Idle update step in NMO2 for a class A Mobile	
tcv_GMM_AttachRec	BOOLEAN	FALSE	This TCV is to be used in Idle update step in NMO2 for a class A Mobile	
tcv_GMM_DetachExpect	BOOLEAN	FALSE	This TCV is to be used in the Detach Handling	
tcv_GMM_RAU_Expect	BOOLEAN	FALSE	This TCV is to be used in the Routing Area Update Handler	
tcv_GMM_RAU_Rec	BOOLEAN	FALSE	This TCV is to be used in the Routing Area Update Handler	
tcv_HFN	B20	'000000000000000000'B	Hyper Frame Number for CS or PS domain – to be used in security steps	
tcv_InitialUE_Id	InitialUE_Identity	c_UE_ldDefIMSI	Used to store the UE Identity	
tcv_Int_ModifyFlag	BOOLEAN	FALSE	This Flag will be used in Security related steps. If it is set to True, it means that A Integrity Modification is being done at that stage.	
tcv_K	INTEGER	0		
tcv_MIB	MasterInformationBlock	c_MIB_Def (c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid - 950	the initial value c_MIB_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_MIB shall be re-initialized to c_MIB_Def_UTRAN.	
		. ,		

	Test Case Variable Declarations				
Variable Name	Туре	Value	Comments		
tcv_MIB_ValueTagChanged	BOOLEAN	TRUE	initial value = TRUE, set to TRUE after MIBValueTag changed, set to FALSE after MIB delivered to SS.		
tcv_MM_TestExecution	BOOLEAN	FALSE	Indication of MM test execution, set to TRUE once NMO II is set, used to properly handle ATTACH and DETACH procedures in MM tests		
tcv_N308	INTEGER	2			
tcv_NumCfgCell	INTEGER	0	Number of cells configured		
tcv_NumOfPLMN	INTEGER	1	This TCV is used to decide if the test case is a Single PLMN or Multi PLMN test case and based on it initialise SIB 11, 12 & 18 accordingly. Values 1>> 1 PLMN, 2 >> 2 PLMN, 3 >> 3 PLMN Rest Not defined		
tcv_PollSDU	Poll_SDU	sdu1	number of SDU's between pollings, this initial value is for ts_SS_CreateCellFACH. (from 34.123–1). used in RB2, RB3, RB4.		
tcv_PollWindow	PollWindow	pw99	percentage of transmission window,threshold for polling, this initial value is for ts_SS_CreateCellFACH. (from 34.123–1). used in RB2, RB3, RB4.		
tcv_PS_AuthCK	BITSTRING	INT_TO_BIT (0, 128)	Ciphering Key for PS domain 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)		
tcv_PS_AuthIK	BITSTRING	INT_TO_BIT (0, 128)	Integrity Key for PS domain 128 bits (TS 33.102 cl. 6.3.7, TS 34.108 cl. 8.1.2)		
tcv_PS_KeySeq	KeySeq	tsc_KeySeqDef	Ciphering key sequence number for PS domain		
tcv_RAB_Id	B8	'00000000B	to hold the RABId received in a SETUP or a CALL CONFIRMED message		
tcv_RB_ActivationTimeInfoL ist	RB_ActivationTimeInfoList	cs_RB_ActTimeInfoListSRB s (0,0,0,0)			
tcv_RB_SigResumed	BOOLEAN	FALSE			
tcv_ReceivePS_ServiceReq	BOOLEAN	FALSE	This Type tcv by default will be set to False. It will be set to TRUE, when MO Service request has been rejected, and hence Ue can retransmit Service Request which should be handled in Default handlers.		

Test Case Variable Declarations				
Variable Name	Туре	Value	Comments	
tcv_Res	BOOLEAN	FALSE	to hold the BOOLEAN result of a test suite operation or a test Step	
tcv_RLC_IgnoreStatus	BOOLEAN	FALSE	This variable is used to indicate that an RLC STATUS PDU may be received and should be ignored.	
tcv_RLC_SeqNumDL_RB1	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB1	
tcv_RLC_SeqNumDL_RB2	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB2	
tcv_RLC_SeqNumDL_RB20	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB20	
tcv_RLC_SeqNumDL_RB21	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB21	
tcv_RLC_SeqNumDL_RB22	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB22	
tcv_RLC_SeqNumDL_RB24	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB24	
tcv_RLC_SeqNumDL_RB3	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB3	
tcv_RLC_SeqNumDL_RB4	RLC_SequenceNumber	0	Downlink RLC Sequence Number for RB4	
tcv_RRC_EstCauMO	EstablishmentCause	originatingConversationalCa	To hold the establishment cause for MO call that is supported by UE. Assigned in ts_RRC_InitVariables.	
tcv_RRC_EstCauMT	EstablishmentCause	terminatingConversationalC all	To hold the establishment cause for MT call that is supported by UE. Assigned in ts_RRC_InitVariables.	
tcv_RRC_MSN_RB0	RRC_SequenceNumber	0	Used to store the MSN of RB0	
tcv_RRC_MSN_RB1	RRC_SequenceNumber	0	Used to store the MSN of RB1	
tcv_RRC_MSN_RB2	RRC_SequenceNumber	0	Used to store the MSN of RB2	
tcv_RRC_MSN_RB2_UL	RRC_SequenceNumber	0	Used to store the UL MSN of RB2	
tcv_RRC_MSN_RB3	RRC_SequenceNumber	0	Used to store the MSN of RB3	
tcv_RRC_MSN_RB4	RRC_SequenceNumber	0	Used to store the MSN of RB4	
tcv_RRC_PagingCau	PagingCause	terminatingConversationalC all	To hold the paging cause for MT call that is supported by UE. Assigned in ts_RRC_InitVariables.	
tcv_RRC_RAB_Type	RB_ConfigType	cell_DCH_64kCS_RAB_SR B	To hold the RAB config type that is supported by the UE. Assigned in ts_RRC_InitVariables.	
tcv_RRC_Ti	RRC_TransactionIdentifier	0	To hold the RRC Transaction Identifier.	

Test Case Variable Declarations				
Variable Name	Туре	Value	Comments	
tcv_SB1	SysInfoTypeSB1	c_SB1_Def	the initial value c_SB1_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SB1 shall be re-initialized to c_SB1_DefUTRAN.	
tcv_SB1_ValueTag	INTEGER	1	To hold current SB1_ValueTag, value range is 1 to 4.	
tcv_SB1_ValueTagChanged	BOOLEAN	FALSE	initial value = FALSE, set to TRUE after SB1ValueTag changed, set to FALSE after SB1 delivered to SS.	
tcv_Segs	SegmentsOfSysInfoBlock		Variable buffering the result of SIBSegmentation	
tcv_SIB1	SysInfoType1	cb_SIB1_Def (c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA,tsc_SFN_Offset A, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode))		
tcv_SIB11	SysInfoType11	cb_SIB11_Def(c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellB, px_PriScrmCode, tsc_URA_IdCellB, px_TCellB, tsc_SFN_OffsetB, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellC, px_PriScrmCode, tsc_URA_IdCellC, px_TCellC, px_TCellC, px_TCellC, px_TCellC, tsc_SFN_OffsetC, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellD, px_PriScrmCode, tsc_URA_IdCellD, px_TCell		

	Test Case Variable Declarations			
Variable Name	Туре	Value	Comments	
		D, tsc_SFN_OffsetD, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellE, px_PriScrmCode, tsc_URA_IdCellE, px_TCellE, tsc_SFN_OffsetE, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellF, px_PriScrmCode, tsc_URA_IdCellF, px_TCellF, tsc_SFN_OffsetF, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellG, px_TCellG, tsc_CellG, px_TCellG, tsc_URA_IdCellG, px_TCellG, tsc_SFN_OffsetG, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellH, px_TCellH, tsc_SFN_OffsetH, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode), c_CellInfoDef (tsc_CellH, px_TCellH, tsc_SFN_OffsetH, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_		
tcv_SIB12 tcv_SIB18 tcv_SIB2 tcv_SIB3	SysInfoType12 SysInfoType18 SysInfoType2 SysInfoType3	cb_SIB12_Def cb_SIB3_DefUTRAN_GERA N(c_CellInfoDef (tsc_CellA, px_PriScrmCode,	no initial value no initial value the initial value c_SB3_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SB3 shall	
		tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode))	be re-initialized to c_SB3_DefUTRAN.	

Continued on next page

	Test Case Variable Declarations			
Variable Name	Туре	Value	Comments	
tcv_SIB4	SysInfoType4	cb_SIB4_DefUTRAN_GERA N (c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA,tsc_SFN_Offset A, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode))	the initial value c_SB4_DefUTRAN_GERAN is for UTRAN/GERAN, for UTRAN only tcv_SB4 shall be re-initialized to c_SB4_DefUTRAN.	
tcv_SIB7	SysInfoType7	c_SIB7_Def		
tcv_Start	START_Value	'0000000000000000000'B	To hold the START value received in the INITIAL DIRECT TRANSFER message	
tcv_StartList	STARTList	c_StartListCS	To hold the START list sent by UE	
tcv_SubChNum	AvailableSubChannelNumber s	'1111111111111'B	Available subchannel numbers for PRACH, this initial value is for ts_SS_CreateCellFACH. (from 34.108 cl. 6.1 (SIB5))	
tcv_TestBody	BOOLEAN	FALSE	to indicate if the test body is currently being executed	
tcv_TGCFN	TGCFN	0		
tcv_TimeoutInDefault	BOOLEAN	FALSE	Indication of a TimeoutInDefault having occurred	
tcv_TimerPoll	TimerPoll	tp400	value for polling timer, this initial value is for ts_SS_CreateCellFACH. (from 34.123–1). used in RB2, RB3, RB4	
tcv_TimerPollProhibit	TimerPollProhibit	tpp200	minimum time between polls, this initial value is for ts_SS_CreateCellFACH. (from 34.123–1). used in RB2, RB3, RB4	
tcv_TmpAttachReqPDU	ATTACHREQUEST		Temporary variable	
tcv_TmpAuthAndCiphRspP DU	AUTHENTICATIONANDCIP HERINGRESPONSE		Temporary variable	
tcv_TmpB3	B3	'000'B	Temporary variable	
tcv_TmpCellInfo	CellInfoCfg	c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, c_FreqInfo (px_UARFCN_D_Mid - 950 , px_UARFCN_D_Mid), px_UL_ScramblingCode)	To temporary store CellInfo data	
tcv_TmpRAU_ReqPDU	ROUTINGAREAUPDATERE QUEST	. = 0,	Temporary variable	

Continued on next page

Test Case Variable Declarations			
Variable Name	Туре	Value	Comments
tcv_UE_OpMode	UE_OperationMode	px_UE_OpModeDef	Indicates the current UE operation mode (either A or C).
tcv_UE_SwitchedOn	BOOLEAN	TRUE	This value is to represent the state of the UE. TRUE means UE is Switched/Powered On, and hence only Switch/Power OFF operation can be done, and no Switch/Power On operation. False Means, UE is off, and only Switch/Power On Operation can be done. This Variable is introduced to help automation of test cases. The dafault value of ON, is consistent with present Test Sequence, where MMI command to switch/Power off is called before creation of the first cell on SS Side.
tcv_UE_SystemSpecificCap	INTEGER	0	use to represent the integer equivalent of 7 bit UE system specific Capability. The Valid range is 0 to 127
tcv_Use_E_PLMN	BOOLEAN	FALSE	The user of ts_IdleUpdated needs to set tcv_Use_E_PLMN to 'True' if he wants to send 'equivalent PLMN list' as set in tcv_E_PLMN during CS or PS registration

PCO Type Declarations			
PCO Type	Role	Comments	
DSAP	LT		
CSAP	LT		
Dc_SAP	LT		
MMI	UT		
Detailed Comments :			

PCO Name	PCO Type	Role	Comments
AM	DSAP	LT	PCO above AM SAP of RLC
CMAC	CSAP	LT	Control and observation point between RRC and MAC
СРНҮ	CSAP	LT	Control and observation point between RRC and PHY
CRLC	CSAP	LT	Control and observation point between RRC and RLC
Dc	Dc_SAP	LT	Carry transmission and reception of NAS messages
TM	DSAP	LT	PCO above TM SAP of RLC
UM	DSAP	LT	PCO above UM SAP of RLC
Ut	MMI	UT	The PCO used for the upper tester

Timer Declarations			
Timer Name	Duration	Unit	Comments
t_3395	30	s	Timer T3395, 24.008, section 11.2.5
t_TimeoutInDefault	300	ms	Used to catch timeouts in the Defaults
t_Dly	5000	ms	general purpose delay timer
t_Guard	300	s	test case guard timer
t_LowerBound	4500	ms	the lower bound timer
t_T312	1	S	Timer to check physical channel establishment criteria
t_UpperBound	5500	ms	the upper bound timer
t_WaitMS	13500	ms	general wait timer
t_WaitS	15	s	general watch timer

ASP Type Definition

ASP Name: AT_CmdCnf
PCO Type: MMI

Comments: The ASP is used get the result of a requested AT command previously sent to the UT (UT ->LT).

Parameter Name	Parameter Type	Comments
result	BOOLEAN	OPTIONAL
resultString	IA5String	OPTIONAL
sMS_BlockMode	HEXSTRING	to control and observe the Block mode procedure for SMS

Detailed Comments:

ASP Type Definition

ASP Name: AT_CmdReq **PCO Type**: MMI

Comments: The ASP is used to request a AT command to the UT (LT ->UT).

Parameter Name	Parameter Type	Comments
cmd	IA5String	command line
sMS_BlockMode	HEXSTRING	to control and observe the Block mode procedure for SMS

Detailed Comments:

ASP Type Definition

 $\textbf{ASP Name :} \ \mathsf{MMI_CmdCnf}$

PCO Type : MMI

Comments: The ASP is used get the result of a requested command previously sent to the UT (UT ->LT).

Parameter Name	Parameter Type	Comments
result	BOOLEAN	
resultString	IA5String	OPTIONAL

Detailed Comments:

ASP Type Definition

ASP Name: MMI_CmdReq

PCO Type : MMI

Comments: The ASP is used to request an MMI command to the UT (LT ->UT).

Parameter Name	Parameter Type	Comments	
cmd	IA5String	command line	
Patrillad Community			

ASP Type Definition

ASP Name: RLC_TR_TestDataInd

PCO Type : DSAP

Comments: To indicate the reception of unstructered data using transparent mode in the uplink direction

Parameter Name	Parameter Type	Comments
cellid	INTEGER	
rB_ld	SS_RB_Identity	RB identity (RB3 or RB4)
data	PDU	

Detailed Comments:

ASP Type Definition

ASP Name: RRC_DataInd (RRC-DATA-IND)

PCO Type: Dc_SAP

Comments: The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation (NAS <-

RRC).

Parameter Name	Parameter Type	Comments	
cellId	INTEGER	Cell Id	
rB_ld	SS_RB_Identity	RB identity (RB3 or RB4)	
ch	LogicChGERAN	Logical channel (used for interworking with GERAN)	
sapld	SapId	RRC SAP identifier (SAP0)	
cN_Domain	SS_CN_DomainIdentity	CN domain identity	
start	START_Value	Mandatory in INITIAL DIRECT TRANSFER	
msg	PDU	NAS PDU	
Detailed Comments:			

Detailed Comments:

ASP Type Definition

ASP Name: RRC_DataReq **PCO Type**: Dc_SAP

Comments: The ASP is used to request the transmission of the NAS PDU message using acknowledged operation (NAS

-> RRC).

Parameter Name	Parameter Type	Comments	
cellId	INTEGER		
rB_ld	SS_RB_Identity	RB identity (RB3 or RB4)	
ch	LogicChGERAN	Logical channel (used for interworking with GERAN)	
sapld	SapId	RRC SAP identifier (SAP0)	
cN_Domain	SS_CN_DomainIdentity	CN domain identity	
msg	PDU	NAS PDU	
Detailed Comments :			

```
ASP Name: CRLC_SetRRC_MessageSN_REQ
PCO Type: CSAP
Comments: To request the SS to set the RRC message sequence number in COUNT-I to the value specified in this ASP.
The ASP is used to initialise SS RRC

Type Definition

SEQUENCE
{
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    count_I_SB_UL RRC_SequenceNumber OPTIONAL,
    count_I_LSB_DL RRC_SequenceNumber OPTIONAL
}

Detailed Comments:
```

```
ASP Name: CRLC_SetRRC_MessageSN_CNF
PCO Type: CSAP
Comments: To confirm the RRC message sequence number setting request

Type Definition

SEQUENCE
{
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo
}
Detailed Comments:
```

```
ASN.1 ASP Type Definition

ASP Name: CRLC_RRC_MessageSN_REQ
PCO Type: CSAP

Comments: To request the SS to return the values in COUNT-I for sending the next DL RRC message or for receiving the next UL RRC message on the concerned SRB.

Type Definition

SEQUENCE {
    cellId INTEGER(-1..63), routingInfo RoutingInfo }

Detailed Comments:
```

ASP Name: CRLC_RRC_MessageSN_CNF

PCO Type : CSAP

Comments: To return the counter I value (HFN and RRC message sequence number) for sending the next DL RRC

message or for receiving the next UL RRC message on the concerned SRB.

COUNT_I_MSB is the 28 MSB of the COUNT-I (HFN)

Type Definition

```
SEQUENCE
{
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    count_I_MSB_UL COUNT_I_MSB,
    count_I_LSB_UL RRC_SequenceNumber,
    count_I_MSB_DL COUNT_I_MSB,
    count_I_LSB_DL RRC_SequenceNumber
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CMAC_Ciphering_Activate_CNF

PCO Type : CSAP

Comments: To confirm to activate or inactivate the ciphering

Type Definition

SEQUENCE {
 cellId INTEGER (-1..63),
 routingInfo RoutingInfo

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CMAC_Ciphering_Activate_REQ

PCO Type : CSAP

Comments: To request to start or, restart or stop downlink ciphering or uplink deciphering. The physicalChannelldentity

of DPCH applies to routingInfo.Do not increment HFN part of COUNT-C if the value of

incrementCOUNT_C_Ind is "NotIncr".

Type Definition

```
SEQUENCE
{
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    ratType RatType,
    cn_DomainIdentity CN_DomainIdentity,
    cipheringModeInfo CipheringModeInfo,
    incHFN Increment_Mode
```

ASP Name: CMAC_Config_CNF

PCO Type : CSAP

Comments: For MAC emulator to report that a previous attempt to setup, reconfigure or release a logical channel is

successful.

Type Definition

```
SEQUENCE {
    cellId INTEGER (-1..63),
    routingInfo RoutingInfo
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CMAC_Config_REQ

PCO Type : CSAP

Comments: To request to configure MAC entity. Setup is used for creation of the MAC instances or the MAC resources.

Release is used for free the all MAC resources. The reconfiguration is to change the MAC parameters, it is

not the MAC modification.

Type Definition

```
SEQUENCE {
    cellId INTEGER (-1..63),
    routingInfo RoutingInfo,
    ratType RatType,
    configMessage CHOICE {
        setup CmacConfigReq,
        reconfigure CmacConfigReq,
        release NULL
    }
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CMAC_PAGING_Config_CNF

PCO Type : CSAP

Comments: To confirm to setup the Paging message

Type Definition

SEQUENCE {

cellId INTEGER (0..63), routingInfo RoutingInfo

ASP Name: CMAC_PAGING_Config_REQ

PCO Type : CSAP

Comments: To request MAC layer to send the Paging message on the specified configuration.

Type Definition

```
SEQUENCE {
    cellId INTEGER (0..63),
    routingInfo RoutingInfo,
    ratType RatType,
    configMessage CmacPagingConfigReq
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CMAC_SYSINFO_Config_CNF

PCO Type : CSAP

Comments: To confirm to setup the BCCH message to MAC layer

Type Definition

SEQUENCE {
cellId INTEGER (0..63),
routingInfo RoutingInfo

}

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CMAC_SYSINFO_Config_REQ

PCO Type : CSAP

Comments: To request MAC layer to send the BCCH message on the specified configuration.

Type Definition

SEQUENCE {
 cellId INTEGER (0..63),
 routingInfo RoutingInfo,
 ratType RatType,

configMessage CmacSysinfoConfigReq

ASN.1 ASP Type Definition ASP Name: CMAC_SecurityMode_Config_CNF PCO Type: CSAP Comments: To confirm to configure the MAC security mode Type Definition SEQUENCE { cellId INTEGER (-1..63) } Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CMAC_SecurityMode_Config_REQ

PCO Type : CSAP

Comments: To request to configure the MAC security mode

If there are several CMAC_Ciphering_Activate_REQ follow this ASP, the SS shall take a serial of specified

actions on the same contents in this ASP at the activation time indicated in each

CMAC_Ciphering_Activate_REQ.

Type Definition

SEQUENCE {
 cellId INTEGER (-1..63),
 macCipheringInfo SecurityInfo
}

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_Cell_Config_CNF

PCO Type : CSAP

Comments: To confirm to setup the cell parameter

Type Definition

SEQUENCE {

cellid INTEGER (0..63)

ASP Name: CPHY_Cell_Config_REQ

PCO Type : CSAP

Comments: To request to setup the cell parameter.

The unit of tcell is chip; the unit of sfnOffset is frame number; the primary scambling code number of the cell

is 16*primaryScramblingCode_SS; the unit of dLTxAttenuationLevel is dB.

Type Definition

```
SEQUENCE {
cellid INTEGER (0..63),
tcell INTEGER(0..38399),
 sfnOffset INTEGER (0 .. 4095 ),
frequencyInfo FrequencyInfo,
 primaryScramblingCode_SS INTEGER (0..511),
cellTxPowerLevel CellTxPowerLevel,
dLTxAttenuationLevel INTEGER(0..30)
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_Cell_Release_CNF

PCO Type : CSAP

Comments: The confirmation to the CPHY_Cell_Release_Req

Type Definition

```
SEQUENCE {
soft_Reset BOOLEAN,
```

cell_ID_List SEQUENCE (SIZE (1..8)) OF INTEGER(0..63) -- cell IDs

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_Cell_Release_REQ

PCO Type : CSAP

Comments: 1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a test

case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag ON:Releases

all configured Channels and cells (if any) irrespective of Cell ID list IE.

2. Releases the associated Memory Buffers (if any).

3. Cancels all active timers (if any)

With "Soft_Reset" flag OFF

1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any)

2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List

3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.

Type Definition

```
SEQUENCE {
soft Reset BOOLEAN,
 cell_ID_List SEQUENCE (SIZE (1..8)) OF INTEGER(0..63) -- cell IDs
```

ASP Name: CPHY_Frame_Number_CNF

PCO Type : CSAP

Comments: To return the requested connection frame number. The routingInfo indicates a physical channel.

Type Definition

SEQUENCE{

cellId INTEGER(0..63), routingInfo RoutingInfo,

frameNumber INTEGER (0..255)

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_Frame_Number_REQ

PCO Type : CSAP

Comments: To request the physical layer to return a connection frame number on which the next message can be sent

at the specified PCO on the specified logical channel. The return frame number shall leave time from current frame number in order to leave some execution time for TTCN preparing next message. The routingInfo

indicates a physical channel

Type Definition

SEQUENCE{

cellId INTEGER(0..63), routingInfo RoutingInfo

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_Ini_CNF

PCO Type : CSAP

Comments: Confirm the test initialisation

Type Definition

SEQUENCE

confirmation NULL

ASN.1 ASP Type Definition ASP Name: CPHY_Ini_REQ PCO Type: CSAP Comments: Request to initialise the test Type Definition ENUMERATED { defaultRadioEnvironment(0), nonDefaultMultiCell(1) }

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_Out_of_Sync_IND

PCO Type : CSAP

Comments: To report that the physical channel synchronization (in FDD mode, sync with uplink DPCCH) was lost as

detected by the SS receiver.

Type Definition

SEQUENCE {
 cellId INTEGER (0..63),
 routingInfo RoutingInfo

Detailed Comments:

ASN.1 ASP Type Definition

 $\textbf{ASP Name} \ : \ \mathsf{CPHY_RL_Modify_CNF}$

PCO Type : CSAP

Comments: To confirm to modify the Radio Link

Type Definition

SEQUENCE {

cellId INTEGER (0..63), routingInfo RoutingInfo

ASP Name: CPHY_RL_Modify_REQ

PCO Type : CSAP

Comments: To request to modify the Radio Link

HardHandover (PhysicalChannelReconfig)

ChannelisationCodeChange

FrequencyChange

PhysicalChannelModifyForTrCHReconfig CompressedMode(PhysicalChannelReconfig)

Re_Synchronized HardHandover

Softhandover

Type Definition

```
SEQUENCE {
    cellId INTEGER (0..63),
    routingInfo RoutingInfo,
    ratType RatType,
    modifyMessage CphyRIModifyReq
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_RL_Release_CNF

PCO Type : CSAP

Comments: PHY emulator confirms that a specified physical channel has been released.

Type Definition

SEQUENCE {

cellId INTEGER (0..63), routingInfo RoutingInfo

}

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_RL_Release_REQ

PCO Type : CSAP

Comments: To request to release the Radio Link

Type Definition

SEQUENCE {

cellId INTEGER (0..63), routingInfo RoutingInfo

```
ASP Name: CPHY_RL_Setup_CNF
PCO Type: CSAP
Comments: To confirm to setup the Radio Link

Type Definition

SEQUENCE {
    cellId INTEGER (0..63),
    routingInfo RoutingInfo
}

Detailed Comments:
```

```
ASN.1 ASP Type Definition

ASP Name : CPHY_RL_Setup_REQ
PCO Type : CSAP
Comments : To request to setup the associated transport channels and the Radio Link itself.

Type Definition

SEQUENCE {
    cellId INTEGER (0..63),
    routingInfo RoutingInfo,
    ratType RatType,
    setupMessage CphyRlSetupReq
}

Detailed Comments :
```

```
ASP. Name: CPHY_Sync_IND
PCO Type: CSAP
Comments: To indicate that physical channel synchronization (in FDD mode, sync with DPCCH) has been achieved.

Type Definition

SEQUENCE{
cellId INTEGER (0..63),
routingInfo RoutingInfo
}

Detailed Comments:
```

```
ASN.1 ASP Type Definition

ASP Name : CPHY_TrCH_Config_CNF
PCO Type : CSAP
Comments : To confirm to configure the transport channel

Type Definition

SEQUENCE {
    cellId INTEGER (0..63),
    routingInfo RoutingInfo
}

Detailed Comments :
```

```
ASN.1 ASP Type Definition

ASP Name : CPHY_TrCH_Config_REQ
PCO Type : CSAP
Comments : To request to configure the transport channel

Type Definition

SEQUENCE {
    cellId INTEGER(0..63),
    routingInfo RoutingInfo,
    ratType RatType,
    trchConfigType TrChConfigType,
    configMessage CphyTrchConfigReq
}

Detailed Comments :
```

ASN.1 ASP Type Definition

ASP Name: CPHY_TrCH_Release_CNF
PCO Type: CSAP
Comments: To confirm to release tthe Radio Link

Type Definition

SEQUENCE {
 cellId INTEGER (0..63),
 routingInfo RoutingInfo
}

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CPHY_TrCH_Release_REQ
PCO Type: CSAP
Comments: To request to release the Radio Link

Type Definition

SEQUENCE {
 cellId INTEGER (0..63),
 routingInfo RoutingInfo,
 trchConfigType TrChConfigType
}

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CRLC_Ciphering_Activate_CNF
PCO Type: CSAP
Comments: To confirm to activate or inactivate the ciphering

Type Definition

SEQUENCE {
cellId INTEGER (-1..63)}

Detailed Comments:

ASP Name: CRLC_Ciphering_Activate_REQ

PCO Type : CSAP

Comments: To request to start, restart or stop downlink ciphering or uplink deciphering. The RB-identity applied to

routingInfo indicates the SRB being not suspended during the execution of the ciphering mode command. Each call of the ASP includes one RLC SN in rb_DL_CiphActivationTimeInfo for the corresponding

rb-identity.

Type Definition

```
SEQUENCE {
    cellId INTEGER (-1..63),
    ratType RatType,
    cn_DomainIdentity CN_DomainIdentity,
    ciphActivationInfo CiphActivationInfo,
    incHFN RLC_IncMode
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CRLC_Config_CNF

PCO Type : CSAP

Comments: For RLC emulator to comfirm that a previous attempt to establish, reconfigure or release a radio bearer has

been successful

Type Definition

SEQUENCE {
cellId INTEGER (-1..63),
routingInfo RoutingInfo

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CRLC_Config_REQ

PCO Type : CSAP

Comments: To request to setup, reconfigure or release RLC entity

Type Definition

SEQUENCE {

cellId INTEGER (-1..63), routingInfo RoutingInfo, ratType RatType, configMessage CrlcConfigReq

ASP. Name: CRLC_Integrity_Activate_CNF PCO Type: CSAP Comments: To confirm to activate or inactivate the integrity protection Type Definition SEQUENCE { cellId INTEGER (-1..63) }

ASP Name: CRLC_Integrity_Activate_REQ

PCO Type : CSAP

Detailed Comments:

Comments: To request to start or to modify the downlink or uplink integrity protection. The ASP shall be called before

the sending of SECURITY MODE COMMAND. It activates the integrity on all SRBs in DL. The ASP shall

not be called if the integrity shall be switched off in the test case.

Type Definition

ASN.1 ASP Type Definition

```
SEQUENCE {
    cellId INTEGER (-1..63),
    cn_DomainIdentity CN_DomainIdentity,
    integrityActivationInfo IntegrityActivationInfo
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CRLC_Integrity_Failure_IND

PCO Type : CSAP

Comments: RLC emulator reports the occurrences of a failure in integrity protection, i.e. reception of an

integrity-protected RLC AM/UM SDU containing a non-matching X-MAC value compared to the desired.

Type Definition

```
SEQUENCE {
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    failureCause ENUMERATED { codeNotMatched(0) }
}
```

```
ASP Name: CRLC_Resume_CNF
PCO Type: CSAP
Comments: To confirm the resume request

Type Definition

SEQUENCE {
    cellId INTEGER (-1..63),
    routingInfo RoutingInfo
}

Detailed Comments:
```

ASP. 1 ASP Type Definition

ASP Name: CRLC_Resume_REQ
PCO Type: CSAP
Comments:

Type Definition

SEQUENCE {
 cellId INTEGER (-1..63),
 routingInfo RoutingInfo
}
Detailed Comments:

ASN.1 ASP Type Definition

ASP Name : CRLC_SecurityMode_Config_CNF
PCO Type : CSAP
Comments : To confirm to configure the ciphering

Type Definition

SEQUENCE {
 cellId INTEGER (-1..63)
}
Detailed Comments :

ASP Name: CRLC_SequenceNumber_CNF

PCO Type : CSAP

Comments: To return the requested counter sequence number to which the next DL PDU to be sent or the expected UL

PDU to be received.

Type Definition

```
SEQUENCE {
    cellId INTEGER (-1..63),
    routingInfo RoutingInfo,
    count_C_MSB_UL COUNT_C_MSB,
    count_C_LSB_UL RLC_SequenceNumber,
    count_C_MSB_DL COUNT_C_MSB,
    count_C_LSB_DL RLC_SequenceNumber
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CRLC_SequenceNumber_REQ

PCO Type : CSAP

Comments: To request the RLC layer to return current counter sequence numbers to which the next DL PDU to be sent

or the expected UL PDU to be received.

Type Definition

```
SEQUENCE {
  cellId INTEGER (-1..63),
  routingInfo RoutingInfo
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: CRLC_Suspend_CNF

PCO Type : CSAP

Comments: To confirm the suspension of data transmission. The parameter vt indicates either the value of the Send

State Variable VT(S) for AM, or the value of Data State Variable VT(US) for UM.

Type Definition

SEQUENCE {

cellid INTEGER (-1..63), routingInfo RoutingInfo, vt RLC_SequenceNumber

ASP Name: CRLC_Suspend_REQ

PCO Type : CSAP

 $\textbf{Comments}: \ \text{To request the suspension of data transmission. The parameter n indicates that an RLC entity will not send a limit of the context of the$

PDU with "Sequence Number">=VT(S)+N for AM and "Sequence Number">=VT(US)+N for UM, where N is

a non-negative integer

Type Definition

```
SEQUENCE {
    cellId INTEGER (-1..63),
    routingInfo RoutingInfo,
    n RLC_SequenceNumber
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: RLC_AM_DATA_CNF

PCO Type : DSAP Comments :

Type Definition

```
SEQUENCE {
  cellId INTEGER(-1..63),
  routingInfo RoutingInfo,
  mui Mui
```

Detailed Comments:

ASN.1 ASP Type Definition

ASP Name: RLC_AM_DATA_IND

PCO Type : DSAP

Comments: To indicate to receive DATA using ackowledged mode

Type Definition

```
SEQUENCE {
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    integrityResult IntegrityResult ,
    aM_message CHOICE {
        uL_DCCH_Message UL_DCCH_Message,
        uL_CCCH_Message UL_SHCCH_Message
}
```

ASN.1 ASP Type Definition ASP Name: RLC_AM_DATA_REQ PCO Type : DSAP Comments: To request to transmit DATA using ackowledged mode **Type Definition** SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, confirmationRequest AmConfirmationRequest, aM_message CHOICE { dL_DCCH_Message DL_DCCH_Message, dL_CCCH_Message DL_CCCH_Message, pCCH_Message PCCH_Message, dL_SHCCH_Message DL_SHCCH_Message, bCCH_FACH_Message BCCH_FACH_Message, bCCH_BCH_Message BCCH_BCH_Message, $invalid_dL_DCCH_Message\ Invalid_DL_DCCH_Message,$ invalid_dL_CCCH_Message Invalid_DL_CCCH_Message, invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message

```
ASP Name: RLC_TR_DATA_IND
PCO Type: DSAP
Comments: To indicate to receivet DATA using transparent mode

Type Definition

SEQUENCE {
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    tM_message CHOICE {
        uL_DCCH_Message,
        uL_CCCH_Message UL_CCCH_Message,
        uL_SHCCH_Message UL_SHCCH_Message
}

Detailed Comments:
```

ASN.1 ASP Type Definition ASP Name: RLC_TR_DATA_REQ PCO Type : DSAP Comments: To request to transmit DATA using transparent mode **Type Definition** SEQUENCE { cellId INTEGER(-1..63), routingInfo RoutingInfo, tM_message CHOICE { dL_DCCH_Message DL_DCCH_Message, dL_CCCH_Message DL_CCCH_Message, pCCH_Message PCCH_Message, dL_SHCCH_Message DL_SHCCH_Message, bCCH_FACH_Message BCCH_FACH_Message, bCCH_BCH_Message BCCH_BCH_Message, invalid_dL_DCCH_Message Invalid_DL_DCCH_Message, invalid_dL_CCCH_Message Invalid_DL_CCCH_Message, invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message

```
ASP Name: RLC_UM_DATA_IND
PCO Type: DSAP
Comments: To indicate to receivet DATA using unacknowledged mode

Type Definition

SEQUENCE {
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    integrityResult IntegrityResult,
    uM_message CHOICE {
    uL_DCCH_Message UL_DCCH_Message,
    uL_CCCH_Message UL_SHCCH_Message,
    uL_SHCCH_Message UL_SHCCH_Message
}

Detailed Comments:
```

ASP Name: RLC_UM_DATA_REQ

PCO Type : DSAP

Comments: To request to transmit DATA using unacknowledged mode

Type Definition

```
SEQUENCE {
    cellId INTEGER(-1..63),
    routingInfo RoutingInfo,
    uM_message CHOICE {
        dL_DCCH_Message DL_DCCH_Message,
        dL_CCH_Message DL_CCCH_Message,
        pCCH_Message PCH_Message,
        pCH_Message PCH_Message,
        dL_SHCCH_Message DL_SHCCH_Message,
        bCCH_FACH_Message BCCH_FACH_Message,
        bCCH_BCH_Message BCCH_BCH_Message,
        invalid_dL_DCCH_Message Invalid_DL_DCCH_Message,
        invalid_dL_CCCH_Message Invalid_DL_CCCH_Message,
        invalid_dL_SHCCH_Message Invalid_DL_SHCCH_Message
    },
    specialLI BOOLEAN
}
```

PDU Name : ACTIVATEPDPCONTEXTACCEPTdl

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : Activate PDP Context Accept

n -> ue

Reference 3G PP 24.008 clause, 9.5.2

Field Name	Field Type	Field Encoding	Comments
i	П		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
negiotiatedLLC_SAPI	LLC_SAPI_v		LLC service access point identifier M V BITSTRING [8]
negiotiatedQoS	QualityOfService_lv		Quality of service M LV OCTETSTRING [13–15]
spare	B4		Spare M V BITSTRING [4]
radioPriority	RadioPriority_v		Radio priority M V BITSTRING [4]
pDP_Address	PktDataProtoAddr		Packet data protocol address O TLV OCTETSTRING [4–20]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]
pktFlowID	PktFlowIdentifier		Packet Flow Identifier O TLV OCTETSTRING [3]

PDU Name : ALERTINGul **PCO Type** : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC ALERTING uplink ue -> n

3G TS 24.008 cl. 9.3.1.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [23]

PDU Name : CALLCONFIRMED

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC CALL CONFIRMED ue \rightarrow n

3G TS 24.008 cl. 9.3.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
repeatInd	RepeatInd		repeat indicator C BITSTRING[8]
bcap1	Всар		Bearer capability O OCTETSTRING [316]
bcap2	Всар		Bearer capability O OCTETSTRING [316]
cau	Cau		cause O OCTETSTRING [432]
cC_Capabilities	CC_Capabilities		cc capabilities O OCTETSTRING[3]
streamld	StreamId		stream identifier O OCTETSTRING[3]
supportedCodecs	CodecList		supported codecs O OCTETSTRING[5-n]

PDU Name : CMSERVICEREJECT

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : CM SERVICE REJECT n -> ue

3G TS 24.008 V3.4.0 cl. 9.2.6

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
rejCau	RejCau		Reject Cause M BITSTRING [8]

Detailed Comments: (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4).

PDU Type Definition

PDU Name : CONNECTACKNOWLEDGE

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : CC CONNECT ACKNOWLEDGE ue <-> n

3G TS 24.008 cl. 9.3.6

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]

 $\textbf{Detailed Comments} \hspace{0.2cm} \textbf{:} \hspace{0.2cm} \textbf{(1) bits 7 and 8 are 0 and send sequence number} \hspace{0.2cm} \textbf{for earlier than R99 resp.}$

a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Name : CONNECTUI
PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

 $\hbox{ {\it Comments} } \qquad : \ \hbox{ {\it CC CONNECT}} \quad \hbox{ $n < -$ ue}$

3G TS 24.008 cl. 9.3.5.2

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
facility	Facility		facility O
connectedSubAdrs	ConnectedSubAdrs		connected subaddress O OCTETSTRING [223]
userUser	UserUser		user-user O OCTETSTRING [3131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [23]
streamId	StreamId		stream identifier
			OCTETSTRING[3]

 $\textbf{Detailed Comments} \hspace*{0.2cm} \textbf{:} \hspace*{0.2cm} \textbf{(1) bits 7 and 8 are 0 and send sequence number} \hspace*{0.2cm} \textbf{for earlier than R99 resp.}$

a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : CPACK
PCO Type : Dc_SAP

Encoding Rule Name:
Encoding Variation:

 $\begin{tabular}{lll} \textbf{Comments} & : SMS CP-ACK & ue <-> n \\ \end{tabular}$

3G TS 24.011, cl. 7.2.2

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
sMSProtocolDiscriminator	ProtocolDiscriminator		SMS protocol discriminator M BITSTRING [4] ('1001'B)
msgType	MsgType		message type M BITSTRING [8] ('00000100'B)

Detailed Comments: To acknowledge CPDATA messages carrying higher layer protocol data.

PDU Name : CPDATA
PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : SMS CP DATA ue <-> n

3G TS 24.011, cl. 7.2.1

Field Name	Field Type	Field Encoding	Comments
ti	П		transaction identifier M BITSTRING [4]
sMSProtocolDiscriminator	ProtocolDiscriminator		SMS protocol discriminator M BITSTRING [4] ('1001'B)
msgType	MsgType		message type M BITSTRING [8] ('0000 0001'B)
cP_UserData	CP_UserData		CP-User data element M Length of 1 octet + RPDU of max 248 octets => 1249 octets

Detailed Comments: cP_UserData contains length of 1 octet plus RPDU, either returning to the UE in case of MO, or

reporting the outcome of a MT messaging attempt in case of MT .

PDU Type Definition

PDU Name : CPERROR PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : SMS CP-ERROR ue <-> n

3G TS 24.011, cl. 7.2.3

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
sMSProtocolDiscriminator	ProtocolDiscriminator		SMS protocol discriminator M BITSTRING [4] ('1001'B)
msgType	MsgType		message type M BITSTRING [8] ('0001 0000'B)
cP_Cause	OCTETSTRING[1]		CP Cause element M
Detailed Comments : To transport errors resulting from CPDATA messages.			

PDU Name : DISCONNECTul

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC DISCONNECT ue \rightarrow n

3G TS 24.008 cl. 9.3.7.2

Field Name	Field Type	Field Encoding	Comments
ti	П		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau_lv		cause M OCTETSTRING [331]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [23]

PDU Name : RELEASECOMPLETEul

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC or SS RELEASE COMPLETE $\,$ n <- ue

3G TS 24.008 cl. 9.3.19.2

Field Name	Field Type	Field Encoding	Comments
ti	П		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [432]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [23]

PDU Name : RELEASEdI **PCO Type** : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC RELEASE $\, n \rightarrow ue \,$

3G TS 24.008 cl. 9.3.18.1

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [432]
cau2	Cau		cause O OCTETSTRING [432]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3131]

PDU Name : REQUESTPDPCONTEXTACTIVATIONAL

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : Request PDP Context Activation

n -> ue

3GPP 24.008, clause, 9.5.7

Field Type	Field Encoding	Comments
П		transaction identifier M BITSTRING [4]
ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
MsgType		message type M BITSTRING [8]
PktDataProtoAddr_lv		Packet data protocol address M LV OCTETSTRING [3–19]
AccessPtName		Access point name O TLV OCTETSTRING [3–102]
ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]
	TI ProtocolDiscriminator MsgType PktDataProtoAddr_Iv AccessPtName	TI ProtocolDiscriminator MsgType PktDataProtoAddr_Iv AccessPtName

PDI	Type	Defin	ition
rvu	ivbe	Delli	HUOH

PDU Name : SERVICEREJECT

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 clause 9.4.22

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator
			M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
gmmCause	RejCau		M 1 octet

PDU Name : SETUPdI PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

 $\begin{tabular}{ll} \textbf{Comments} & : CC \ SETUP & n \rightarrow ue \\ \end{tabular}$

3G TS 24.008 cl. 9.3.23.1

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING (4)
cC_ProtocolDiscriminator	ProtocolDiscriminator		BITSTRING [4] CC protocol discriminator
			M BITSTRING [4]
msgType	MsgType		message type (1)
			BITSTRING [8]
repeatInd	RepeatInd		repeat indicator
			BITSTRING[8]
bcap1	Bcap		Bearer capability O
			OCTETSTRING [316]
bcap2	Bcap		Bearer capability O
			OCTETSTRING [316]
facility	Facility		facility O
progInd	ProgInd		progress indicator O
			OCTETSTRING [4]
signal	Signal		signal O OCTETSTRING[2]
cgpn	CGPN		calling party subaddr. O OCTETSTRING [214]
cgps	CGPS		calling party subaddr. O OCTETSTRING [223]
cdpn	CDPN		called party number
			OCTETSTRING[243]
cdps	CDPS		called party subaddr. O OCTETSTRING [223]
redirectingPN	RedirectingPN		redirecting party BCD number O
			OCTETSTRING[319]
redirectingPSubadrs	RedirectingPS		redirecting party subadress
			O OCTETSTRING[223]
llcRepeatInd	RepeatInd		LLC repeat indicator O OCTETSTRING [1]
llc1	LLC		low layer compatib.1 O OCTETSTRING [218]
llc2	LLC		low layer compatib.2 C OCTETSTRING [218]
hlcRepeatInd	RepeatInd		HLC repeat indicator O OCTETSTRING [1]

Continued on next page

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PDU Type Definition			
Field Name	Field Type	Field Encoding	Comments
hlc1	HLC		high layer compat.1 O OCTETSTRING [25]
hlc2	HLC		high layer compat. 2 C OCTETSTRING [25]
userUser	UserUser		user-user O OCTETSTRING [3131]
priority	PriorityLvI		priority O OCTETSTRING[1]
alert	AlertPattern		alerting pattern O OCTETSTRING[3]
ntwCCCapabilities	NtwCCCapabilities		Network call control capabilities O OCTETSTRING[3]
cauNoCLI	CauNoCLI		Cause of no CLI O OCTETSTRING[3]
buBcap	BuBcap		Backup Bearer Capability O TLV OCTETSTRING[3-15]

Detailed Comments: (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : STATUS
PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC STATUS n -> ue

3G TS 24.008 cl. 9.3.27

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau_lv		cause M OCTETSTRING [331]
callState	CallState_v		call state M OCTETSTRING[1]
auxilliaryState	AuxiliaryState		auxilliary state O OCTETSTRING[3]

Detailed Comments: (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Name : STATUSENQUIRY

PCO Type : Dc_SAP

Encoding Rule Name:
Encoding Variation:

Comments : CC STATUS ENQUIRY n <-> ue

3G TS 24.008 cl. 9.3.28

Field Name	Field Type	Field Encoding	Comments
ti	П		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]

Detailed Comments: (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.

a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Type Definition

PDU Name : AUTHENTICATION_AND_CIPHERING_FAILURE

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.10a (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0001 1100'B M BITSTRING [8]
gmmCause	RejCau		M 1 octet
authFailurePar	AuthenticationFailureParame ter		O TLV, 16 octets
Detailed Comments :			

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PDU Name : ACTIVATEPDPCONTEXTREQUESTul

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : Activate PDP Context Request

ue -> n

3GPP 24.008 clause, 9.5.1

Field Name	Field Type	Field Encoding	Comments
	ТІ		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
requestedNSAPI	NSAPI_v		Network service access point identifier M V BITSTRING [8]
requestedLLC_SAPI	LLC_SAPI_v		LLC service access point identifier M V BITSTRING [8]
requestedQoS	QualityOfService_lv		Quality of service M LV OCTETSTRING [13–15]
pDP_Address	PktDataProtoAddr_lv		Packet data protocol address M LV OCTETSTRING [3–19]
accessPtName	AccessPtName		Access point name O TLV OCTETSTRING [3–102]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]

PDU Name : ATTACHACCEPT

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.2 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator
			M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator
			M BITSTRING [4]
msgType	MsgType		Message Type
			M BITSTRING [8]
forceToStandby	ForceToStandby		M
,	,		1/2 octet
attachResult	AttachResult		M
a a si a dia D.A data Tira a s	ODDO Timos u		1/2 octet
periodicRAupdateTimer	GPRS_Timer_v		M 1 octet
radioPrioTOM8	RadioPriority2_v		M
			1/2 octet
radioPrioSMS	RadioPriority_v		M 1/2 octet
rai	RAI_v		Routing Area Identification
lai	IXAI_V		M
			6 octets
ptmsiSignature	PTMSI_Signature		O 4 cototo
negReadyTimer	GPRS_Timer		4 octets O
negriceady rimer	Of No_filler		2 octets
allocatedPTMSI	GMM_MS_IdentityPTMSI		0
			7 octets
msIdentity	GMM_MS_Identity		O 7–10 octets
gmmCause	GMM_Cause		0
g			2 octets
t3302Value	GPRS_Timer2		O TLV
a a III la tifica tia a	CallNatification		3 octets
cellNotification	CellNotification		O 1 octet
equivalentPLMN	PLMN_List		0
•			5–17 octets
ntwFeatureSupport	NtwFeatureSupport_tv		O TV
emergNumList	EmergNumList		1 octet O TLV
Cindigitalinest	Linergivanicist		5–50 octets
Detailed Comments :		•	

PDU Name : ATTACHCOMPLETE

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : 3GPP 24.008 V3.6.0 clause 9.4.3 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		'0000 0011'B M BITSTRING [8]

Detailed Comments:

PDU Type Definition

PDU Name : ATTACHREJECT

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.4 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 0100' M BITSTRING [8]
gmmCause	RejCau		M 1 octet
t3302Value	GPRS_Timer2		O, TLV 3 octets
Detailed Comments :	•	·	•

PDU Name : ATTACHREQUEST

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.1 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator	_	Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000' M BITSTRING [4]
msgType	MsgType		Message Type '0000 0001' M BITSTRING [8]
msNetworkCap	MS_NetworkCap_lv		MS network capability M 3–9 octets
gprsCiphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
attachType	AttachType		Attach Type M BITSTRING [4]
drxParameter	DRXparamter		M 2 octets
ptmsiORimsi	MS_Identity_lv		Mobile Identity M 6–9 octets
oldRAI	RAI_v		Routing Area Identification M 6 octets
msRadioAccessCap	MSRadioAccessCap_lv		M 6–52 octets
oldPTMSI_Signature	PTMSI_Signature		O 4 octets
readyTimer	GPRS_Timer		O 2 octets
tmsiStatus	TMSI_Status		O 1 octet
pS_LCS_Capability	PS_LCS_Capability		O TLV 3 octets

PDU Name : AUTHENTICATIONANDCIPHERINGREQUEST

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : 3GPP 24.008 V3.6.0 clause 9.4.9 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator
msgType	MsgType		M BITSTRING [4] '0001 0010'B M BITSTRING [8]
imeisvReq	IMEISVRequest		M BITSTRING[4]
ciphAlgorithm	CiphAlgorithm		Ciphering algorithm M BITSTRING[4]
acRefNo	AC_ReferenceNumber		M BITSTRING [4]
forceToStandby	ForceToStandby		M BITSTRING [4]
authRand	AuthenticationParamterRAN D		O, TV 17 octets
gprsCiphKeySeqNo	CiphKeySeqNum_tv		Ciphering key sequence number O, TV, 1
aUTN	GMM_AUTN		Auth. parameter AUTN O, TLV, 18 octets

PDU Name : AUTHENTICATIONANDCIPHERINGRESPONSE

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.10 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator
msgType	MsgType		M BITSTRING [4] '0001 0011'B M BITSTRING [8]
spare4	B4		
acRefNo	AC_ReferenceNumber		M BITSTRING [4]
authRsp	AuthRsp_tv		O, TV 5 octets
imeisv	GMM_MS_Identity		O TLV, 11 octets
authRspExt	AuthRspExt		O TLV, 3–14 octets
Detailed Comments :	•	•	•

PDU Name : AUTHENTICATIONFAILURE

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : MM AUTHENTICATION FAILURE ue -> n

3G TS 24.008 V3.4.0 cl. 9.2.3a

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
rejCau	RejCau		Reject Cause M BITSTRING [8]
authFailParam	AuthenticationFailureParame ter		Authentication Failure Paramter O AuthFail (128 bits)

Detailed Comments: (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,

for core network nodes earlier than R99:

bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;

for core network nodes of R99 or later:

bits 7 and 8 are reserved for the send sequence number.

PDU Name : AUTHENTICATIONREQUEST

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : MM AUTHENTICATION REQUEST n -> ms

3G TS 24.008 V3.4.0 cl. 9.2.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
spare4	B4		Spare half octet M BITSTRING [4]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
rAND	MM_RAND		Auth. parameter RAND M BITSTRING [128]
aUTN	AUTN		Auth. parameter AUTN O AUTN

 $\textbf{Detailed Comments} : (1) \text{ In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4)} \; .$

PDU Name : AUTHENTICATIONRESPONSE

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : MM AUTHENTICATION RESPONSE ue -> n

3G TS 24.008 V3.4.0 cl. 9.2.2

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
authRsp	AuthRsp		Authentication Response M OCTETSTRING [4]
authRspExt	AuthRspExt		Authentication Response Extension O AuthRspExt (3–14 octets)

Detailed Comments: (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,

for core network nodes earlier than R99:

bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;

for core network nodes of R99 or later:

bits 7 and 8 are reserved for the send sequence number.

PDU Name : CMSERVICEREQUEST

PCO Type : Dc_SAP

Encoding Rule Name:
Encoding Variation:

Comments : CM SERVICE REQUEST ue -> n

3G TS 24.008 V3.4.0 cl. 9.2.9

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
cMServType	CMServType		CM Service Type M BITSTRING [4]
mSClsmk2	MS_Clsmk2_lv		Mobile Station Classmark 2 LV M MS_Clsmk2 (4 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2–9 octets)
priorityLvl	PriorityLvl		Priority Level TV O PriorityLvl (1 octets)

Detailed Comments: (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the MS,

for core network nodes earlier than R99:

bit 8 shall be set to 0 and bit 7 is reserved for the send sequencenumber;

for core network nodes of R99 or later:

bits 7 and 8 are reserved for the send sequence number.

PDU Name : CMSERVICEACCEPT

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : CM SERVICE ACCEPT n -> ue

3G TS 24.008 V3.4.0 cl. 9.2.5

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]

Detailed Comments: (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4).

PDU Type Definition

PDU Name : DEACTIVATEPDPCONTEXTACCEPT

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : Deactivate PDP Context Accept

n <=> ue

3GPP 24.008, 9.5.15

Field Name	Field Type	Field Encoding	Comments
ti	TI		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]
Detailed Comments :			

PDU Name : DEACTIVATEPDPCONTEXTREQUEST

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : Deactivate PDP Context Request

n <=> ue 24.008, 9.5.14

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
sM_ProtocolDiscriminator	ProtocolDiscriminator		protocol discriminator M BITSTRING [4]
msgType	MsgType		message type M BITSTRING [8]
sM_Cause	SM_Cause_v		SM cause M V OCTETSTRING [1]
tearDwnInd	TearDwnInd_tv		Tear down indicator O TV BITSTRING [8]
protocolConfOpts	ProtoCfgOpt		Protocol configuration options O TLV OCTETSTRING [3–253]

PDU Type Definition

PDU Name : DETACHACCEPTMO

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 clause 9.4.6.2 (DETACH ACCEPT mobile originated detach)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type '000 0110' M BITSTRING [8]
spare	B4		M 1/2 octet
forceToStandby	ForceToStandby		M 1/2 octet
Detailed Comments :			

PDU Name : DETACHACCEPTMT

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.6.1 (DETACH ACCEPT mobile terminated detach)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type '000 0110' M BITSTRING [8]
Detailed Comments :			

PDU Type Definition

PDU Name : DETACHREQUESTMO

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.5.2 (Mobile originating detach, GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator
			M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
spare4	B4		M 1/2 octet
detachType	DetachType		M 1/2 octet
ptmsi	GMM_MS_IdentityPTMSI		O TLV
ptmsiSignature	PTMSI_Signature_tlv		0
Detailed Comments :			

PDU Name : DETACHREQUESTMT

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.5.1 (Mobile terminating detach, GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator
			BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
forceToStandby	ForceToStandby		M 1/2 octet
detachType	DetachType		M 1/2 octet
gmmCause	GMM_Cause		O, TV 2 octets
Detailed Comments :			

PDU Name : DISCONNECTdI

PCO Type : Dc_SAP

Encoding Rule Name : Encoding Variation :

Comments : CC DISCONNECT ue <- n

3G TS 24.008 cl. 9.3.7.1

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau_lv		cause M OCTETSTRING [331]
facility	Facility		facility O
progInd	ProgInd		progress indicator O OCTETSTRING [4]
userUser	UserUser		user-user O OCTETSTRING [3131]
allowedAction	AllowedAction		Allowed actions (for CCBS) O OCTETSTRING[3]

Detailed Comments: (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp.

a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Name : LOCATIONUPDATINGACCEPT

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : MM LOCATION UPDATING ACCEPT n -> ms

3G TS 24.008 V3.4.0 cl. 9.2.13

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
locAreald	LocAreald_v		Location Area Id. V M LocAreaId_v (5 octets)
mobileId	MM_MS_Identity		Mobile Identity O MobileId (3–11 octets)
followOnProceed	FollowOnProceed		Follow on proceed O BITSTRING [8]
cTSPerm	CTSPerm		CTS Permission O BITSTRING [8]
equivalentPLMN	PLMN_List		O 17 octets
emergNumList	EmergNumList		O TLV 5–50 octets
Detailed Comments: (1) In messages sent from the network bits 7 and 8 are "0" (see 3G TS 24.008 cl. 10.4).			

PDU Name : LOCATIONUPDATINGREQUEST

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : MM LOCATION UPDATING REQUEST ue -> n

3G TS 24.008 V3.4.0 cl. 9.2.15

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
locUpdType	LocUpdType		Location Updating Type M BITSTRING [4]
locAreald	LocAreald_v		Location Area Id. V M LocAreaId (5 octets)
mSClsmk1	MS_Clsmk1		Mobile Station Classmark 1 M MSClsmk1 (1 octets)
mobileld	MS_Identity_lv		Mobile Identity LV M MobileId (2–9 octets)
mSClsmk2	MS_Clsmk2		Mobile Station Classmark 2 TLV O MSClsmk2 (5 octets)

Detailed Comments: (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,

for core network nodes earlier than R99:

bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;

for core network nodes of R99 or later:

bits 7 and 8 are reserved for the send sequence number.

PDU Name : PAGINGRESPONSE

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : PAGINGRESPONSE ue -> n

GSM 04.18 cl. 9.1.25

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
rRProtocolDiscriminator	ProtocolDiscriminator		RR Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]
spare4	B4		Spare half octet M BITSTRING [4]
ciphKeySeqNum	CiphKeySeqNum		Ciphering Key Sequence Number M BITSTRING [4]
mSClsmk2	MS_Clsmk2_lv		Mobile Station Classmark 2 M MSClsmk2 (4 octets)
mobileId	MS_Identity_lv		Mobile Identity LV M MobileId (2–10 octets)

 $\textbf{Detailed Comments} \hspace{0.1cm} : \hspace{0.1cm} \textbf{(1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,} \\$

for core network nodes earlier than R99:

bit 8 shall be set to 0 and bit 7 is reserved for the send sequencenumber;

for core network nodes of R99 or later:

bits 7 and 8 are reserved for the send sequence number.

(2) (see 3G TS 24.008 cl. 4.5.1.3.3) The $\dot{\text{UE}}$ shall respond with the PAGING RESPONSE message defined in GSM 04.18, chapter 9.1.25. For reasons of backward compatibility the paging response

shall use the RR protocol discriminator.

PDU Name : RELEASECOMPLETEdI

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC or SS RELEASE COMPLETE $\, n \rightarrow ue \,$

3G TS 24.008 cl. 9.3.19.1

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [432]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3131]

Detailed Comments: (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Name : RELEASEul PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : CC RELEASE n <- ue

3G TS 24.008 cl. 9.3.18.2

Field Name	Field Type	Field Encoding	Comments
ti	ТІ		transaction identifier M BITSTRING [4]
cC_ProtocolDiscriminator	ProtocolDiscriminator		CC protocol discriminator M BITSTRING [4]
msgType	MsgType		message type (1) M BITSTRING [8]
cau	Cau		cause O OCTETSTRING [432]
cau2	Cau		cause O OCTETSTRING [432]
facility	Facility		facility O
userUser	UserUser		user-user O OCTETSTRING [3131]
sS_VersionInd	SS_VersionInd		SS version indicator O OCTETSTRING [23]

Detailed Comments: (1) bits 7 and 8 are 0 and send sequence number for earlier than R99 resp. a 2bit send sequence number for R99 or later (see 3G TS 24.008 cl. 10.4)

PDU Name : ROUTINGAREAUPDATEREQUEST

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.14 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator '1000'
			M BITSTRING [4]
msgType	MsgType		Message Type '0000 1000' M BITSTRING [8]
gprsCiphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M
			BITSTRING[4]
updateType	UpdateType_v		Update Type M BITSTRING [4]
oldRAI	RAI_v		Routing Area Identification M 6 octets
msRadioAccessCap	MSRadioAccessCap_lv		M 6–52 octets
oldPTMSI_Signature	PTMSI_Signature		O 4 octets
readyTimer	GPRS_Timer		O 2 octets
drxParameter	DRXparamter_tv		O, TV 3 octets
tmsiStatus	TMSI_Status		O 1 octet
ptmsi	GMM_MS_IdentityPTMSI		O, TLV 7 octets
msnetworkcap	MS_NetworkCap_tlv		MS network capability O, TLV 4–10 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets
pS_LCS_Capability	PS_LCS_Capability		O TLV 3 octets
Detailed Comments :			

PDU Name : SERVICEREQUEST

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : 3GPP 24.008 V3.6.0 clause 9.4.20 (GMM message)

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
gMMProtocolDiscriminator	ProtocolDiscriminator		GMM Protocol Discriminator
			M BITSTRING [4]
msgType	MsgType		Message Type M BITSTRING [8]
serviceType	ServiceType_v		Service type M BITSTRING[4]
ciphKeySeqNo	CiphKeySeqNum		Ciphering key sequence number M BITSTRING[4]
ptmsi	MS_Identity_lv		Mobile Identity M 6 octets
pDP_ContextStatus	PDP_ContextStatus		O 4 octets
Detailed Comments :			

PDU Name : STATUS_PDU

PCO Type : DSAP

Encoding Rule Name: Encoding Variation:

Comments : An AMD STATUS PDU. Ref 3G TS 25.322 clause 9.2.1.5

Field Name	Field Type	Field Encoding	Comments
dC_Field	DC_Field		1
type	CtrlPDU_Type		2
superFieldsTx	SuperFields		3
superFieldsAndPadRx	HEXSTRING		4
paddingTx	Padding		5

Detailed Comments: 1. Always tsc_DC_ControlPDU for a STATUS PDU.

2. Always tsc_PDU_TypeStatus for a STATUS PDU.

3. The superfields transmitted in the STATUS PDU.

4. The superfields and padding to be received in the STATUS PDU.

5. The padding transmitted must be present to ensure that the total size of this PDU is exactly equal to the current PDU size. It is the callers responsibility to ensure that the superfields are either terminated with a NO_MORE SUFI, or an ACK SUFI.

PDU Type Definition

PDU Name : TMSIREALLOCATIONCOMPLETE

PCO Type : Dc_SAP

Encoding Rule Name: Encoding Variation:

Comments : MM TMSI REALLOCATION COMPLETE ue -> n

3G TS 24.008 V3.4.0 cl. 9.2.18

Field Name	Field Type	Field Encoding	Comments
skipIndicator	SkipIndicator		Skip Indicator M BITSTRING [4]
mMProtocolDiscriminator	ProtocolDiscriminator		MM Protocol Discriminator M BITSTRING [4]
msgType	MsgType		Message Type (1) M BITSTRING [8]

Detailed Comments: (1) (see 3G TS 24.008 cl. 10.4) In messages sent from the UE,

for core network nodes earlier than R99:

bit 8 shall be set to 0 and bit 7 is reserved for the send sequence number;

for core network nodes of R99 or later:

bits 7 and 8 are reserved for the send sequence number.

ASN.1 PDU Type Definition

PDU Name : Invalid_DL_CCCH_Message

PCO Type : DSAP

Encoding Rule Name: PER_Unaligned

Encoding Variation : Comments :

Type Definition

SEQUENCE {

integrityCheckInfo IntegrityCheckInfo OPTIONAL,

message Invalid_DL_CCCH_MsgType

,

Detailed Comments:

ASN.1 PDU Type Definition

PDU Name : Invalid_DL_DCCH_Message

PCO Type : DSAP

Encoding Rule Name: PER_Unaligned

Encoding Variation : Comments :

Type Definition

SEQUENCE {

integrityCheckInfo [0] IntegrityCheckInfo OPTIONAL,

message [1] Invalid_DL_DCCH_MsgType

Detailed Comments:

ASN.1 PDU Type Definition

PDU Name : Invalid_DL_SHCCH_Message

PCO Type : DSAP

Encoding Rule Name: PER_Unaligned

Encoding Variation : Comments :

Type Definition

SEQUENCE {

message Invalid_DL_SHCCH_MsgType

	ASN.1 PDU Type Definitions By Reference					
PDU Name	PCO Type	Type Reference	Module Identifie	Enc Rule	Enc Variation	Comments
BCCH_BCH_ Message	DSAP	BCCH-BCH- Message	Class-definitio	PER_Unaligne d		
BCCH_FACH_ Message	DSAP	BCCH-FACH -Message	Class-definitio	PER_Unaligne d		
DL_CCCH_Me ssage	DSAP	DL-CCCH-M essage	Class-definitio	PER_Unaligne d		
DL_DCCH_Me ssage	DSAP	DL-DCCH-M essage	Class-definitio	PER_Unaligne d		
DL_SHCCH_ Message	DSAP	DL-SHCCH- Message	Class-definitio	PER_Unaligne d		
PCCH_Messag e	DSAP	PCCH-Messa ge	Class-definitio	PER_Unaligne d		
UL_CCCH_Me ssage	DSAP	UL-CCCH-M essage	Class-definitio	PER_Unaligne d		
UL_DCCH_Me ssage	DSAP	UL-DCCH-M essage	Class-definitio	PER_Unaligne d		
UL_SHCCH_ Message	DSAP	UL-SHCCH- Message	Class-definitio	PER_Unaligne d		
Detailed Comme	ents :					

Alias Definitions					
Alias Name	Expansion	Comments			
RxStatus	RLC_TR_TestDataInd	This alias is used to receive an AM STATUS PDU. Note that AM PDUs are received using the Tr PCO, so that the RLC PDU can be specified within the TTCN. This is described in detail in 34.123–3, clause 6.5 (RLC test method).			
Detailed Comments :					

III Constraints Part

Constraint Name : c_TP_DCS_01

Group :

Structured Type : TP_DataCodingScheme

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
cg	'0000'B		
code	'0000'B		

Detailed Comments : SMS class 0

Structured Type Constraint Declaration

Constraint Name : c_TP_Protld01

Group :

Structured Type : TP_Protld

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments		
type	'00'B				
interworking	'0'B				
value	'00000'B				

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_CP_UserData02(p_RP_MsgRef: RP_MsgRef)

Group :

Structured Type : CP_UserData

Derivation Path : Encoding Variation :

Comments : CP_UserData with RP_ACK PDU

Element Name	Element Value	Element Encoding	Comments
iel	?		
rP_ACK	cr_RP_ACK(p_RP_MsgRef)		
rP_DATA	_		
rP_ERROR	_		
rP_SMMA	_		

Constraint Name : cr_RP_DATA_03

Group :

Structured Type : RP_DATA

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare5	'00000'B		
rP_MsgTypeInd	'000'B		
rP_MsgRef	?		
rP_OrigAddr	cr_RP_OrigAddr02		
rP_DestAddr	cr_RP_DestAddr02		
rP_UserData_lv	cr_RP_UserData02_lv		
I			

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_RP_DATA_04

Group

Structured Type : RP_DATA

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
Element Name	Element value	Licinion Lilouding	Comments
spare5	'00000'B		
rP_MsgTypeInd	'000'B		
rP_MsgRef	?		
rP_OrigAddr	cr_RP_OrigAddr02		
rP_DestAddr	cr_RP_DestAddr02		
rP_UserData_lv	cr_RP_UserData13_lv		
5	•	•	

Constraint Name : cr_RP_DestAddr02

Group :

Structured Type : CDPN_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	('02'O, '03'O, '04'O, '05'O, '06'O, '07'O, '08'O, '09'O, '0A'O, '0B'O)		ue -> n = 211
typeOfNumPlan	cr_TypeOfNumPlanAny		
digits	*		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_RP_OrigAddr02

Group :

Structured Type : CDPN_Iv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments	
iel	'00'O			
typeOfNumPlan	_			
digits	_			

Constraint Name : cr_RP_UserData02_lv

Group :

Structured Type : RP_UserData_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
tP_COMMAND	_		
tP_DELIVER_REPORT	_		
tP_SUBMIT	(cr_TP_SUBMIT_01, cr_TP_SUBMIT_01_VPF_N P, cr_TP_SUBMIT_01_VPF_A BS, cr_TP_SUBMIT_01_VPF_E NH)		
tP_DELIVER	_		
tP_SUBMIT_REPORT	_		
tP_STATUS_REPORT	_		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_RP_UserData13_lv

Group :

Structured Type : RP_UserData_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
tP_COMMAND	_		
tP_DELIVER_REPORT	_		
tP_SUBMIT	(cr_TP_SUBMIT_04, cr_TP_SUBMIT_04_VPF_N P, cr_TP_SUBMIT_04_VPF_A BS, cr_TP_SUBMIT_04_VPF_E NH)		
tP_DELIVER	_		
tP_SUBMIT_REPORT	_		
tP_STATUS_REPORT	_		
Detailed Comments :			

Constraint Name : cr_TearDwnIndAny

Group :

Structured Type : TearDwnInd_tv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		
spare	?		
tdiflag	?		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_TP_DestAddr01

Group :

Structured Type : TP_Addr

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
typeOfNumPlan	cr_TypeOfNumPlan04		
digits	*		

Constraint Name : cr_TP_SUBMIT_01

Group :

Structured Type : SMS_SUBMIT

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	'10'B		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_DestAddr01		
tP_ProtId	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ValPeriodRel	?		
tP_ValPeriodAbs	_		
tP_ValPeriodEnh	_		
tP_UD_Len	?		
tP_UserData	?		

Constraint Name : cr_TP_SUBMIT_01_VPF_NP

Group

Structured Type : SMS_SUBMIT

Element Value	Element Encoding	Comments
?		
?		
?		
'00'B		
?		
'01'B		
?		
cr_TP_DestAddr01		
c_TP_ProtId01		
c_TP_DCS_01		
_		
_		
_		
?		
?		
	? ? '00'B ? '01'B ? cr_TP_DestAddr01 c_TP_ProtId01 c_TP_DCS_01 ?	? ? '00'B ? '01'B ? cr_TP_DestAddr01 c_TP_ProtId01 c_TP_DCS_01 ?

Constraint Name : cr_TP_SUBMIT_01_VPF_ABS

Group

Structured Type : SMS_SUBMIT

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	'11'B		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_DestAddr01		
tP_Protld	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ValPeriodRel	-		
tP_ValPeriodAbs	?		
tP_ValPeriodEnh	_		
tP_UD_Len	?		
tP_UserData	?		
Detailed Comments :			

Constraint Name : cr_TP_SUBMIT_01_VPF_ENH

Group :

Structured Type : SMS_SUBMIT

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	'01'B		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_DestAddr01		
tP_Protld	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ValPeriodRel	_		
tP_ValPeriodAbs	_		
tP_ValPeriodEnh	cr_TP_ValPeriodEnhAny		
tP_UD_Len	?		
tP_UserData	?		
Detailed Comments :			

Constraint Name : cr_TP_SUBMIT_04

Group

Structured Type : SMS_SUBMIT

Derivation Path : Encoding Variation :

Comments : MO SMS with maximum amount of user data

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	'10'B		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_DestAddr01		
tP_ProtId	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ValPeriodRel	?		
tP_ValPeriodAbs	-		
tP_ValPeriodEnh	-		
tP_UD_Len	o_IntToOct(tsc_SMS_MaxNumOfChars, 1)		
tP_UserData	?		
Detailed Comments :			

Constraint Name : cr_TP_SUBMIT_04_VPF_NP

Group

Structured Type : SMS_SUBMIT

Derivation Path : Encoding Variation :

Comments : MO SMS with maximum amount of user data

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	'00'B		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_DestAddr01		
tP_ProtId	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ValPeriodRel	_		
tP_ValPeriodAbs	_		
tP_ValPeriodEnh	_		
tP_UD_Len	o_IntToOct(tsc_SMS_MaxNumOfChars, 1)		
tP_UserData	?		
Detailed Comments :			

Constraint Name : cr_TP_SUBMIT_04_VPF_ABS

Group

Structured Type : SMS_SUBMIT

Derivation Path : Encoding Variation :

Comments : MO SMS with maximum amount of user data

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	'11'B		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_DestAddr01		
tP_ProtId	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ValPeriodRel	_		
tP_ValPeriodAbs	?		
tP_ValPeriodEnh	_		
tP_UD_Len	o_IntToOct(tsc_SMS_MaxNumOfChars, 1)		
tP_UserData	?		
Detailed Comments :			

Constraint Name : cr_TP_SUBMIT_04_VPF_ENH

Group :

Structured Type : SMS_SUBMIT

Derivation Path : Encoding Variation :

Comments : MO SMS with maximum amount of user data

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	'01'B		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_DestAddr01		
tP_ProtId	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ValPeriodRel	-		
tP_ValPeriodAbs	_		
tP_ValPeriodEnh	cr_TP_ValPeriodEnhAny		
tP_UD_Len	o_IntToOct(tsc_SMS_MaxNumOfChars, 1)		
tP_UserData	?		

_			_
Structured 1	Evna Can	etraint Da	claration

Constraint Name : cr_TypeOfNumPlan04

Group :

Structured Type : TypeOfNumPlan

Element Name	Element Value	Element Encoding	Comments	
extBit	'1'B			
typeOfNum	?			
numbPlanId	?			
Detailed Comments :				

 $\textbf{Constraint Name} \qquad : \ cs_CP_UserData01(p_TP_OA1, p_RP_OA_MT: BCDN; p_RP_MsgRef: RP_MsgRef; p_TimeZone) \\$

: TZONES)

Group :

Structured Type : CP_UserData

Derivation Path : Encoding Variation :

Comments : CP_UserData with RP_DATA PDU

Element Name	Element Value	Element Encoding	Comments
iel	o_IntToOct((159 + LENGTH_OF(p_TP_OA1) + LENGTH_OF(p_RP_OA_MT)), 1)		to be checked
rP_ACK	-		
rP_DATA	cs_RP_DATA_01(p_RP_OA_MT, p_TP_OA1, p_RP_MsgRef, p_TimeZone)		
rP_ERROR	-		
rP_SMMA	-		

Structured Type Constraint Declaration

Constraint Name: cs_RP_DATA_01(p_RP_OA_MT, p_TP_OA1: BCDN; p_RP_MsgRef:RP_MsgRef; p_TimeZone:

TZONES)

Group

Structured Type : RP_DATA

Element Name	Element Value	Element Encoding	Comments
spare5	'00000'B		
rP_MsgTypeInd	'001'B		
rP_MsgRef	p_RP_MsgRef		
rP_OrigAddr	cs_RP_OrigAddr01(p_RP_ OA_MT)		
rP_DestAddr	cs_RP_DestAddr01		
rP_UserData_lv	cs_RP_UserData01_lv(
	p_TP_OA1, p_TimeZone)		
Detailed Comments :	•		

Constraint Name : cs_RP_DestAddr01

Group :

Structured Type : CDPN_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	'00'O		n -> ue = 0
typeOfNumPlan	_		
digits	_		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name: cs_RP_OrigAddr01(p_RP_OA_MT: BCDN)

Group :

Structured Type : CDPN_Iv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	o_IntToOct((
	LENGTH_OF(
	p_RP_OA_MT) +		
	1),		
	1)		
typeOfNumPlan	cs_TypeOfNumPlan03		ton: international, npi:
3,7			ISDN/tel, E.164
			1.021.7.0 21101
digits	p_RP_OA_MT		

 $\textbf{Constraint Name} \hspace{0.3cm} : \hspace{0.1cm} \text{cs} \hspace{0.1cm} \text{RP_UserData01_lv} (\text{p_TP_OA1: BCDN; p_TimeZone: TZONES}) \\$

Group :

Structured Type : RP_UserData_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	o_IntToOct((153 +		
	LENGTH_OF(
	p_TP_OA1)), `		
	1)		
tP_COMMAND	_		
tP_DELIVER_REPORT	_		
tP_SUBMIT	_		
tP_DELIVER	cs_TP_DELIVER_01(
	p_TP_OA1,		
	p_TimeZone)		
tP_SUBMIT_REPORT	-		
tP_STATUS_REPORT	_		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_TP_DELIVER_01(p_TP_OA1: BCDN; p_TimeZone: TZONES)

Group :

Structured Type : SMS_DELIVER

	T	T	T
Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	'0'B		
tP_UD_HeaderInd	'0'B		
tP_StatusRptInd	'0'B		
spare2	'00'B		
tP_MoreMsg	'0'B		
tP_MsgTypeInd	'00'B		
tP_OrigAddr	cs_TP_OrigAddr01(p_TP_O A1)		
tP_ProtId	c_TP_ProtId01		
tP_DataCodingScheme	c_TP_DCS_01		
tP_ServCenterTimeSt	o_GetSC_TimeStamp(p_TimeZone)		
tP_UD_Len	'A0'O		160 characters
tP_UserData	o_ComputeSM_ContentsSp ec(160, tsc_Fox)		
Detailed Comments :			

Constraint Name : cs_TP_OrigAddr01(p_TPOA: BCDN)

Group :

Structured Type : TP_Addr

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	o_IntToOct(2*LENGTH_OF(p_TPOA), 1)		Integer representation of useful semi–octets; as BCDN is decalred as OCTETSTRING the number must be even!
typeOfNumPlan	cs_TypeOfNumPlan03		ton: international, npi: ISDN/tel. E.164
digits	p_TPOA		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cs_TypeOfNumPlan03

Group :

Structured Type : TypeOfNumPlan

Element Name	Element Value	Element Encoding	Comments
extBit	'1'B		
typeOfNum	'001'B		international number
numbPlanId	'0001'B		ISDN/telephony numbering plan (Rec. E.164/E.163)
Detailed Comments :			

Constraint Name : cr_RP_ACK(p_RP_MsgRef: RP_MsgRef)

Group :

Structured Type : RP_ACK

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare5	'00000'B		
rP_MsgTypeInd	'010'B		ue -> n
rP_MsgRef	p_RP_MsgRef		
rP_UserData	cr_RP_UserDataAny IF_PRESENT		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_RP_UserDataAny

Group :

Structured Type : RP_UserData

Derivation Path : Encoding Variation :

Comments: Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
iei	'01000001'B		
iel	?		
tP_COMMAND	cr_TP_COMMAND_Any IF_PRESENT		
tP_DELIVER_REPORT	cr_TP_DELIVER_REPORT_ Any IF_PRESENT		
tP_SUBMIT	cr_TP_SUBMIT_Any IF_PRESENT		
tP_DELIVER	cr_TP_DELIVER_Any IF_PRESENT		
tP_SUBMIT_REPORT	cr_TP_SUBMIT_REPORT_A ny IF_PRESENT		
tP_STATUS_REPORT	cr_TP_STATUS_REPORT_A ny IF_PRESENT		
Detailed Comments :			

Constraint Name : c_RepeatInd1

Group :

Structured Type : RepeatInd

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1101'B		
repeatInd	'0001'B		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cbs_SM_Cause_v(cause: CauseValue)

Group :

Structured Type : SM_Cause_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
causeValue	cause		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cds_BcapMT_5a_SyncT (p_ltc : B3 ; p_Ra : B2; p_Sacp : B3; p_Otherltc, p_OtherRa : B2;

p_NumStopBits, p_NumDataBits: B1; p_Parity: B3; p_OtherModemType: B2)

Group

Structured Type : Bcap

Derivation Path : cs_BcapMT_5a_AsyncNT.

Encoding Variation:

Comments: Base Bearer capability with a Synchronous mode and transparent conection element and containing

octets 3, 4, 5 , 5a, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
syncAsync	'0'B		Synchronous
connectElem	'00'B		Transparent

 $\textbf{Constraint Name} \qquad \textbf{:} \ \ \text{cds_BcapMT_7_SyncNT} \ \ (\ p_Itc : B3 \ ; \ p_RA : B2 \ ; \ p_Sacp : B3 \ ; \ \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_Sacp : B3 \ ; \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_Sacp : B3 \ ; \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_Sacp : B3 \ ; \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_Sacp : B3 \ ; \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_Sacp : B3 \ ; \ p_Sacp : B3 \ ; \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_Sacp : B3 \ ; \ p_Sacp : B3 \ ; \ p_NumStopBits, \ p_NumDataBits : B3 \ ; \ p_Sacp : B$

B1; p_Parity: B3; p_ModemType: B5; p_OtherModemType: B2; p_UserInfoLayer2: B5)

Group :
Structured Type : Bcap

Derivation Path : cs_BcapMT_7_AsyncNT.

Encoding Variation:

Comments : Base Bearer capability with a Synchronous mode and Non transparent conection element and

containing octets 3, 4, 5, 6, 6a, 6b, 6c, 6d and 7.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
syncAsync	'0'B		Synchronous

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cds_BcapMT_AsyncT (p_ltc:B3; p_RA : B2; p_Sacp : B3;p_NumStopBits, p_NumDataBits : B1;

p_Parity : B3 ; p_ModemType : B5 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap

Derivation Path : cs_BcapMT_AsyncNT.

Encoding Variation:

Comments : Base Bearer capability with an Asynchronous mode and a transparent conection element and

containing octets 3, 4, 5, 6, 6a, 6b, 6c, and 6d.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Unstructure
Transparent

Constraint Name : cds_BcapMT_SyncT (p_ltc:B3; p_RA : B2 ; p_Sacp : B3;p_NumStopBits, p_NumDataBits : B1 ;

p_Parity : B3 ; p_ModemType : B5 ; p_OtherModemType : B2)

Group :
Structured Type : Bcap

Derivation Path : cs_BcapMT_AsyncNT.

Encoding Variation:

Comments: Base Bearer capability with a Synchronous mode and a transparent conection element and

containing octets 3, 4, 5 , 6, 6a, 6b, 6c, and 6d.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
structure	'11'B		Unstructure
syncAsync	'0'B		Synchronous
connectElem	'00'B		Transparent

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_CallState_v (p_State : B6)

Group :

Structured Type : CallState_v

Derivation Path : Encoding Variation :

Comments : Call state

Element Name	Element Value	Element Encoding	Comments
codingStd	'11'B		
callStateVal	p_State		call state value

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_CallStateAny_v

Group

Structured Type : CallState_v

Derivation Path : Encoding Variation :

Comments : Call state

Element Name	Element Value	Element Encoding	Comments
codingStd	?		
callStateVal	?		

Constraint Name : cr_Cau_lv (p_CauVal : INTEGER)

Group :

Structured Type : Cau_lv

Derivation Path :

Encoding Variation: Comments: Cause

Element Name	Element Value	Element Encoding	Comments
iel	?		
extBit3	?		
codingStd	?		
spare1	?		
loc	?		
extBit3a	*		
recommend	*		
extBit4	'1'B		no extension
cauValue	INT_TO_BIT(p_CauVal,7)		
diagnostic	*		

Structured Type Constraint Declaration

Constraint Name : cr_CauAny

Group :
Structured Type : Cau
Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00001000'B		
iel	?		
extBit3	?		
codingStd	?		
spare1	?		
loc	?		
extBit3a	*		
recommend	*		
extBit4	?		
cauValue	?		
diagnostic	*		

Constraint Name : cr_CauAny_lv

Group :

Structured Type : Cau_lv

Derivation Path : Encoding Variation :

Comments : Cause – Any value – Octets 3 and 4 are mandatory

Element Name	Element Value	Element Encoding	Comments
iel	?		
extBit3	?		
codingStd	?		
spare1	?		
loc	?		
extBit3a	*		
recommend	*		
extBit4	?		
cauValue	?		
diagnostic	*		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_ConnectedSubAdrs_Any

Group :

Structured Type : ConnectedSubAdrs

Derivation Path : Encoding Variation :

Comments : Connected subaddress

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Element Name	Element Value	Element Encoding	Comments
iei	'01001101'B		4Didentifier '01001101'B
iel	?		length
subadrs	cr_SubadrsAny		Subaddress
Detailed Comments :			

Constraint Name : cr_CP_UserData03(p_RP_DATA: RP_DATA)

Group :

Structured Type : CP_UserData

Derivation Path : Encoding Variation :

Comments : CP_UserData with RP_DATA PDU

Element Name	Element Value	Element Encoding	Comments
iel	?		
rP_ACK	_		
rP_DATA	p_RP_DATA		
rP_ERROR	_		
rP_SMMA	_		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_FacAny

Group

Structured Type : Facility

Derivation Path : Encoding Variation :

Comments : Facility IE with AnyOrOmit values

Element Name	Element Value	Element Encoding	Comments
iei	'00011100'B		
iel	?		
comps	*		component: any

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_PktDataProtoAddrMO_lv_Len (p_Length : Length ;p_addr : IA5String)

Group

Structured Type : PktDataProtoAddr_lv

Derivation Path : Encoding Variation :

Comments : Received value of PDP Address

Element Name	Element Value	Element Encoding	Comments
length	p_Length		
spare	'0000'B		
pDP_TypeOrg	tsc_PDP_TypeOrg		
pDP_TypeNo	tsc_PDP_TypeNo		
addrInfo	o_IA5_IP_ToOct (p_addr , TRUE)		

 $\textbf{Constraint Name} \hspace{0.3cm} : \hspace{0.1cm} \text{cr_QoS_InteractiveOrBackgroundMO_Iv (p_DlyClass, p_trafficClass : B3)} \\$

Group

Structured Type : QualityOfService_lv

Derivation Path : Encoding Variation :

Comments : The QoS for interactive RAB at 64kbps uplink as well as down link, sent to the UE

Element Name	Element Value	Element Encoding	Comments
length	('0B'O,'0C'O,'0E'O)		
spare	'00'B		
dlyClass	p_DlyClass		Best effort
relabilityClass	'011'B		
peakThroughput	'0100'B		64 kbps
spare1	'0'B		
precedenceClass	'000'B		Subscribed class
spare2	'000'B		
meanThroughput	'11111'B		best effort
trafficClass	p_trafficClass		Interactive
deliveryOrder	'01'B		Without delivery order
deliveryErrorSDU	'010'B		Erroneour SDU are delivered
maxSDUSize	'20'O		320 octets
maxBitRateUplink	'40'O		64 kbps
maxBitRateDnlink	'40'O		64 kbps
residualBER	'0111'B		1 x 10E (-5)
sduErrRatio	'0100'B		1 X 10 E(-4)
transDly	?		Transfer delay will be neglected in case of interactive or background. Hence the value is set to spare
trafficHandpro	?		This is set to 3, but has to be neglected by the UE as the traffic class is interactive.
bitRateUplink	?		The guaranteed bit rate is set equal to requested bit rate.
bitRateDnlink	?		This will be neglected by UE as the class is interactive
spare3	'000'B IF_PRESENT		
signallingInd	*		
srcStatsDescr	*		
maxBitRateDnlinkExt	'00'O IF_PRESENT		
bitRateDnlinkExt	'00'O IF_PRESENT		
Detailed Comments :	•		•

Constraint Name : cr_StreamIdPresent

Group :

Structured Type : Streamld

Derivation Path : Encoding Variation :

Comments: stream identifier – any value

<u> </u>			
Element Name	Element Value	Element Encoding	Comments
iei	'00101101'B		information element identifier '00101101'B
iel	'01'O		length
val	?		stream identifier value
Public 10			

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_TP_AddrAny

Group

Structured Type : TP_Addr

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
typeOfNumPlan	cr_TypeOfNumPlanAny IF_PRESENT		
digits	*		
Patellad Community			

Constraint Name : cr_TP_COMMAND_Any

Group :

Structured Type : SMS_COMMAND

Derivation Path : Encoding Variation :

Comments: Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
spare1	?		
tP_UD_HeaderInd	?		
tP_StatRptReq	?		
spare3	?		
tP_MsgTypeInd	'10'B		
tP_MsgRef	?		
tP_ProtId	cr_TP_ProtIdAny IF_PRESENT		
tP_CmdType	?		
tP_MsgNum	?		
tP_DestAddr	cr_TP_AddrAny IF_PRESENT		
tP_CmdLen	?		
tP_CmdData	*		

Constraint Name : cr_TP_DELIVER_Any

Group :

Structured Type : SMS_DELIVER

Derivation Path : Encoding Variation :

Comments: Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptInd	?		
spare2	?		
tP_MoreMsg	?		
tP_MsgTypeInd	'00'B		
tP_OrigAddr	cr_TP_AddrAny IF_PRESENT		
tP_ProtId	cr_TP_ProtIdAny IF_PRESENT		
tP_DataCodingScheme	cb_DataCodingScheme (?, ?) IF_PRESENT		
tP_ServCenterTimeSt	?		
tP_UD_Len	?		
tP_UserData	*		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cr_TP_DELIVER_REPORT_Any

Group :

Structured Type : SMS_DELIVER_REPORT

Derivation Path : Encoding Variation :

Comments: Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
spare1	?		
tP_UD_HeaderInd	?		
spare4	?		
tP_MsgTypeInd	'00'B		
tP_FailCause	_		1.
tP_ParamInd	?		
tP_Protld	cr_TP_ProtldAny IF_PRESENT		
tP_DataCodingScheme	cb_DataCodingScheme (?, ?) IF_PRESENT		
tP_UD_Len	*		
tP_UserData	*		

Detailed Comments: 1. as this constraint is used for RP_ACK the Failure Cause is omitted

Constraint Name : cr_TP_ProtIdAny

Group :

Structured Type : TP_Protld

Derivation Path : Encoding Variation : Comments :

Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
type	?		
interworking	?		
value	?		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_TP_STATUS_REPORT_Any

Group :

Structured Type : SMS_STATUS_REPORT

Derivation Path : Encoding Variation :

Comments : Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
spare1	?		
tP_UD_HeaderInd	?		
tP_StatusRptQual	?		
spare2	?		
tP_MoreMsg	?		
tP_MsgTypeInd	'10'B		
tP_MsgRef	?		
tP_RecAddr	cr_TP_AddrAny IF_PRESENT		
tP_ServCenterTimeSt	?		
tP_DischTime	?		
tP_Status	cr_TP_StatusAny IF_PRESENT		
tP_ParamInd	*		
tP_Protld	cr_TP_ProtIdAny IF_PRESENT		
tP_DataCodingScheme	cb_DataCodingScheme (?,?) IF_PRESENT		
tP_UD_Len	*		
tP_UserData	*		
Detailed Comments :			

Constraint Name : cr_TP_StatusAny

Group :

Structured Type : TP_Status

Derivation Path : Encoding Variation :

Comments: Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
spare1	?		
value	?		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_TP_SUBMIT_Any

Group :

Structured Type : SMS_SUBMIT

Derivation Path : Encoding Variation :

Comments: Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
tP_ReplyPath	?		
tP_UD_HeaderInd	?		
tP_StatusRptReq	?		
tP_ValPeriodFrmt	?		
tP_RejDuplicates	?		
tP_MsgTypeInd	'01'B		
tP_MsgRef	?		
tP_DestAddr	cr_TP_AddrAny IF_PRESENT		
tP_ProtId	cr_TP_ProtIdAny IF_PRESENT		
tP_DataCodingScheme	cb_DataCodingScheme (?, ?) IF_PRESENT		
tP_ValPeriodRel	*		
tP_ValPeriodAbs	*		
tP_ValPeriodEnh	cr_TP_ValPeriodEnhAny IF_PRESENT		
tP_UD_Len	*		
tP_UserData	*		
Detailed Comments :			

Constraint Name : cr_TP_SUBMIT_REPORT_Any

Group

Structured Type : SMS_SUBMIT_REPORT

Derivation Path : Encoding Variation :

Comments: Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
spare1	?		
tP_UD_HeaderInd	?		
spare4	?		
tP_MsgTypeInd	'01'B		
tP_FailCause	?		
tP_ParamInd	?		
tP_ServCenterTimeSt	?		
tP_ProtId	cr_TP_ProtIdAny IF_PRESENT		
tP_DataCodingScheme	cb_DataCodingScheme (?, ?) IF_PRESENT		
tP_UD_Len	*		
tP_UserData	*		
Detailed Comments :			

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_TP_ValPeriodEnhAny

Group :

Structured Type : TP_ValPeriodEnh

Derivation Path : Encoding Variation :

Comments : Constraint to be used in the assignment of a test case variable

Element Name	Element Value	Element Encoding	Comments
extBit	?		
singleShot	?		
spare3	?		
periodFrmt	?		
period	?		
Patellad Comments			

 $\textbf{Constraint Name} \hspace{0.3cm} \textbf{:} \hspace{0.1cm} \text{cs_AccessPtNameMT}(p_len: Length; p_APN: IA5String \hspace{0.1cm})$

Group

Structured Type : AccessPtName

Derivation Path : Encoding Variation :

Comments : 24.007, section 10.5.6.1

Element Name	Element Value	Element Encoding	Comments
iei	'00101000'B		
length	p_len		
accessPtName	o_IA5_ToOct(p_APN)		
Petallad Comments			

: cs_BcapMT_5a_AsyncNT (p_Itc : B3 ; p_Ra : B2; p_Sacp : B3; p_OtherItc, p_OtherRa : B2; p_NumStopBits, p_NumDataBits: B1; p_Parity : B3 ; p_OtherModemType : B2) **Constraint Name**

Group

: Bcap **Structured Type Derivation Path Encoding Variation:**

Comments : Base Bearer capability with an Asynchronous mode and Non transparent conection element and

containing octets 3, 4, 5 , 5a, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

iei '0000 iel '09'O extBit3 '1'B radioChRequi '01'B codingStd '0'B transferMode '0'B itc p_ltc		no extension spare bits for n-> ue GSM transfer mode octet 3
extBit3 '1'B radioChRequi '01'B codingStd '0'B transferMode '0'B		spare bits for n-> ue GSM
radioChRequi '01'B codingStd '0'B transferMode '0'B		spare bits for n-> ue GSM
codingStd '0'B transferMode '0'B		GSM
transferMode '0'B		
		transfer mode octet 3
Lito		
p_nc		
bcap3aEtc1 -		
bcap3aEtc2 -		
bcap3aEtc3 -		
bcap3aEtc4 -		
bcap3aEtc5 -		
bcap3aEtc6 -		
extBit4 '1'B		no extension
compress px_Bo	ScapDataCompression	
structure '00'B		SDU Integrity
duplexMode '1'B		Full duplex mode
cfg '0'B		configuration: point-to-point
nirr '0'B		negotiation of intermediate rate: no meanoing
establish '0'B		demand
extBit5 '0'B		extension
accessId '00'B		
rateAdapt p_Ra	a	
sacp p_Sa	аср	
extBit5a '1'B		no extension
OherItc p_Oth	herItc	
OtherRateAdapt p_Oth	herRa	
spare3 '000'E	В	
extBit5b -		
rateAdaptHeader -		
multiFrame -		
mode -		
logLinkld –		
assignorAssignee –		
inBandOutBand –		

Structured Type Constraint Declaration				
Element Name	Element Value	Element Encoding	Comments	
spare1	_			
extBit6	'0'B		extension	
layer1ld	'01'B		Default	
userInfoLayer1	'0000'B			
syncAsync	'1'B		Asynchronous	
extBit6a	'0'B		extension bit, octet 6a	
numStopBits	p_NumStopBits			
nego	'0'B		Not possible	
numDataBits	p_NumDataBits			
userRate	'0101'B		9.6 kBPS	
extBit6b	'0'B		extension	
intermRate	'11'B		spare	
nicTx	'0'B		spare	
nicRx	'0'B		spare	
parity	p_Parity			
extBit6c	'0'B		extension	
connectElem	'01'B		Non Transparent	
modemType	'00000'B		none	
extBit6d	'1'B		no extension	
OtherModemType	p_OtherModemType			
FixedNtwUserRate	px_BcapFNUR			
extBit6e	_			
acceptChCoding	_			
maxNumTrafficCh	_			
extBit6f	_			
ulMl	_			
wAIUR	_			
extBit6g	_			
acceptChCodingExt	_			
asymInd	_			
spare2	_			
extBit7	_			
layer2id	_			
userInfoLayer2	_			
Detailed Comments :		·	<u> </u>	

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: cs_BcapMT_5ab7_V120 (p_ltc:B3; p_Sacp : B3; p_OtherItc : B2; p_Sync,p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ; p_UserInfoLayer2 : B5) **Constraint Name**

Group

Structured Type : Bcap **Derivation Path Encoding Variation:**

Comments : Base Bearer capability for V.120 and containing octets 3, 4, 5 , 5a, 5b, 6, 6a, 6b, 6c , 6d and 7 .

> The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re-usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'0B'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		
itc	p_ltc		
bcap3aEtc1	_		
bcap3aEtc2	_		
bcap3aEtc3	_		
bcap3aEtc4	_		
bcap3aEtc5	_		
bcap3aEtc6	-		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		
structure	'00'B		SDU integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		negotiation of intermediate rate: no meanoing
establish	'0'B		demand
extBit5	'0'B		extension
accessId	'00'B		
rateAdapt	'11'B		rate Adaptation: Other rate adaptation
sacp	p_Sacp		
extBit5a	'0'B		extension
OherItc	p_OtherItc		
OtherRateAdapt	'00'B		Other rate adaptation: V120
spare3	'000'B		
extBit5b	'1'B		no extension
rateAdaptHeader	'1'B		Rate adaptation header : included
multiFrame	'1'B		MultiFrame establish: supported
mode	'1'B		mode: protocol sensitive
logLinkld	'0'B		spare
assignorAssignee	'0'B		spare

Structured Type Constraint Declaration				
Element Name	Element Value	Element Encoding	Comments	
inBandOutBand	'0'B		spare	
spare1	'0'B		spare	
extBit6	'0'B		extension	
layer1ld	'01'B		Default	
userInfoLayer1	'0000'B			
syncAsync	p_Sync			
extBit6a	'0'B		extension bit, octet 6a	
numStopBits	p_NumStopBits			
nego	'0'B		Not possible	
numDataBits	p_NumDataBits			
userRate	'0101'B		9.6 kBPS	
extBit6b	'0'B		extension	
intermRate	'11'B		spare	
nicTx	'0'B		spare	
nicRx	'0'B		spare	
parity	p_Parity			
extBit6c	'0'B		extension	
connectElem	'01'B		Non transparent	
modemType	'00000'B		none	
extBit6d	'1'B		no extension	
OtherModemType	'00'B		no other modem type	
FixedNtwUserRate	px_BcapFNUR			
extBit6e	_			
acceptChCoding	_			
maxNumTrafficCh	_			
extBit6f	_			
ulMl	_			
wAIUR	_			
extBit6g	_			
acceptChCodingExt	_			
asymInd	_			
spare2	_			
extBit7	'1'B		extension	
layer2id	'10'B			
userInfoLayer2	p_UserInfoLayer2			
Detailed Comments :	, · -	1		

 $\textbf{Constraint Name} \hspace{0.3cm} \textbf{:} \hspace{0.1cm} cs_BcapMT_5ab_AsyncNT \hspace{0.1cm} (\hspace{0.1cm} p_itc:B3; \hspace{0.1cm} p_RA:B2; \hspace{0.1cm} p_Sacp:B3; \hspace{0.1cm} p_OtherItc, \hspace{0.1cm} p_OtherRA:B2; \hspace{0.1cm} p_Sacp:B3; \hspace{0.1cm} p_OtherItc, \hspace{0.1cm} p_OtherRA:B2; \hspace{0.1cm} p_Sacp:B3; \hspace{0.1cm} p_OtherItc, \hspace{0.1cm} p_OtherRA:B2; \hspace{0.1cm} p_Sacp:B3; \hspace{0.1cm} p_OtherItc, \hspace{0.1cm} p_OtherItc,$

p_NumStopBits, p_NumDataBits: B1; p_Parity : B3)

Group :

Structured Type : Bcap
Derivation Path :
Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent conection element and

containing octets 3, 4, 5 , 5a, 5b, 6, 6a, 6b, 6c and 6d .

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'0A'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		
itc	p_itc		Other ITC
bcap3aEtc1	_		
bcap3aEtc2	_		
bcap3aEtc3	_		
bcap3aEtc4	_		
bcap3aEtc5	_		
bcap3aEtc6	_		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		
structure	'00'B		SDU integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		negotiation of intermediate rate: no meanoing
establish	'0'B		demand
extBit5	'0'B		extension
accessId	'00'B		
rateAdapt	p_RA		
sacp	p_Sacp		
extBit5a	'0'B		extension
OherItc	p_OtherItc		spare
OtherRateAdapt	p_OtherRA		
spare3	'000'B		
extBit5b	'1'B		no extension
rateAdaptHeader	'1'B		Rate adaptation header : included
multiFrame	'1'B		MultiFrame establish: supported
mode	'1'B		mode: protocol sensitive
logLinkld	'0'B		spare
assignorAssignee	'0'B		spare

Structured Type Constraint Declaration				
Element Name	Element Value	Element Encoding	Comments	
inBandOutBand	'0'B		spare	
spare1	'0'B		spare	
extBit6	'0'B		extension	
layer1ld	'01'B		Default	
userInfoLayer1	'0000'B			
syncAsync	'1'B		Asynchronous	
extBit6a	'0'B		extension bit, octet 6a	
numStopBits	p_NumStopBits			
nego	'0'B		Not possible	
numDataBits	p_NumDataBits			
userRate	'0101'B		9.6 kBPS	
extBit6b	'0'B		extension	
intermRate	'11'B		spare	
nicTx	'0'B		spare	
nicRx	'0'B		spare	
parity	p_Parity			
extBit6c	'0'B		extension	
connectElem	'01'B		Non Transparent	
modemType	'00000'B		none	
extBit6d	'1'B		no extension	
OtherModemType	'00'B		no other modem type	
FixedNtwUserRate	px_BcapFNUR			
extBit6e	_			
acceptChCoding	_			
maxNumTrafficCh	_			
extBit6f	_			
ulMl	_			
wAIUR	_			
extBit6g	_			
acceptChCodingExt	_			
asymInd	_			
spare2	_			
extBit7	_		extension	
layer2id	_			
userInfoLayer2	_			
Detailed Comments :				

 $\textbf{Constraint Name} \quad \textbf{:} \ \, \text{cs_BcapMT_7_AsyncNT} \ \, \text{(} \ \, \text{p_Itc} : \text{B3} \ \, \text{;} \ \, \text{p_RA: B2} \ \, \text{;} \ \, \text{p_Sacp} : \text{B3} \ \, \text{;} \ \, \text{p_NumStopBits}, \ \, \text{p_NumDataBits} : \\$

B1; p_Parity: B3; p_ModemType: B5; p_OtherModemType: B2; p_UserInfoLayer2: B5)

Group :

Structured Type : Bcap
Derivation Path :
Encoding Variation :

Comments : Base Bearer capability with an Asynchronous mode and Non transparent conection element and

containing octets 3, 4, 5, 6, 6a, 6b, 6c, 6d and 7.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'09'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		transfer mode octet 3
itc	p_ltc		information transfer capability, octet 3
bcap3aEtc1	_		capability, octet 3
bcap3aEtc2	_		
bcap3aEtc3	_		
bcap3aEtc4	_		
bcap3aEtc5	_		
bcap3aEtc6	_		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		PIXIT compression
structure	'00'B		SDU Integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		nirr: no meaning
establish	'0'B		demand
extBit5	'1'B		no extension
accessId	'00'B		
rateAdapt	p_RA		
sacp	p_Sacp		
extBit5a	_		
OherItc	_		
OtherRateAdapt	_		
spare3	_		
extBit5b	_		
rateAdaptHeader	-		
multiFrame	_		
mode	_		
logLinkId	_		
assignorAssignee	_		
inBandOutBand	_		

Structured Type Constraint Declaration				
Element Name	Element Value	Element Encoding	Comments	
spare1	-			
extBit6	'0'B		extension	
layer1Id	'01'B		Default	
userInfoLayer1	'0000'B			
syncAsync	'1'B		Asynchronous	
extBit6a	'0'B		extension bit, octet 6a	
numStopBits	p_NumStopBits			
nego	'0'B		Not possible	
numDataBits	p_NumDataBits			
userRate	'0101'B		9.6 kBPS	
extBit6b	'0'B		extension	
intermRate	'11'B		spare	
nicTx	'0'B		spare	
nicRx	'0'B		spare	
parity	p_Parity			
extBit6c	'0'B		extension	
connectElem	'01'B		Non Transparent	
modemType	p_ModemType			
extBit6d	'1'B		no extension	
OtherModemType	p_OtherModemType			
FixedNtwUserRate	px_BcapFNUR			
extBit6e	_			
acceptChCoding	_			
maxNumTrafficCh	_			
extBit6f	_			
ulMl	_			
wAIUR	_			
extBit6g	_			
acceptChCodingExt	_			
asymInd	_			
spare2	_			
extBit7	'1'B		no extension	
layer2id	'10'B		layer 2 ld	
userInfoLayer2	p_UserInfoLayer2			
Detailed Comments :				

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Constraint Name : cs_BcapMT_AsyncNT

(p_ltc:B3; p_RA : B2 ; p_Sacp : B3; p_NumStopBits, p_NumDataBits : B1 ; p_Parity : B3 ;

p_ModemType : B5 ; p_OtherModemType : B2)

Group :

Structured Type : Bcap
Derivation Path :

Encoding Variation:

Comments: Base Bearer capability with an Asynchronous mode and Non transparent conection element and

containing octets 3, 4, 5, 6, 6a, 6b, 6c, and 6d.

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more

than 5 parameters are used for the BCAP constraints.

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'08'O		
extBit3	'1'B		no extension
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		GSM
transferMode	'0'B		transfer mode octet 3
itc	p_ltc		
bcap3aEtc1	_		
bcap3aEtc2	_		
bcap3aEtc3	_		
bcap3aEtc4	_		
bcap3aEtc5	_		
bcap3aEtc6	_		
extBit4	'1'B		no extension
compress	px_BcapDataCompression		
structure	'00'B		SDU Integrity
duplexMode	'1'B		Full duplex mode
cfg	'0'B		configuration: point-to-point
nirr	'0'B		negotiation of intermediate rate: no meanoing
establish	'0'B		demand
extBit5	'1'B		no extension
accessId	'00'B		
rateAdapt	p_RA		
sacp	p_Sacp		I.440/I.450
extBit5a	_		
OherItc	_		
OtherRateAdapt	_		
spare3	_		
extBit5b	_		
rateAdaptHeader	_		
multiFrame	_		
mode	_		
logLinkld	_		
assignorAssignee	_		
inBandOutBand	_		

	Structured Type Constraint Declaration				
Element Name	Element Value	Element Encoding	Comments		
spare1	-				
extBit6	'0'B		extension		
layer1ld	'01'B		Default		
userInfoLayer1	'0000'B				
syncAsync	'1'B		Asynchronous		
extBit6a	'0'B		extension bit, octet 6a		
numStopBits	p_NumStopBits				
nego	'0'B		Not possible		
numDataBits	p_NumDataBits				
userRate	'0101'B		9.6 kBPS		
extBit6b	'0'B		extension		
intermRate	'11'B		spare		
nicTx	'0'B		spare		
nicRx	'0'B		spare		
parity	p_Parity				
extBit6c	'0'B		extension		
connectElem	'01'B		Non Transparent		
modemType	p_ModemType				
extBit6d	'1'B		no extension		
OtherModemType	p_OtherModemType				
FixedNtwUserRate	px_BcapFNUR				
extBit6e	_				
acceptChCoding	_				
maxNumTrafficCh	_				
extBit6f	_				
ulMl	_				
wAIUR	_				
extBit6g	_				
acceptChCodingExt	_				
asymInd	_				
spare2	_				
extBit7	_				
layer2id	_				
userInfoLayer2	_				
Detailed Comments :	·	1			

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Constraint Name : cs_BcapSpeechMT

Group : Bcap
Structured Type : Bcap
Derivation Path : Encoding Variation :

 $\begin{tabular}{ll} \textbf{Comments} & : speech bearer capability for direction n->ue \\ \end{tabular}$

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	'01'O		
extBit3	'1'B		extension bit
radioChRequi	'01'B		spare bits for n-> ue
codingStd	'0'B		coding standard : GSM
transferMode	'0'B		circuit mode
itc	'000'B		speech
bcap3aEtc1	_		
bcap3aEtc2	_		
bcap3aEtc3	_		
bcap3aEtc4	_		
bcap3aEtc5	_		
bcap3aEtc6	_		
extBit4	_		
compress	_		
structure	_		
duplexMode	_		
cfg	_		
nirr	_		
establish	_		
extBit5	_		
accessId	_		
rateAdapt	_		
sacp	_		
extBit5a	_		
OherItc	_		
OtherRateAdapt	_		
spare3	_		
extBit5b	_		
rateAdaptHeader	_		
multiFrame	_		
mode	_		
logLinkld	_		
assignorAssignee	_		
inBandOutBand	_		
spare1	_		
extBit6	_		
layer1Id	_		
userInfoLayer1	_		
syncAsync	_		
extBit6a	_		

Continued on next page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
numStopBits	-		
nego	_		
numDataBits	_		
userRate	_		
extBit6b	_		
intermRate	_		
nicTx	_		
nicRx	_		
parity	_		
extBit6c	_		
connectElem	_		
modemType	_		
extBit6d	_		
OtherModemType	_		
FixedNtwUserRate	_		
extBit6e	_		
acceptChCoding	_		
maxNumTrafficCh	_		
extBit6f	_		
ulMl	_		
wAIUR	-		
extBit6g	_		
acceptChCodingExt	_		
asymInd	-		
spare2	-		
extBit7	-		
layer2id	-		
userInfoLayer2	_		

		Structured Type Co	onstraint Declaration		
Constraint Name	: cs_CP_	: cs_CP_UserData04(p_RP_MsgRef: RP_MsgRef)			
Group	:				
Structured Type	: CP_Use	erData			
Derivation Path	:	:			
Encoding Variation	n:				
Comments	: CP_Use	erData with RP_ACK PDU			
Element Na	ame	Element Value	Element Encoding	Comments	
iel		'02'O			
rP_ACK		cs_RP_ACK(p_RP_MsgRef)			
rP_DATA		_			
rP_ERROR		_			
rP_SMMA		_			
Detailed Commen	ts:	•			

Constraint Name : cs_LLC_SAPI_UMTS_GSM_v

Group

Structured Type : LLC_SAPI_v

Derivation Path : Encoding Variation :

Comments: LLC SAPI value assigned as SAPI 3 in order to ensure that there are no problems at the time of

handover from UMTS to GSM

Element Name	Element Value	Element Encoding	Comments
spare	'0000'B		
ILC_SAPI_Value	'0011'B		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cs_LLC_SAPI_UMTS_v

Group :

Structured Type : LLC_SAPI_v

Derivation Path : Encoding Variation :

Comments : The value of LLC SAPI for an UE supporting ONLY UMTS

Element Name	Element Value	Element Encoding	Comments
spare	'0000'B		
ILC_SAPI_Value	'0000'B		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name: cs_PktDataProtoAddrMT(p_len: Length; p_addr : IA5String)

Group :

Structured Type : PktDataProtoAddr

Derivation Path : Encoding Variation :

Comments : PDP Address sent to the UE

Element Name	Element Value	Element Encoding	Comments
iei	'00101011'B		
length	p_len		
spare	'0000'B		
pDP_TypeOrg	tsc_PDP_TypeOrg		
pDP_TypeNo	tsc_PDP_TypeNo		
addrInfo	o_IA5_IP_ToOct (p_addr , TRUE)		

 $\textbf{Constraint Name} \hspace{0.3cm} \textbf{:} \hspace{0.1cm} \text{cs_PktDataProtoAddrMT_Iv}(p_len: Length; p_addr: IA5String) \\$

Group

Structured Type : PktDataProtoAddr_lv

Derivation Path : Encoding Variation :

Comments : PDP Address sent to the UE

Element Name	Element Value	Element Encoding	Comments
length	p_len		
spare	'0000'B		
pDP_TypeOrg	tsc_PDP_TypeOrg		
pDP_TypeNo	tsc_PDP_TypeNo		
addrInfo	o_IA5_IP_ToOct(p_addr, TRUE)		

Structured Type Constraint Declaration

Constraint Name : cs_PktFlowId

Group :

Structured Type : PktFlowIdentifier

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00110100'B		
length	'01'O		
pktFlowIdentifier	'00'O		Best effort
5 . 11 . 10	-		

 $\textbf{Constraint Name} \hspace{0.3cm} : \hspace{0.1cm} \text{cs_QoS_InteractiveOrBackgroundMT_Iv (p_DlyClass, p_trafficClass : B3)} \\$

Group

Structured Type : QualityOfService_lv

Derivation Path : Encoding Variation :

Comments: The QoS for interactive RAB at 64kbps uplink as well as down link, sent to the UE.

This is set same as the one received by the nw

Element Name	Element Value	Element Encoding	Comments
length	'0B'O		
spare	'00'B		
dlyClass	p_DlyClass		
relabilityClass	'011'B		Unacknowledged GTP, LLC, and acknowledged RLC; Protected Data
peakThroughput	'0100'B		64 kbps
spare1	'0'B		
precedenceClass	'011'B		class 3
spare2	'000'B		
meanThroughput	'11111'B		best effort
trafficClass	p_trafficClass		
deliveryOrder	'01'B		
deliveryErrorSDU	'010'B		
maxSDUSize	'20'O		
maxBitRateUplink	'40'O		64 kbps
maxBitRateDnlink	'40'O		64 kbps
residualBER	'0111'B		1 x 10E (-5)
sduErrRatio	'0100'B		1 X 10 E(-4)
transDly	'111111'B		Transfer delay will be neglected in case of interactive or background. Hence the value is set to spare
trafficHandpro	'11'B		This is set to 3, but has to be neglected by the UE as the traffic class is interactive.
bitRateUplink	'10'O		The guaranteed bit rate is set equal to 16 kbps
bitRateDnlink	'10'O		The guaranteed bit rate is set equal to 16 kbps
spare3	_		
signallingInd	_		
srcStatsDescr	_		
maxBitRateDnlinkExt	_		
bitRateDnlinkExt	_		
Detailed Comments :			

Constraint Name : cs_RadioPriorityHigh_v

Group :

Structured Type : RadioPriority_v

Derivation Path : Encoding Variation :

Comments: This is a constraint for Radio Prority, indicating the RB Prority has to be high.

Direction: nw -> ue

in message ACTIVATE PDP CONTEXT ACCEPT

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	'001'B		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name: cs_RP_ACK(p_RP_MsgRef: RP_MsgRef)

Group :

Structured Type : RP_ACK

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare5	'00000'B		
rP_MsgTypeInd	'011'B		n -> ue
rP_MsgRef	p_RP_MsgRef		
rP_UserData	_		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_AuthFailParamGmmAny

Group :

Structured Type: AuthenticationFailureParameter

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00110000'B		
iel	'0E'O		
auts	?		

Constraint Name : c_AC_RefNum3

Group :

Structured Type : AC_ReferenceNumber

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
value	'0011'B		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_AttachTypeAny

Group :

Structured Type : AttachType

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
for	?		Follow-on request
type	?		Type of attach

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_AuthCiphRspExtAny

Group :

Structured Type : AuthRspExt

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00101001'B		IEI is 0x29 (see 24.008 / 9.4.10)
iel	?		
rES	?		
Petallad Comments			

Constraint Name : c_AuthFailParamAny

Group :

Structured Type : AuthenticationFailureParameter

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100010'B		
iel	'0E'O		
auts	?		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_AuthRspAny_tv

Group :

Structured Type : AuthRsp_tv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100010'B		'00100010'B (22 hex)
value	?		Authentication Parameter RES

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_AuthRspExtAny

Group :

Structured Type : AuthRspExt

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments	
iei	'00100001'B		'00100001'B	
iel	?			
rES	?			

Constraint Name : c_AUTN(p_AUTN: BITSTRING)

Group :
Structured Type : AUTN
Derivation Path :

Encoding Variation:

Comments : Authentication Parameter AUTN

3G TS 24.008 cl. 10.5.3.1.1

Element Name	Element Value	Element Encoding	Comments
iei	'00100000'B		
iel	'10'O		Length of 16 octets
aUTN	p_AUTN		value of Authentication Parameter AUTN
Data la LO amora da			

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_CellIndInfoDef

Group :

Structured Type : CellIndependantInfo

Derivation Path :
Encoding Variation :
Comments :

Element Name	Element Value	Element Encoding	Comments
cs_cipheringStarted	FALSE		
ps_cipheringStarted	FALSE		
recentSecureDomain	cs_domain		the domain on which security was recently started, and hence the SRB are ciphered and Integrit protected with this domain.
dL_CipherMode	cs_Null_CipheringModeCom mand		
uL_CipherMode	-		
cipheringAlgorithmCapability	'000000000000011'B		
integrityStarted	FALSE		
dL_Integrity	cs_IntegrityProtectStart (px_FRESH)		
uL_Integrity	-		
dl_IntegrityCheckInfo	-		
start_CS	'00000000000000000000'B		Default new key
start_PS	'0000000000000000000'B		Default new key

Constraint Name

: c_CellInfoDef (p_CellId : INTEGER; p_priScrmCode : PrimaryScramblingCode; p_URA_ld : BITSTRING; p_tCell : Tcell; p_sfnOffset : INTEGER; p_FreqInfo : FrequencyInfo; p_UL_ScramblingCode : UL_ScramblingCode)

Group

Structured Type : CellInfoCfg

Derivation Path Encoding Variation: Comments

Element Name	Element Value	Element Encoding	Comments
cellid	p_CellId		
frequencyInfo	p_FreqInfo		
attenuationLevel	tsc_AttenuationServingCell		
priScrmCode	p_priScrmCode		
powerpCPICH	tsc_PowerpCPICH		
powerpSCH	tsc_PowerpSCH		
powersSCH	tsc_PowersSCH		
powerpCCPCH	tsc_PowerpCCPCH		
powersCCPCH	tsc_PowersCCPCH1		
powersCCPCH1	tsc_PowersCCPCH1		
timingsCCPCH1	tsc_TimingsCCPCH1		
powerAICH	tsc_PowerAICH		
powerPICH	tsc_PowerPICH		
cellTxPowerLevel	defaultCellTxPowerLvI : NULL		
tCell	p_tCell		
sfnOffset	p_sfnOffset		
puncLimit	tsc_PuncLimit		
sf_PRACH	tsc_PRACH1_SF		
slotFormatsCCPCH1	tsc_SlotFormatsCCPCH1		
mcc	tsc_MCC_Def		
mnc	tsc_MNC_Def		
lac	tsc_LAC_Def		
rac	tsc_RAC_Def		
attFlag	tsc_AttOn		
nmo	tsc_NMO_I		
ura_Identity	p_URA_ld		
t3212	tsc_T3212_Def		
cRNTI	tsc_CRNTI		
uRNTI	c_U_RNTI_Def		
cellConfig	cell_NotConfigured		
dRX_CycleLength	c_DRX_CycleLengthStrucD ef		
uL_ScramblingCode	p_UL_ScramblingCode		
DL_DPCH_SHO	FALSE		
UL_DPCH_SHO	FALSE		
dl_DPCH_2ndScrCode	tsc_DL_DPCH1_2ndScrC		
Detailed Comments :			

Constraint Name : c_CiphAlgorithm (p_alg : B3)

Group :

Structured Type : CiphAlgorithm

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
algorithm	p_alg		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_CiphKeySeqNum(p_KeySeq: KeySeq)

Group :

Structured Type : CiphKeySeqNum

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
are1 '('0'B		
ySeq p	p_KeySeq		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_DetachTypeReAttNotRequired

Group :

Structured Type : DetachType

Derivation Path : Encoding Variation :

Comments : 'normal detach, re-attach not required'

Element Value	Element Encoding	Comments
'0'B		
'010'B		
	'0'B	'0'B

Constraint Name : c_DetachTypeReAttNotRequiredGPRS

Group :

Structured Type: DetachType

Derivation Path : Encoding Variation :

Comments : 'normal detach, re-attach not required'

Element Name	Element Value	Element Encoding	Comments
powOff	'0'B		
type	'001'B		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_DRX_CycleLengthStrucDef

Group :

Structured Type : DRX_CycleLengthStructure

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
cN_CS_DRX_CycleLength	7		
cN_PS_DRX_CycleLength	7		
uTRAN_DRX_CycleLength	9		
	-	-	

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_DRX_ParamterAny

Group :

Structured Type : DRXparamter

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
splitPGcycleCode	?		Split PG cycle code
cnDRXcoef	?		CN specific DRX cycle length coefficient
splitOnCCCH	?		Split on CCCCH
nonDRXtimer	?		non-DRX timer

Constraint Name : c_ForceToStandby(p_val : B3)

Group :

Structured Type: ForceToStandby

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	p_val		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_ForceToStandby0

Group :

Structured Type : ForceToStandby

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	'000'B		Force to standby not indicated

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_GMM_AttachResult(p_result : B3)

Group :

Structured Type : AttachResult

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
result	p_result		

Constraint Name : c_GMM_AuthAUTN (p_autn : B128)

Group :

Structured Type : GMM_AUTN

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00101000'B		
iel	'10'O		
aUTN	p_autn		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_GMM_AuthRAND (p_rand : BITSTRING)

Group :

Structured Type: AuthenticationParamterRAND

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100001'B		
randValue	p_rand		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_GMM_KeySeq_tv (p_key : KeySeq)

Group

Structured Type : CiphKeySeqNum_tv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1000'B		
spare1	'0'B		
keySeq	p_key		

Constraint Name : c_GMM_MobileIdTMSI (p_tmsi : OCTETSTRING)

Group :

Structured Type : GMM_MS_Identity

Derivation Path : Encoding Variation :

Comments : Default TMSI

Element Name	Element Value	Element Encoding	Comments
iei	'00100011'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfld	'100'B		TMSI
otherDigits	p_tmsi		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_GMM_UpdateType_v(p_for : B1; p_type : B3)

Group :

Structured Type : UpdateType_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
for	p_for		
value	p_type		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_GPRS_Timer_v(p_unit : B3; p_value : B5)

Group :

Structured Type : GPRS_Timer_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
unit	p_unit		
value	p_value		

Constraint Name : c_GPRS_TimerAny

Group :

Structured Type : GPRS_Timer

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		00010111'B (17 hex)
unit	?		Unit
value	?		Timer value

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_LocAreald_v(p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING)

Group :

Structured Type : LocAreald_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN(p_MCC, p_MNC)		
lac	p_LAC		
	•		·

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : c_LocArealdAny_v

Group :

Structured Type : LocAreald_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments	
plmn	?			
lac	?			

Constraint Name : c_LocUpdTypeAny

Group :

Structured Type : LocUpdType

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
fOR	?		
spare1	'0'B		
IUT	?		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_MobileIdAny_lv

Group :

Structured Type : MS_Identity_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
iDigit1	?		
oddEvenInd	?		
typeOfId	?		
otherDigits	?		
Detailed Comments .			

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_MobileIdPTMSI (p_ptmsi : O0_8)

Group

Structured Type : GMM_MS_IdentityPTMSI

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011000'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI / P-TMSI
otherDigits	p_ptmsi		
Detailed Comments			

Constraint Name : c_MobileIdPTMSI_Any

Group :

Structured Type : GMM_MS_IdentityPTMSI

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011000'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfld	'100'B		TMSI / P-TMSI
otherDigits	?		Any value

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_MobileIdPTMSI_lv (p_ptmsi : O0_8)

Group :

Structured Type : MS_Identity_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfId	'100'B		TMSI / P-TMSI
otherDigits	p_ptmsi		
5			

Constraint Name : c_MobileIdTMSI_Def

Group :

Structured Type : MM_MS_Identity

Derivation Path : Encoding Variation :

Comments : Default TMSI

Element Name	Element Value	Element Encoding	Comments
iei	'00010111'B		
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfld	'100'B		TMSI
otherDigits	px_TMSI_Def		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_MobileIdTMSI_lv

Group :

Structured Type : MS_Identity_lv

Derivation Path : Encoding Variation :

Comments : Default TMSI

Element Name	Element Value	Element Encoding	Comments
iel	'05'O		TMSI consists of 4 octets
iDigit1	'1111'B		special coding for TMSI
oddEvenInd	'0'B		even
typeOfld	'100'B		TMSI
otherDigits	px_TMSI_Def		
Data il a la Communità	_		_

Constraint Name : c_MS_Clsmk1_Any

Group :

Structured Type : MS_Clsmk1

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : c_MS_Clsmk2_Any

Group :

Structured Type : MS_Clsmk2

Derivation Path : Encoding Variation : Comments :

Comments :			
Element Name	Element Value	Element Encoding	Comments
iei	'00110011'B		
iel	'03'O		
spare1_1	'0'B		
revLvl	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
spare1_2	'0'B		
pSCap	?		
sSSI	?		
sMCap	?		
vBS	?		
vGCS	?		
fC	?		
cM3	?		
spare1_3	'0'B		
ICSVA	?		
uCS2	?		
soLSA	?		
cMSP	?		
a5_3	?		
a5_2	?		
Detailed Comments :			

Constraint Name : c_MS_Clsmk2_Any_lv

Group :

Structured Type : MS_Clsmk2_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	'03'O		
spare1_1	'0'B		
revLvI	?		
eSIND	?		
a5_1	?		
rFPwrCap	?		
spare1_2	'0'B		
pSCap	?		
sSSI	?		
sMCap	?		
vBS	?		
vGCS	?		
fC	?		
cM3	?		
spare1_3	'0'B		
ICSVA	?		
uCS2	?		
soLSA	?		
cMSP	?		
a5_3	?		
a5_2	?		
Detailed Comments :		•	

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Constraint Name : c_MS_RadioAccessCapAny_lv

Group

Structured Type : MSRadioAccessCap_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments	
iel	?			
value	?		MS radio access capability value (CSN.1 coding)	
Detailed Comments :				

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Constraint Name : c_PLMN_List1 (p_Plmn1 : OCTETSTRING)

Group

Structured Type : PLMN_List

Derivation Path : Encoding Variation :

Comments : equivalent PLMN list containing 1 PLMN (OCTETSTRING[3])

Element Name	Element Value	Element Encoding	Comments
iei	'01001010'B		'01001010'B
iel	'03'O		
plmn1	p_Plmn1		PLMN 1
plmn2	_		PLMN 2
plmn3	_		PLMN 3
plmn4	_		PLMN 4
plmn5	_		PLMN 5

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_PriorityLvlAny

Group :

Structured Type : PriorityLvl

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1000'B		
spare1	'0'B		
callPrio	?		
	-	-	

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_PTMSI_Signature (p_ptmsi : OCTETSTRING)

Group :

Structured Type : PTMSI_Signature

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		
value	p_ptmsi		

Constraint Name : c_PTMSI_Signature_tlv (p_ptmsi : OCTETSTRING)

Group :

Structured Type : PTMSI_Signature_tlv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00011001'B		
iel	'03'O		
value	p_ptmsi		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_PTMSI_SignatureAny

Group :

Structured Type : PTMSI_Signature

Derivation Path : Encoding Variation : Comments :

ı	Element Name	Element Value	Element Encoding	Comments
	iei	'00011001'B		'00011001'B (19 hex)
	value	?		P-TMSI signature value

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_PTMSI_SignatureDef

Group

Structured Type : PTMSI_Signature

Derivation Path : Encoding Variation : Comments :

	5
iei '00011001'B	
value px_PTMSI_SigDef	

Constraint Name : c_RadioPriority(p_val : B3)

Group :

Structured Type : RadioPriority_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare	'0'B		
value	p_val		
value	p_val		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_RadioPriority2(p_val : B3)

Group :

Structured Type : RadioPriority2_v

Derivation Path : Encoding Variation : Comments :

spare '0'B	Element Name	nt Name Element Value	Element Encoding	Comments
	spare	'0'B		
value p_val	value	p_val		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_RAI_Any_v

Group :

Structured Type : RAI_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
plmn	?		MCC + MNC 3 digits each
lac	?		LAC
rac	?		RAC

Constraint Name : c_RAI_v (p_mcc : HEXSTRING; p_mnc : HEXSTRING; p_lac : OCTETSTRING; p_rac :

OCTETSTRING)

Group :

Structured Type : RAI_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
plmn	o_ConvtPLMN(p_mcc, p_mnc)		
lac	p_lac		
rac	p_rac		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_RepeatIndAny

Group :

Structured Type : RepeatInd

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1101'B		'D'H
repeatInd	?		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : c_ServiceType_v(p_type : B3)

Group :

Structured Type : ServiceType_v

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
type	p_type		

Constraint Name : c_TMSI_StatusAny

Group :

Structured Type : TMSI_Status

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		'1001'B
spare3	'000'B		
flag	?		Flag

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name: cb_DataCodingScheme (p_cg:B4; p_code:B4)

Group :

Structured Type : TP_DataCodingScheme

Derivation Path : Encoding Variation :

Comments: English language, used for Cell Broadcast

Element Name	Element Value	Element Encoding	Comments
cg	p_cg		
code	p_code		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cb_IMEISV_Request(p_value: B3)

Group :

Structured Type : IMEISVRequest

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
spare1	'0'B		
value	p_value		

Constraint Name : cr_AccessPtNameAny

Group :

Structured Type : AccessPtName

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00101000'B		
length	?		
accessPtName	?		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_Bcap3aEtcAny

Group :

Structured Type : Bcap3aEtc

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
extBit	?		
coding	?		
spare2	?		
speechVersion	?		

Constraint Name : cr_BcapAnyMO

Group : Bcap
Structured Type : Bcap
Derivation Path : Encoding Variation :

 $\label{lem:comments:equation$

Element Name	Element Value	Element Encoding	Comments
iei	'00000100'B		
iel	?		
extBit3	*		
radioChRequi	*		
codingStd	*		
transferMode	*		
itc	*		
bcap3aEtc1	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc2	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc3	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc4	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc5	cr_Bcap3aEtcAny IF_PRESENT		
bcap3aEtc6	cr_Bcap3aEtcAny IF_PRESENT		
extBit4	*		
compress	*		
structure	*		
duplexMode	*		
cfg	*		
nirr	*		
establish	*		
extBit5	*		
accessId	*		
rateAdapt	*		
sacp	*		
extBit5a	*		
OherItc	*		
OtherRateAdapt	*		
spare3	*		
extBit5b	*		
rateAdaptHeader	*		
multiFrame	*		
mode	*		
logLinkld	*		
assignorAssignee	*		
inBandOutBand	*		
spare1	*		
extBit6	*		

Continued on next page

Structured Type Constraint Declaration			
Element Name	Element Value	Element Encoding	Comments
layer1Id	*		
userInfoLayer1	*		
syncAsync	*		
extBit6a	*		
numStopBits	*		
nego	*		
numDataBits	*		
userRate	*		
extBit6b	*		
intermRate	*		
nicTx	*		
nicRx	*		
parity	*		
extBit6c	*		
connectElem	*		
modemType	*		
extBit6d	*		
OtherModemType	*		
FixedNtwUserRate	*		
extBit6e	*		
acceptChCoding	*		
maxNumTrafficCh	*		
extBit6f	*		
ulMl	*		
wAIUR	*		
extBit6g	*		
acceptChCodingExt	*		
asymInd	*		
spare2	*		
extBit7	*		
layer2id	*		
userInfoLayer2	*		
Detailed Comments :	·	·	

Constraint Name : cr_CC_CapabilitiesAny

Group :

Structured Type : CC_Capabilities

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00010101'B		
iel	?		
maxNumBearer	?		
spare2	?		
рср	?		
dtmf	?		
spare4	?		
maxNumSpeechBearer	?		

Detailed Comments :

Structured Type Constraint Declaration

Constraint Name : cr_CodecAny

Group

Structured Type : Codec

Derivation Path : Encoding Variation :

Comments : Codec

3G TS 24.008 cl. 10.5.4.32

Element Name	Element Value	Element Encoding	Comments
sysld	?		system identification
len	?		length
bitMap1to8	?		codec bitmap bits 1-8
bitMap9to16	*		codec bitmap bits 9-16

Constraint Name : cr_CodecListAny

Group :

Structured Type : CodecList

Derivation Path : Encoding Variation :

Comments : Supported Codec List

3G TS 24.008 cl. 10.5.3.32

Element Name	Element Value	Element Encoding	Comments	
iei	'01000000'B		'01000000'B (40 hex)	
iel	?		length	
codec1	cr_CodecAny IF_PRESENT		Codec	
codec2	cr_CodecAny IF_PRESENT		Codec	
codec3	cr_CodecAny IF_PRESENT		Codec	
codec4	cr_CodecAny IF_PRESENT		Codec	
codec5	cr_CodecAny IF_PRESENT		Codec	

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_DRXparamter_tv_Any

Group :

Structured Type : DRXparamter_tv

Derivation Path : Encoding Variation :

Comments: to be used in ROUTINGAREAUPDATEREQUEST constraints

Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		'00100111'B (hex 27)
splitPGcycleCode	?		Split PG cycle code
cnDRXcoef	?		CN specific DRX cycle length coefficient
splitOnCCCH	?		Split on CCCCH
nonDRXtimer	?		non-DRX timer
Patalled Comments :			

Constraint Name : cr_Facility_Any

Group :

Structured Type : Facility

Derivation Path : Encoding Variation :

Comments : Facility information element

3G TS 24.008 cl. 10.5.4.15

Element Name	Element Value	Element Encoding	Comments
iei	'00011100'B		information element identifier '00011100'B
iel	?		length
comps	*		Component

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_GPRS_TimerAny

Group :

Structured Type : GPRS_Timer

Derivation Path : Encoding Variation :

Comments: to be used in ROUTINGAREAUPDATEREQUEST constraints

Element Name	Element Value	Element Encoding	Comments	
iei	'00010111'B		00010111'B (17 hex)	
unit	?		Unit	
value	?		Timer value	
Partit Louisian				

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_LLC_SAPI_v

Group

Structured Type : LLC_SAPI_v

Derivation Path : Encoding Variation :

Comments : LLC SAPI value assigned as SAPI 3 in order to ensure that there are no problems at the time of

handover from UMTS to GSM

Element Name	Element Value	Element Encoding	Comments	
spare	'0000'B			
ILC_SAPI_Value	('0000'B, '0011'B, '0101'B, '1001'B, '1001'B, '1011'B)			
Detailed Comments:				

Constraint Name : cr_MS_NetworkCap_tlv_Any

Group :

Structured Type : MS_NetworkCap_tlv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00110001'B		'00110001'B (hex 31)
iel	?		
value	?		MS network capability value (CSN.1 coding)

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_MS_NetworkCapAss_lv

Group :

Structured Type : MS_NetworkCap_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iel	?		
value	?		MS network capability value (CSN.1 coding)

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_NSAPI_v

Group :

Structured Type : NSAPI_v

Derivation Path : Encoding Variation :

Comments : Received value of NSAPI

Element Name	Element Value	Element Encoding	Comments
spare	'0000'B		
nSAPI_Value	('0101'B, '0110'B, '0111'B, '1000'B, '1001'B, '1010'B, '1101'B, '1100'B, '1110'B, '1110'B, '1111'B)		

Constraint Name : cr_PDP_ContextStatusAny

Group :

Structured Type : PDP_ContextStatus

Derivation Path : Encoding Variation :

Comments: to be used in ROUTINGAREAUPDATEREQUEST constraints

Element Name	Element Value	Element Encoding	Comments
iei	'00110010'B		'00110010'B
iel	?		Unit
nSAPI	?		Timer value

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_ProtoCfgOptAny

Group :

Structured Type : ProtoCfgOpt

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00100111'B		270
length	?		
ext	?		
spare	?		
configprotocol	?		
protocolldContents	*		

Constraint Name : cr_PS_LCS_CapabilityAny

Group

Structured Type : PS_LCS_Capability

Derivation Path Encoding Variation:

Comments

: PS LCS Capability 3GPP 24.008 / 10.5.5.22

Element Name	Element Value	Element Encoding	Comments
iei	'00110011'B		'00110011'B (33 hex)
iel	'01'O		
spare	'000'B		
oTD_A	?		
oTD_B	?		
gPS_A	?		
gPS_B	?		
gPS_C	?		
	•		

Constraint Name : cr_QualityOfService_lv_Any

Group :

Structured Type : QualityOfService_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
length	?		
spare	?		
dlyClass	?		
relabilityClass	?		
peakThroughput	?		
spare1	?		
precedenceClass	?		
spare2	?		
meanThroughput	?		
trafficClass	?		
deliveryOrder	?		
deliveryErrorSDU	?		
maxSDUSize	?		
maxBitRateUplink	?		
maxBitRateDnlink	?		
residualBER	?		
sduErrRatio	?		
transDly	?		
trafficHandpro	?		
bitRateUplink	?		
bitRateDnlink	?		
spare3	*		
signallingInd	*		
srcStatsDescr	*		
maxBitRateDnlinkExt	*		
bitRateDnlinkExt	*		
Detailed Comments :			

Constraint Name : cr_SS_VersionIndAny

Group :

Structured Type : SS_VersionInd

Derivation Path : Encoding Variation :

Comments : SS version indicator IE with AnyOrOmit values

Element Name	Element Value	Element Encoding	Comments
iei	'01111111'B		
iel	?		
sS_VersionInfo	*		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_StaticPDP_AddressAny

Group :

Structured Type : PktDataProtoAddr_lv

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
length	?		
spare	'0000'B		
pDP_TypeOrg	?		
pDP_TypeOrg pDP_TypeNo	?		
addrInfo	*		

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_StreamIdAny

Group :

Structured Type : Streamld

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
iei	'00101101'B		
iel	?		
val	?		

Constraint Name : cr_SubadrsAny

Group :

Structured Type : Subadrs

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
extBit	?		extension bit
typrOfSubadrs	?		Type of subaddress
oddEven	?		odd/even indicator
spare3	?		3 spare bits
subadrsInfo	*		subaddress information
Public 10 annuals			

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_TearDwnInd_tv

Group :

Structured Type : TearDwnInd_tv

Derivation Path : Encoding Variation :

Comments: Tear down indicator used for the direction

ue -> n

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		
spare	'000'B		
tdiflag	'?'B		TDI Flag = 0, Tear down of all PDP Context not requested. TDI Flag = 1, Tear down of all PDP Context requested.

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_Tl_Any

Group : Structured Type : TI
Derivation Path : Encoding Variation :

Comments : Transaction identifier – used for MO calls

Element Name	Element Value	Element Encoding	Comments
tiFlag	?		from network to MS
tiVal	?		

Constraint Name : cr_TypeOfNumPlanAny

Group :

Structured Type : TypeOfNumPlan

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments
extBit	?		extension bit
typeOfNum	?		Type of number
numbPlanId	?		Numbering plan id.
·			

Detailed Comments:

Structured Type Constraint Declaration

Constraint Name : cr_UserUserAny

Group :

Structured Type : UserUser

Derivation Path : Encoding Variation : Comments :

Element Name	Element Value	Element Encoding	Comments		
iei	'01111110'B		information element identifier		
iel	?		length		
userUserProtocolDiscr	?		user–user protocol discriminator		
userUserInfo	*		user user information		

Detailed Comments : In SETUP, ALERTING, CONNECT, DISCONNECT, RELEASE and RELEASE COMPLETE

messages the userUserInfo length is of 0 – 32 bytes.

In USER INFORMATION messages the userUserInfo length is of 1 – 128.

Constraint Name : cs_CauNormCallClear_lv

Group :

Structured Type : Cau_lv

Derivation Path : Encoding Variation :

Comments : Cause – Normal call clearing

Element Name	Element Value	Element Encoding	Comments
iel	'02'O		
extBit3	'1'B		no extension
codingStd	'11'B		coding standard – GSM
spare1	'0'B		bit
loc	'0000'B		location – user
extBit3a	_		
recommend	_		
extBit4	'1'B		no extension
cauValue	INT_TO_BIT (16, 7)		Normal call clearing
diagnostic	_		
Detailed Comments :			

Structured Type Constraint Declaration

Constraint Name : cs_TearDwnInd_tv

Group :

Structured Type : TearDwnInd_tv

Derivation Path : Encoding Variation :

Comments: Tear down indicator used for the direction

n -> ue, indicating all the PDP Context must be released.

Element Name	Element Value	Element Encoding	Comments
iei	'1001'B		
spare	'000'B		
tdiflag	'1'B		Tear down all PDP Context

Constraint Name : cs_TI_MT

Group : Structured Type : TI
Derivation Path : Encoding Variation :

Comments: Transaction identifier – used for MT calls

Element Name	Element Value	Element Encoding	Comments
tiFlag	'0'B		from network to MS
tiVal	'000'B		

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_PowerOffsetInfoBelow64k

Group :

ASN1 Type : PowerOffsetInformation

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
gainFactorInformation signalledGainFactors:{
   modeSpecificInfo fdd:{
      gainFactorBetaC tsc_GainFactorBetaC_Below64k
   },
   gainFactorBetaD tsc_GainFactorBetaD,
   referenceTFC_ID 0
   },
   powerOffsetPp_m OMIT
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_PowerOffsetInfoComputed

Group :

ASN1 Type : PowerOffsetInformation

Derivation Path : Encoding Variation : Comments :

Constraint Value

{
 gainFactorInformation computedGainFactors : 0,
 powerOffsetPp_m OMIT

Constraint Name : c_PowerOffsetInfoHigher64k

Group :

ASN1 Type : PowerOffsetInformation

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    gainFactorInformation signalledGainFactors:{
        modeSpecificInfo fdd:{
            gainFactorBetaC tsc_GainFactorBetaC_Higher64k
        },
        gainFactorBetaD tsc_GainFactorBetaD,
        referenceTFC_ID 0
        },
        powerOffsetPp_m OMIT
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_103_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RAB subflow#2 on dedicated channel

Constraint Value

Detailed Comments: TS 34.108 cl. 6.10.2.4.1.4:

TTI = 20 ms;

 $two\ transport\ Blocks = 0,\ TB\ size = 103\ bits;\ Tansport\ Block = 1,\ Size = 103.$

Constraint Name : c_DCH_103_TFS_UE

Group :

ASN1 Type : DedicatedTransChTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RAB subflow#2 on dedicated channel used in message sent to UE

Constraint Value

```
{
    tti tti20 :{ { rlc_Size bitMode : sizeType1 : 103,
        numberOfTbSizeList { zero : NULL, one : NULL },
        logicalChannelList allSizes : NULL
    }},
    semistaticTF_Information {
        channelCodingType convolutional :third,
        rateMatchingAttribute 190,
        crc_Size crc0
    }
}
```

Detailed Comments: TS 34.108 cl. 6.10.2.4.1.4:

TTI = 20 ms;

two transport formats: TransportBlocks = 0, TB size = 103 bits; TansportBlock = 1, Size = 103.

rlc_Size = TB_Size (DCH, w/o MUX)

Constraint Name: cb_DCH_336_148_DL_Info (p_ActTime : ActivationTime)

RateMatching = 155.

Group :

ASN1 Type : CphyTrchConfigReq

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
activationTime activationCFN: p_ActTime,
 ulconnectedTrCHList OMIT,
 ulTFCS OMIT,
 dlconnectedTrCHList {
  { trchid tsc_DL_DCH1,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_336_TFS},
  { trchid tsc_DL_DCH5,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_148_TFS_DL }
 dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( c_PowerOffsetInfoHigher64k ) --- sent to SS
Detailed Comments: For DCH1 (34.108 cl. 6.10.2.4.26):
                       TTI = 20 \text{ ms};
                       5 transport formats: TransportBlocks = 0,1,2,3 and 4; all TB sizes = 336 bits;
                       coding = turbo;
                       CRCsize = 16;
                       RateMatching = 130
                       For DCH5 (34.108 cl. 6.10.2.4.26):
                       TTI = 40 \text{ ms};
                       two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
                       coding = convolutional;
                       coding rate = 1/3;
                       CRCsize = 16;
```

Constraint Name: cb_DCH_336_148_UL_Info (p_ActTime : ActivationTime)

Group :

ASN1 Type : CphyTrchConfigReq

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    activationTime activationCFN : p_ActTime,
    ulconnectedTrCHList {
        { trchid tsc_UL_DCH1,
            ul_TransportChannelType dch,
            transportChannelInfo c_DCH_336_TFS},
        { trchid tsc_UL_DCH5,
            ul_TransportChannelType dch,
            transportChannelInfo c_DCH_148_TFS_UL }
        },
        ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx, -- sent to SS
        dlconnectedTrCHList OMIT,
        dlTFCS OMIT
    }

Detailed Comments : For DCH1 (34.108 cl. 6.10.2.4.1.26.1.1.1):
        TTI = 20 ms;
        5 transport formats: TB size always=336 bits; TransportBlocks = 0,1,2,3 and 4;
        coding = turbo;
        CDC = turbo;
```

coding = turbo; CRCsize = 16; RateMatching = 130

For DCH5 (34.108 cl. 6.10.2.4.1.26.1.1.2):

TTI = 40 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

Constraint Name : c_DCH_336_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments : transport format set for transport channel used in CreateCell_DCH_64kPS_RAB_SRB

Constraint Value

```
{
  tti tti20 :{{
     tb_Size 336,
     numberOfTbSizeList { zero : NULL, one : NULL, small : 2, small : 3, small : 4},
     logicalChannelList allSizes : NULL
}},
  semistaticTF_Information {
     channelCodingType turbo: NULL,
     rateMatchingAttribute 150,
     crc_Size crc16
}
```

Detailed Comments: TTI = 20 ms;

5 transport formats: TB size always=336 bits; TransportBlocks = 0,1,2,3 and 4;

coding = turbo; CRCsize = 16; RateMatching = 150

Constraint Name : c_DCH_576_148_DL_Info(p_ActTime: ActivationTime)

Group :

ASN1 Type : CphyTrchConfigReq

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    activationTime activationCFN : p_ActTime,
    ulconnectedTrCHList OMIT,
    ulTFCS OMIT,
    dlconnectedTrCHList {
        { trchid tsc_DL_DCH1,
            dl_TransportChannelType dch,
            transportChannelInfo c_DCH_576_TFS},
        { trchid tsc_DL_DCH5,
            dl_TransportChannelType dch,
            transportChannelType dch,
            transportChannelType dch,
            transportChannelInfo c_DCH_148_TFS_DL }
        },
        dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( c_PowerOffsetInfoHigher64k )
}

Detailed Comments : For DCH1 (34.108 cl. 6.10.2.4.17):
            TTI = 40 ms;
            five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits;
```

five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4,

TB size = 576 bits. coding = turbo; CRCsize = 16; RateMatching = 125

For DCH5 (34.108 cl. 6.10.2.4.17):

TTI = 40 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

Constraint Name : c_DCH_576_148_UL_Info(p_ActTime: ActivationTime)

Group :

ASN1 Type : CphyTrchConfigReq

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    activationTime activationCFN : p_ActTime,
    ulconnectedTrCHList {
        { trchid tsc_UL_DCH1,
            ul_TransportChannelType dch,
            transportChannelInfo c_DCH_576_TFS},
        { trchid tsc_UL_DCH5,
            ul_TransportChannelType dch,
            transportChannelInfo c_DCH_148_TFS_UL }
    },
    ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx , --- sent to SS
    dlconnectedTrCHList OMIT,
    dlTFCS OMIT
}
```

```
Detailed Comments: For DCH1 (34.108 cl. 6.10.2.4.17):
```

TTI = 40 ms;

five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4,

TB size = 576 bits. coding = turbo; CRCsize = 16; RateMatching = 125

For DCH2 (34.108 cl. 6.10.2.4.17):

TTI = 40 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

Constraint Name : c_DCH_576_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments : transport format set for transport channel used in CreateCell_DCH_57_6kCS_RAB_SRB

Constraint Value

```
{
  tti tti40 :{{tb_Size 576,
      numberOfTbSizeList { zero : NULL, one : NULL, small : 2, small : 3, small : 4},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
      channelCodingType turbo: NULL,
      rateMatchingAttribute 145,
      crc_Size crc16
  }
}
```

Detailed Comments: 3GPP TS 34.108 clause 6.10.2.4.17

TTI = 40 ms;

five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4,

TB size = 576 bits. coding = turbo; CRCsize = 16; RateMatching = 125

Constraint Name : c_DCH_576_TFS_UE

Group :

ASN1 Type : DedicatedTransChTFS

Derivation Path : Encoding Variation :

Comments : transport format set for transport channel used in CreateCell_DCH_57_6kCS_RAB_SRB for

message sent to UE

```
Constraint Value
```

```
{
tti tti40 :{ { rlc_Size octetModeType1 : sizeType2 : {part1 9, part2 2},
    numberOfTbSizeList { zero : NULL, one : NULL, small : 2, small : 3, small : 4},
    logicalChannelList allSizes : NULL
}},
semistaticTF_Information {
    channelCodingType turbo: NULL,
    rateMatchingAttribute 145,
    crc_Size crc16
}
}
```

Detailed Comments: 3GPP TS 34.108 clause 6.10.2.4.17

TTI = 40 ms:

five transport formats: TransportBlocks = 0, TB size = 576 bits; TansportBlock = 1, Size = 576 bits; TransportBlocks = 2, TB size = 576 bits; TansportBlock = 3, Size = 576 bits; TransportBlocks = 4,

TB size = 576 bits.

 $rlc_Size = TB_Size (DCH, w/o MUX)$

coding = turbo; CRCsize = 16; RateMatching = 125

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_60_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for RAB subflow#3 on dedicated channel

Constraint Value

```
{
tti tti20 :{ { tb_Size 60,
    numberOfTbSizeList { zero : NULL, one : NULL },
    logicalChannelList allSizes : NULL
}},
semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 235,
    crc_Size crc0
}
```

Detailed Comments: TS 34.108 subcl. 6.10.2.4.1.4:

TTI = 20 ms;

two transport formats: TransportBlocks = 0, TB size = 60 bits; TansportBlock = 1, Size = 60.

Constraint Name : c_DCH_60_TFS_UE

Group :

ASN1 Type : DedicatedTransChTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RAB subflow#3 on dedicated channel used in message sent to UE

Constraint Value

```
{
    tti tti20 :{ { rlc_Size bitMode : sizeType1: 60,
        numberOfTbSizeList { zero : NULL, one : NULL },
        logicalChannelList allSizes : NULL
    }},
    semistaticTF_Information {
        channelCodingType convolutional : half,
        rateMatchingAttribute 235,
        crc_Size crc0
    }
}
```

Detailed Comments: TS 34.108 subcl. 6.10.2.4.1.4:

TTI = 20 ms;

two transport formats:

TransportBlocks = 0, TB size = 60 bits; TansportBlock = 1, Size = 60.

rlc_Size = TB_Size (DCH, w/o MUX)

Constraint Name : c_DCH_640_148_DL_Info(p_ActTime: ActivationTime)

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 155.

Group :

ASN1 Type : CphyTrchConfigReq

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
activationTime activationCFN: p_ActTime,
 ulconnectedTrCHList OMIT,
 ulTFCS OMIT,
 dlconnectedTrCHList {
  { trchid tsc_DL_DCH1,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_640_TFS},
  { trchid tsc_DL_DCH5,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_148_TFS_DL}
 dlTFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k ) --- sent to SS
Detailed Comments: For DCH1 (34.108 cl. 6.10.2.4.13):
                      TTI = 20 \text{ ms};
                      two transport formats: TransportBlocks = 0, TB size = 640 bits; TransportBlocks = 2, TB size =
                      640 bits.
                      coding = turbo;
                      CRCsize = 16;
                      RateMatching = 150
                      For DCH5 (34.108 cl. 6.10.2.4.13):
```

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

Constraint Name : c_DCH_640_148_UL_Info(p_ActTime: ActivationTime)

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 155.

Group :

ASN1 Type : CphyTrchConfigReq

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
activationTime activationCFN: p_ActTime,
 ulconnectedTrCHList {
  { trchid tsc_UL_DCH1,
   ul_TransportChannelType dch,
   transportChannelInfo c_DCH_640_TFS},
  { trchid tsc_UL_DCH5,
   ul_TransportChannelType dch,
   transportChannelInfo c_DCH_148_TFS_UL}
 ulTFCS c_TFCS_Cmpl0_1_2_3_Rx , -- sent to SS
 dlconnectedTrCHList OMIT,
 dITFCS OMIT
Detailed Comments: For DCH1 (34.108 cl. 6.10.2.4.13):
                      TTI = 40 \text{ ms};
                      two transport formats: TransportBlocks = 0, TB size = 640 bits; TansportBlock = 2, Size = 640 bits.
                      coding = turbo;
                      CRCsize = 16;
                      RateMatching = 150
                      For DCH5 (34.108 cl. 6.10.2.4.13):
```

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

Constraint Name : c_DCH_640_TFS

Group

ASN1 Type : CommonOrDedicatedTFS

Derivation Path Encoding Variation:

Comments : transport format set for transport channel used in CreateCell_DCH_64kCS_RAB_SRB

Constraint Value

```
tti tti20 :{ {
   tb_Size 640,
   numberOfTbSizeList { zero : NULL, small : 2},
   logicalChannelList allSizes: NULL
 semistaticTF_Information {
  channelCodingType turbo: NULL,
  rateMatchingAttribute 172,
  crc_Size crc16
Detailed Comments: For DCH1 (34.108 cl. 6.10.2.4.13):
```

TTI = 20 ms:

two transport formats: TransportBlocks = 2, TB size = 640 bits; TansportBlock = 0, Size = 640.

coding = turbo; CRCsize = 16: RateMatching = 172

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_640_TFS_UE

Group

ASN1 Type : DedicatedTransChTFS

Derivation Path Encoding Variation:

Comments : transport format set for transport channel used in CreateCell_DCH_64kCS_RAB_SRB for

message sent to UE

Constraint Value

```
tti tti20 :{ {
  rlc_Size octetModeType1 : sizeType2 : {part1 11, part2 2},
  numberOfTbSizeList { zero : NULL, small : 2},
  logicalChannelList allSizes: NULL
semistaticTF Information {
 channelCodingType turbo: NULL,
 rateMatchingAttribute 172,
 crc_Size crc16
```

Detailed Comments: For DCH1 (34.108 cl. 6.10.2.4.13):

TTI = 20 ms:

two transport formats:

TransportBlocks = 2, TB size = 640 bits; TansportBlock = 0, Size = 640.

rlc_Size = TB_Size (DCH, w/o MUX)

coding = turbo; CRCsize = 16; RateMatching = 172

Constraint Name : c_DCH_81_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RAB subflow#1 on dedicated channel

Constraint Value

```
{
tti tti20 :{{ tb_Size 81,
    numberOfTbSizeList { zero : NULL },
    logicalChannelList allSizes : NULL
},
{ tb_Size 39,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
{ tb_Size 81,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
}
```

Detailed Comments: TS 34.108 cl. 6.10.2.4.1.4:

TTI = 20 ms;

three transport formats: TransportBlocks = 0, TB size = 81 bits; TransportBlocks = 1, TB size = 39

bits; TansportBlock = 1, Size = 81.

Constraint Name : c_DCH_81_TFS_DL

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RAB subflow#1 on dedicated channel

Constraint Value

```
{
tti tti20 :{ { tb_Size 0,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
    { tb_Size 39,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
    { tb_Size 81,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
    semistaticTF_Information {
        channelCodingType convolutional :third,
        rateMatchingAttribute 200,
        crc_Size crc12
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:

TTI = 20 ms;

 $three\ transport Flocks = 1,\ TB\ size = 0\ bits;\ Transport Blocks = 1,\ TB\ size = 39$

bits; TansportBlock = 1, Size = 81.

Constraint Name : c_DCH_81_TFS_DL_UE

Group :

ASN1 Type : DedicatedTransChTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RAB subflow#1 on dedicated channel

Constraint Value

```
{
tti tti20 :{ { rlc_Size bitMode : sizeType1: 0,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
{ rlc_Size bitMode : sizeType1 : 39,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
{ rlc_Size bitMode : sizeType1 : 81,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
{ rlc_Size bitMode : sizeType1 : 81,
    numberOfTbSizeList { one : NULL },
    logicalChannelList allSizes : NULL
},
semistaticTF_Information {
    channelCodingType convolutional :third,
    rateMatchingAttribute 200,
    crc_Size crc12
}
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.4:

TTI = 20 ms;

three transport formats: TransportBlocks = 1, TB size = 0 bits; TransportBlocks = 1, TB size = 39

bits; TansportBlock = 1, Size = 81.

Constraint Name : c_DCH_81_TFS_UE

Group :

ASN1 Type : DedicatedTransChTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RAB subflow#1 on dedicated channel used in message sent to UE

Constraint Value

```
tti tti20 :{ { rlc_Size bitMode : sizeType1: 81,
   numberOfTbSizeList { zero : NULL },
   logicalChannelList allSizes: NULL
  { rlc_Size bitMode : sizeType1 : 39,
   numberOfTbSizeList { one : NULL },
   logicalChannelList allSizes : NULL
  { rlc_Size bitMode : sizeType1: 81,
   numberOfTbSizeList { one : NULL },
   logicalChannelList allSizes: NULL
  }
 semistaticTF_Information {
  channelCodingType convolutional :third,
  rateMatchingAttribute 200,
  crc_Size crc12
Detailed Comments: TS 34.108 cl. 6.10.2.4.1.4:
                        TTI = 20 \text{ ms};
```

three transport formats:

TransportBlocks = 0, TB size = 81 bits; TransportBlocks = 1, TB size = 39 bits; TansportBlock = 1,

Size = 81.

rlc_Size = TB_Size (DCH, w/o MUX)

```
ASN.1 Type Constraint Declaration
Constraint Name
                  : c_DL_AddReconfTransChInfo_WithoutQuality (
                    p_DITrChId:TransportChannelIdentity;
                    p_UITrChId:TransportChannelIdentity
Group
ASN1 Type
                  : DL_AddReconfTransChInformation
Derivation Path
Encoding Variation:
Comments
                                                Constraint Value
 dl_TransportChannelType dch,
 dl_transportChannelIdentity p_DITrChId,
 tfs_SignallingMode sameAsULTrCH:
  ul_TransportChannelType dch,
  ul_TransportChannelIdentity p_UITrChId
 dch_QualityTarget OMIT
Detailed Comments:
```

```
ASN.1 Type Constraint Declaration
Constraint Name
                  : c_DL_AddReconfTransChInfoListTM_12_2k
Group
ASN1 Type
                  : DL_AddReconfTransChInfoList
Derivation Path
Encoding Variation:
Comments
                                                Constraint Value
  dl_TransportChannelType dch,
  dl_transportChannelIdentity tsc_DL_DCH1,
  tfs_SignallingMode explicit_config : dedicatedTransChTFS : c_DCH_81_TFS_DL_UE,
  dch_QualityTarget OMIT
 c\_DL\_AddReconfTransChInfo\_WithoutQuality(tsc\_DL\_DCH2, \, tsc\_UL\_DCH2),
 c\_DL\_AddReconfTransChInfo\_WithoutQuality(tsc\_DL\_DCH3, tsc\_UL\_DCH3),
 c_DL_AddReconfTransChInfo(tsc_DL_DCH5, tsc_UL_DCH5)
Detailed Comments:
```


Constraint Name : c_DL_CommonInformationRB_SetUpSpeech (p_Sf: SF512_AndPilot)

Group :

ASN1 Type : DL_CommonInformation

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
dl_DPCH_InfoCommon{
 cfnHandling maintain :NULL,
 modeSpecificInfo fdd:{
  dl_DPCH_PowerControlInfo {
   modeSpecificInfo fdd:{
    dpc_Mode singleTPC
   }
  },
  powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
  dl_rate_matching_restriction OMIT,
  spreadingFactorAndPilot p_Sf,
  positionFixedOrFlexible fixed,
  tfci_Existence FALSE
}
modeSpecificInfo fdd:{
 defaultDPCH_OffsetValue OMIT,
 dpch\_CompressedModeInfo\ OMIT ,
 tx_DiversityMode noDiversity,
 ssdt_Information OMIT
```


Constraint Value

```
rab_Info {
  rab_Identity gsm_MAP_RAB_Identity: p_RAB_Id,
  cn_DomainIdentity cs_domain,
  re_EstablishmentTimer p_Reesttimer
 rb_InformationSetupList {{
    rb_Identity tsc_RB10,
   pdcp_Info OMIT,
    rlc_InfoChoice rlc_Info: p_RLC_Info,
    rb_MappingInfo {{
      ul_LogicalChannelMappings oneLogicalChannel:{
       ul_TransportChannelType dch: tsc_UL_DCH1,
       logicalChannelIdentity OMIT,
       rlc_SizeList configured :NULL,
       mac_LogicalChannelPriority 7
      dl_LogicalChannelMappingList {{
        dl_TransportChannelType dch: tsc_DL_DCH1,
        logicalChannelIdentity OMIT
   }}
 }}
}
```


Constraint Value

```
rab_Info {
  rab_Identity gsm_MAP_RAB_Identity: p_RAB_Id,
  cn_DomainIdentity cs_domain,
  re_EstablishmentTimer p_Reesttimer
 rb_InformationSetupList {{
    rb_Identity tsc_RB10,
   pdcp_Info OMIT,
    rlc_InfoChoice rlc_Info: p_RLC_Info,
    rb_MappingInfo {{
      ul_LogicalChannelMappings oneLogicalChannel:{
       ul_TransportChannelType dch: tsc_UL_DCH1,
       logicalChannelIdentity OMIT,
       rlc_SizeList configured :NULL,
       mac_LogicalChannelPriority 7
      dl_LogicalChannelMappingList {{
        dl_TransportChannelType dch: tsc_DL_DCH1,
        logicalChannelIdentity OMIT
   }}
 }}
}
```

ASN.1 Type Constraint Declaration Constraint Name : c_RAB_InfoSetupDCH_PS_64k (p_Reesttimer: Re_EstablishmentTimer; p_RAB_Id: BITSTRING; p_RLC_Info: RLC_Info) Group : ASN1 Type : RAB_InformationSetup Derivation Path :

Derivation Path : Encoding Variation : Comments : -

Constraint Value

```
rab_Info {
 rab_Identity gsm_MAP_RAB_Identity: p_RAB_Id,
 cn_DomainIdentity ps_domain,
 re_EstablishmentTimer p_Reesttimer
rb_InformationSetupList {{
  rb_Identity tsc_RB20,
  pdcp_Info {
   losslessSRNS_RelocSupport notSupported : NULL,
   pdcp_PDU_Header absent,
   headerCompressionInfoList OMIT
  rlc_InfoChoice rlc_Info: p_RLC_Info,
  rb_MappingInfo {{
    ul_LogicalChannelMappings oneLogicalChannel: {
     ul_TransportChannelType dch : tsc_UL_DCH1,
     logicalChannelIdentity OMIT,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 8
    dl_LogicalChannelMappingList {{
       dl_TransportChannelType dch : tsc_DL_DCH1,
       logicalChannelIdentity OMIT
    }}
   { --RB_MappingInfo
    ul_LogicalChannelMappings oneLogicalChannel:{ --UL_LogicalChannelMapping,
     ul_TransportChannelType rach: NULL,
     logicalChannelIdentity tsc_UL_DTCH1,
     rlc_SizeList explicitList : { { rlc_SizeIndex 2} },
     mac_LogicalChannelPriority 8
    dl_LogicalChannelMappingList {{
       dl_TransportChannelType fach:NULL,
       logicalChannelIdentity tsc_DL_DTCH1
    }}
  }}
}}
```

Constraint Name : c_RAB_InfoSetupTM_12_2k (

p_ReEstTimer : Re_EstablishmentTimer ;

p_RAB_Id : BITSTRING)

Group

ASN1 Type : RAB_InformationSetup

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
rab_Info {
 rab_Identity gsm_MAP_RAB_Identity: p_RAB_Id,
 cn_DomainIdentity cs_domain,
 re_EstablishmentTimer p_ReEstTimer
rb_InformationSetupList {{ --RB_InformationSetupList
  rb_Identity tsc_RB10,
  pdcp_Info OMIT,
  rlc_InfoChoice rlc_Info: c_RLC_InfoTM_Def,
  rb_MappingInfo {{ --RB_MappingOption
    ul_LogicalChannelMappings oneLogicalChannel: {
      ul_TransportChannelType dch : tsc_UL_DCH1,
     logicalChannelIdentity OMIT,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 6
    dl_LogicalChannelMappingList {{
       dl_TransportChannelType dch : tsc_DL_DCH1,
       logicalChannelIdentity OMIT
    }}
  }}
 },
  rb_Identity tsc_RB11,
  pdcp_Info OMIT,
  rlc_InfoChoice rlc_Info: c_RLC_InfoTM_Def,
  rb_MappingInfo {{
    ul_LogicalChannelMappings oneLogicalChannel:{
     ul_TransportChannelType dch: tsc_UL_DCH2,
     logicalChannelIdentity OMIT,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 6
    dl_LogicalChannelMappingList {{
       dl TransportChannelType dch: tsc DL DCH2,
       logicalChannelIdentity OMIT
    }}
  }}
  rb_Identity tsc_RB12,
  pdcp_Info OMIT,
  rlc_InfoChoice rlc_Info: c_RLC_InfoTM_Def,
  rb_MappingInfo {{
    ul_LogicalChannelMappings oneLogicalChannel:{
     ul_TransportChannelType dch: tsc_UL_DCH3,
     logicalChannelIdentity OMIT,
     rlc_SizeList configured :NULL,
     mac_LogicalChannelPriority 6
    dl_LogicalChannelMappingList {{
       dl_TransportChannelType dch: tsc_DL_DCH3,
```

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```
ASN.1 Type Constraint Declaration

Constraint Value

logicalChannelIdentity OMIT

}}

Petailed Comments:
```

```
ASN.1 Type Constraint Declaration

Constraint Name : c_RLC_InfoTM_Def
Group :
ASN1 Type : RLC_Info
Derivation Path :
Encoding Variation :
Comments :

Constraint Value

{
ul_RLC_Mode ul_TM_RLC_Mode:{
transmissionRLC_Discard OMIT,
segmentationIndication FALSE
},
dl_RLC_Mode dl_TM_RLC_Mode:{
segmentationIndication FALSE
},
Detailed Comments :
```

Constraint Name : c_TFCS_Cmpl0_1_11_12_13_23_Rx

Group : TFCS
ASN1 Type : TFCS
Derivation Path : Encoding Variation :

Comments : TFCS information without power offset information – for receiver

Constraint Value

Constraint Name : c_TFCS_Cmpl0_1_11_12_13_23_Tx (p_PowerOffsetInformation : PowerOffsetInformation)

Group : TFCS
ASN1 Type : TFCS
Derivation Path : Encoding Variation :

Comments : TFCS information with power offset information – for transmitter

Constraint Value

Constraint Name : c_TrChInfoDL_122_AMR

Group :

ASN1 Type : TrCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    dlconnectedTrCHList { {
        trchid tsc_DL_DCH1,
        transportChannelInfo c_DCH_81_TFS_DL
    },
    {
        trchid tsc_DL_DCH2,
        transportChannelInfo c_DCH_103_TFS
    },
    {
        trchid tsc_DL_DCH3,
        transportChannelInfo c_DCH_60_TFS
    },
    {
        trchid tsc_DL_DCH5,
        transportChannelInfo c_DCH_148_TFS_DL
    }},
    dITFCS c_TFCS_Cmpl0_1_11_12_13_23_Tx ( c_PowerOffsetInfoBelow64k )
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cb_TrChInfoDL_336_148

Group :

ASN1 Type : TrCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    dlconnectedTrCHList {
        { trchid tsc_DL_DCH1,
            transportChannelInfo c_DCH_336_TFS},
        { trchid tsc_DL_DCH5,
            transportChannelInfo c_DCH_148_TFS_DL}},
        dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( c_PowerOffsetInfoHigher64k )
    }
```

Constraint Name : c_TrChInfoDL_576_148

Group

ASN1 Type : TrCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    dlconnectedTrCHList {
        { trchid tsc_DL_DCH1,
            transportChannelInfo c_DCH_576_TFS},
        { trchid tsc_DL_DCH5,
            transportChannelInfo c_DCH_148_TFS_DL }},
        dlTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( c_PowerOffsetInfoHigher64k ) --- sent to SS
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoDL_640_148

Group

ASN1 Type : TrCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    dlconnectedTrCHList {
        { trchid tsc_DL_DCH1,
            transportChannelInfo c_DCH_640_TFS},
        { trchid tsc_DL_DCH5,
            transportChannelInfo c_DCH_148_TFS_DL}},
        dlTFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k ) --- sent to SS
}
```

ASN.1 Type Constraint Declaration Constraint Name : c_TrChInfoUL_122_AMR

Group :

ASN1 Type : TrCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    ulconnectedTrCHList {
      {
            trchid tsc_UL_DCH1,
            transportChannelInfo c_DCH_81_TFS
      },
      {
            trchid tsc_UL_DCH2,
            transportChannelInfo c_DCH_103_TFS
      },
      {
            trchid tsc_UL_DCH3,
            transportChannelInfo c_DCH_60_TFS
      },
      {
            trchid tsc_UL_DCH5,
            transportChannelInfo c_DCH_148_TFS_UL
      },
      ulTFCS c_TFCS_Cmpl0_1_11_12_13_23_Rx --- sent to SS
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cb_TrChInfoUL_336_148

Group :

ASN1 Type : TrCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
ulconnectedTrCHList {
    { trchid tsc_UL_DCH1,
        transportChannelInfo c_DCH_336_TFS },
    { trchid tsc_UL_DCH5,
        transportChannelInfo c_DCH_148_TFS_UL }},
ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx --- sent to SS
}
```

ASN.1 Type Constraint Declaration : c_TrChInfoUL_576_148

Constraint Name : c_TrChInfo Group :

ASN1 Type : TrCHInfo

Derivation Path :

Encoding Variation :
Comments :

Constraint Value

```
{
    ulconnectedTrCHList {
        { trchid tsc_UL_DCH1,
            transportChannelInfo c_DCH_576_TFS },
        { trchid tsc_UL_DCH5,
            transportChannelInfo c_DCH_148_TFS_UL }},
    ulTFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx --- sent to SS
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoUL_640_148

Group

ASN1 Type: TrCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    ulconnectedTrCHList {
        { trchid tsc_UL_DCH1,
            transportChannelInfo c_DCH_640_TFS },
        { trchid tsc_UL_DCH5,
            transportChannelInfo c_DCH_148_TFS_UL }},
    ulTFCS c_TFCS_Cmpl0_1_2_3_Rx -- sent to SS
}
```

Constraint Name : c_TrLogMappingDL_4DCCH_1DTCH

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList OMIT,
dlconnectedTrCHList {
  trchid tsc_DL_DCH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DTCH1,
     logicalChannelType dTCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 7
    rB_Identity tsc_RB10
  trchid tsc_DL_DCH5,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DCCH1,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 1
    rB_Identity tsc_RB1
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc DL DCCH2,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 2
    rB_Identity tsc_RB2
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DCCH3,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 3
    rB_Identity tsc_RB3
```

Continued on next page

ASN.1 Type Constraint Declaration Constraint Value { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType dch, logicalChannelIdentity tsc_DL_DCCH4, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 4 }, rB_Identity tsc_RB4 } } Detailed Comments :

Constraint Name : cb_TrLogMappingDL_4DCCH_1DTCH_PS

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList OMIT,
dlconnectedTrCHList {
  trchid tsc_DL_DCH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DTCH1,
     logicalChannelType dTCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 8
    rB_Identity tsc_RB20
  trchid tsc_DL_DCH5,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DCCH1,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 1
    rB_Identity tsc_RB1
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc DL DCCH2,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 2
    rB_Identity tsc_RB2
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DCCH3,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 3
    rB_Identity tsc_RB3
```

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ASN.1 Type Constraint Declaration Constraint Value { logicalChannel_Mapping dl_LogicalChannelMapping : { macHeaderManipulation normalMacHeader, dl_TransportChannelType dch, logicalChannelIdentity tsc_DL_DCCH4, logicalChannelType dCCH, rlc_SizeList configured : NULL, mac_LogicalChannelPriority 4 }, rB_Identity tsc_RB4 } } Detailed Comments :

Constraint Name : c_TrLogMappingDL_4DCCH_3DTCH

Group

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList OMIT,
dlconnectedTrCHList {
  trchid tsc_DL_DCH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DTCH1,
     logicalChannelType dTCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 6
    rB_Identity tsc_RB10
  trchid tsc_DL_DCH2,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DTCH2,
     logicalChannelType dTCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 6
    rB_Identity tsc_RB11
  trchid tsc_DL_DCH3,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DTCH3,
     logicalChannelType dTCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 6
    rB_Identity tsc_RB12
  trchid tsc_DL_DCH5,
  trCH_LogCHMappingList {
```

Continued on next page

Constraint Value

```
logicalChannel_Mapping dl_LogicalChannelMapping : {
macHeaderManipulation normalMacHeader,
 dl_TransportChannelType dch,
 logicalChannelIdentity tsc_DL_DCCH1,
logicalChannelType dCCH,
 rlc_SizeList configured: NULL,
mac_LogicalChannelPriority 1
rB_Identity tsc_RB1
logicalChannel_Mapping dl_LogicalChannelMapping: {
macHeaderManipulation normalMacHeader,
 dl_TransportChannelType dch,
logicalChannelIdentity tsc_DL_DCCH2,
logicalChannelType dCCH,
 rlc_SizeList configured: NULL,
mac_LogicalChannelPriority 2
rB_Identity tsc_RB2
logicalChannel_Mapping dl_LogicalChannelMapping: {
macHeaderManipulation normalMacHeader,
 dl_TransportChannelType dch,
logicalChannelIdentity tsc_DL_DCCH3,
 logicalChannelType dCCH,
rlc_SizeList configured: NULL,
mac_LogicalChannelPriority 3
rB_Identity tsc_RB3
logicalChannel_Mapping dl_LogicalChannelMapping : {
macHeaderManipulation normalMacHeader,
dl_TransportChannelType dch,
logicalChannelIdentity tsc_DL_DCCH4,
 logicalChannelType dCCH,
 rlc_SizeList configured: NULL,
 mac_LogicalChannelPriority 4
rB_Identity tsc_RB4
```

Constraint Name : c_TrLogMappingUL_4DCCH_1DTCH

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList {
  trchid tsc_UL_DCH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DTCH1,
     logicalChannelType dTCH
    rB_Identity tsc_RB10
  trchid tsc_UL_DCH5,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH1,
     logicalChannelType dCCH
    rB_Identity tsc_RB1
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH2,
     logicalChannelType dCCH
    rB_Identity tsc_RB2
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH3,
     logicalChannelType dCCH
    rB_Identity tsc_RB3
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH4,
     logicalChannelType dCCH
    rB_Identity tsc_RB4
```

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ASN.1 Type Constraint Declaration
Constraint Value
}
}
} }
Detailed Comments :

Constraint Name : cb_TrLogMappingUL_4DCCH_1DTCH_PS

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList {
  trchid tsc_UL_DCH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DTCH1,
     logicalChannelType dTCH
    rB_Identity tsc_RB20
  trchid tsc_UL_DCH5,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH1,
     logicalChannelType dCCH
    rB_Identity tsc_RB1
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH2,
     logicalChannelType dCCH
    rB_Identity tsc_RB2
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH3,
     logicalChannelType dCCH
    rB_Identity tsc_RB3
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH4,
     logicalChannelType dCCH
    rB_Identity tsc_RB4
```

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ASN.1 Type Constraint Declaration		
Constraint Value		
}		
}		
retailed Comments :		

Constraint Name : c_TrLogMappingUL_4DCCH_3DTCH

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList {
  trchid tsc_UL_DCH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DTCH1,
     logicalChannelType dTCH
    rB_Identity tsc_RB10
  trchid tsc_UL_DCH2,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DTCH2,
     logicalChannelType dTCH
    rB_Identity tsc_RB11
  trchid tsc_UL_DCH3,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DTCH3,
     logicalChannelType dTCH
    rB_Identity tsc_RB12
  trchid tsc_UL_DCH5,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH1,
     logicalChannelType dCCH
    rB_Identity tsc_RB1
```

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Constraint Value

```
logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH2,
     logicalChannelType dCCH
    rB_Identity tsc_RB2
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH3,
     logicalChannelType dCCH
    rB_Identity tsc_RB3
    logicalChannel_Mapping ul_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH4,
     logicalChannelType dCCH
    rB_Identity tsc_RB4
dlconnectedTrCHList OMIT
```

ASN.1 Type Constraint Declaration Constraint Name : c_UL_AddReconfTransChInfoListTM_12_2k Group **ASN1 Type** : UL_AddReconfTransChInfoList **Derivation Path Encoding Variation:** Comments **Constraint Value** ul_TransportChannelType dch, transportChannelldentity tsc_UL_DCH1, transportFormatSet dedicatedTransChTFS: c_DCH_81_TFS_UE ul_TransportChannelType dch, transportChannelldentity tsc UL DCH2, transportFormatSet dedicatedTransChTFS: c_DCH_103_TFS_UE ul_TransportChannelType dch, transportChannelldentity tsc_UL_DCH3, transportFormatSet dedicatedTransChTFS: c_DCH_60_TFS_UE ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH5,

transportFormatSet dedicatedTransChTFS: c_DCH_148_TFS_UE_UL

Detailed Comments:

ASN.1 Type Constraint Declaration Constraint Name : c_UL_AddReconfTransChInfoListTM_57_6k Group **ASN1 Type** : UL_AddReconfTransChInfoList **Derivation Path Encoding Variation:** Comments **Constraint Value** ul_TransportChannelType dch, transportChannelldentity tsc UL DCH1, transportFormatSet dedicatedTransChTFS: c_DCH_576_TFS_UE ul_TransportChannelType dch, transportChannelIdentity tsc_UL_DCH5, transportFormatSet dedicatedTransChTFS: c_DCH_148_TFS_UE_UL **Detailed Comments:**

Constraint Name : c_UL_AddReconfTransChInfoListTM_64k

Group :

ASN1 Type : UL_AddReconfTransChInfoList

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH1,
    transportFormatSet dedicatedTransChTFS: c_DCH_640_TFS_UE
},
    {
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH5,
    transportFormatSet dedicatedTransChTFS: c_DCH_148_TFS_UE_UL
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_CommTrChInfoTM_12_2k

Group :

ASN1 Type : UL_CommonTransChInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    tfc_Subset OMIT,
    prach_TFCS OMIT,
    modeSpecificInfo fdd:{
        ul_TFCS c_TFCS_Cmpl0_1_11_12_13_23_Tx ( c_PowerOffsetInfoBelow64k )
    }
}
```

Constraint Name : c_UL_CommTrChInfoTM_57_6k

Group :

ASN1 Type : UL_CommonTransChInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    tfc_Subset OMIT,
    prach_TFCS OMIT,
    modeSpecificInfo fdd:{
        ul_TFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( c_PowerOffsetInfoBelow64k )
    }
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_CommTrChInfoTM_64k

Group :

ASN1 Type : UL_CommonTransChInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    tfc_Subset OMIT,
    prach_TFCS OMIT,
    modeSpecificInfo fdd:{
        ul_TFCS c_TFCS_Cmpl0_1_2_3_Tx ( c_PowerOffsetInfoHigher64k )
    }
}
```

Constraint Name: cb_DL_DPCH_122_AMR (p_DL_CommonInformation : DL_CommonInformation;

p_SecondaryScramblingCode : SecondaryScramblingCode)

Group

ASN1 Type : DL_DPCHInfo

Derivation Path : Encoding Variation : Comments :

```
Constraint Value
```

```
dl\_CommonInformation\ p\_DL\_CommonInformation,
dl_DPCH_InfoPerRL fdd: {
 pCPICH_UsageForChannelEst mayBeUsed,
 dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
 -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
 -- Actual value DPCH-FrameOffset = IE value * 256

    Actual value DefaultDPCH-OffsetValueFDD = IE value * 512 ,

 dl_ChannelisationCodeList { { secondaryScramblingCode p_SecondaryScramblingCode,
   sf_AndCodeNumber tsc_DL_DPCH1_ChC_Speech
 }},
 tpc_CombinationIndex 0
powerOffsetOfTFCI_PO1 tsc_DPCH_PowerOffsetTFCI,
powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
dl_TxPower tsc_DL_TxPower_DPCH,
dl_TxPowerMax 15.
dl_TxPowerMin -35
```

ASN.1 Type Constraint Declaration

Constraint Name : c_AICH_Info

Group :

ASN1 Type

Detailed Comments:

: AICH_Info

Derivation Path : Encoding Variation :

Comments: no transmission diversity, AICH timing = e0

Constraint Value

{
 channelisationCode256 tsc_AlCH1_ChC,
 sttd_Indicator FALSE,
 aich_TransmissionTiming e0

Constraint Name : c_DCH_148_TFS_DL

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for signalling bearer on dedicated channel

```
Constraint Value
```

```
{
  tti tti40 :{{ tb_Size 148,
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
      channelCodingType convolutional :third,
      rateMatchingAttribute 170,
      crc_Size crc16
  }
}
```

Detailed Comments: TS 34.108 cl. 6.10.2.4.1.2:

TTI = 40 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

rlc_Size = RLC PDU size =148 bits.

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_148_TFS_UE_UL

Group

ASN1 Type : DedicatedTransChTFS

Derivation Path : Encoding Variation :

Comments : transport format set for signalling bearer on dedicated channel used in message sent to UE

Constraint Value

```
{
    tti tti40 :{{ rlc_Size bitMode : sizeType2 : {part1 2, part2 OMIT},
        numberOfTbSizeList { zero : NULL, one : NULL},
        logicalChannelList allSizes : NULL
    }},
    semistaticTF_Information {
        channelCodingType convolutional :third,
        rateMatchingAttribute 170,
        crc_Size crc16
    }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.2:

TTI = 40 ms;

two transport formats:

TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size = TB_Size -4 = 144 bits.(DCH, w/ MUX)

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

Constraint Name : c_DCH_148_TFS_UL

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for signalling bearer on dedicated channel

Constraint Value

```
{
  tti tti40 :{{ tb_Size 148,
      numberOfTbSizeList { zero : NULL, one : NULL},
      logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
      channelCodingType convolutional :third,
      rateMatchingAttribute 170,
      crc_Size crc16
  }
}
```

Detailed Comments: TS 34.108 cl. 6.10.2.4.1.2:

TTI = 40 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

rlc_Size = RLC PDU size =148 bits.

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 170

ASN.1 Type Constraint Declaration

Constraint Name : c_DCH_148_TTI_10_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for signalling bearer on dedicated channel

Constraint Value

```
{
    tti tti10 :{{ tb_Size 148,
        numberOfTbSizeList { zero : NULL, one : NULL},
        logicalChannelList allSizes : NULL
    }},
    semistaticTF_Information {
        channelCodingType convolutional :third,
        rateMatchingAttribute 192, — dummy value, value is not needed for 13.6 kbps
        crc_Size crc16
    }
}
```

Detailed Comments : TS 34.108 cl. 6.10.2.4.1.3:

TTI = 10 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

rlc_Size = RLC PDU size =148 bits.

coding = convolutional; coding rate = 1/3; CRCsize = 16;

RateMatching = 192 (dummy value, value is not needed for 13.6 kbps)

Constraint Name : c_DCH_148_TTI_10_TFS_UE

Group

ASN1 Type : DedicatedTransChTFS

Derivation Path Encoding Variation:

Comments : transport format set for signalling bearer on dedicated channel used in message sent to UE

Constraint Value

```
tti tti10 :{{ rlc_Size bitMode : sizeType2 : {part1 2, part2 OMIT},
  numberOfTbSizeList { zero : NULL, one : NULL},
  logicalChannelList allSizes: NULL
semistaticTF_Information {
 channelCodingType convolutional :third,
 rateMatchingAttribute 192, -- dummy value, value is not needed for 13.6 kbps
 crc_Size crc16
```

Detailed Comments: TS 34.108 cl. 6.10.2.4.1.3:

TTI = 10 ms;

two transport formats:

TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148. rlc_Size = RLC PDU size = TB_Size -4 =144 bits.(DCH, w/ MUX)

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 192

```
ASN.1 Type Constraint Declaration
Constraint Name
                   : c_DCH_336_TFS_UE
Group
ASN1 Type
                   : DedicatedTransChTFS
Derivation Path
Encoding Variation:
Comments
                    : transport format set for transport channel used in CreateCell_DCH_64kPS_RAB_SRB for
                     message sent to UE
                                                   Constraint Value
 tti tti20 :{ {
   rlc_Size octetModeType1 : sizeType2 : {part1 2, part2 OMIT},
   numberOfTbSizeList { zero : NULL, one : NULL, small : 2, small : 3, small : 4 },
   logicalChannelList allSizes: NULL
 semistaticTF_Information {
  channelCodingType turbo: NULL,
  rateMatchingAttribute 150,
  crc_Size crc16
Detailed Comments: 3GPP TS 34.108 clause 6.10.2.4.1.24
                      TTI = 20 \text{ ms};
                      5 transport formats:
                      TB size always=336 bits; TransportBlocks = 0,1,2,3 and 4;
                      rlsc_Size = TB_Size ( DCH, w/o MUX)
                      coding = turbo;
                      CRCsize = 16;
                      RateMatching = 150
```

```
ASN.1 Type Constraint Declaration
Constraint Name : c_DL_AddReconfTransChInfo (
                    p_DITrChId:TransportChannelIdentity;
                    p_UITrChId:TransportChannelIdentity
Group
ASN1 Type
                  : DL_AddReconfTransChInformation
Derivation Path
Encoding Variation:
Comments
                                                Constraint Value
 dl_TransportChannelType dch,
 dl_transportChannelIdentity p_DITrChId,
 tfs_SignallingMode sameAsULTrCH:
  ul_TransportChannelType dch,
  ul_TransportChannelIdentity p_UITrChId
 dch_QualityTarget{
  bler_QualityValue -20
Detailed Comments:
```

Constraint Name : c_DL_AddReconfTransChInfoListDCH_PS_64k

Group :

ASN1 Type : DL_AddReconfTransChInfoList

Derivation Path : Encoding Variation : Comments :

Constraint Value

c_DL_AddReconfTransChInfo (tsc_DL_DCH1 , tsc_UL_DCH1), c_DL_AddReconfTransChInfo (tsc_DL_DCH5, tsc_UL_DCH5) }

Constraint Name : c_DL_CommonInformationDCH_DPCH_Offset (p_Sf: SF512_AndPilot)

Group :

ASN1 Type : DL_CommonInformation

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
dl_DPCH_InfoCommon{
 cfnHandling initialise : {
  cfntargetsfnframeoffset OMIT
 modeSpecificInfo fdd:{
  dl_DPCH_PowerControlInfo {
   modeSpecificInfo fdd:{
    dpc_Mode singleTPC
  },
  powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
  dl_rate_matching_restriction OMIT,
  spreadingFactorAndPilot p_Sf,
  positionFixedOrFlexible flexible,
  tfci_Existence TRUE
 }
modeSpecificInfo fdd:{
 defaultDPCH_OffsetValue tsc_DefaultDPCH_OffsetValue,
 dpch_CompressedModeInfo OMIT,
 tx_DiversityMode noDiversity,
 ssdt_Information OMIT
}
```

Detailed Comments: NOTE: not aligned with 34.108. Reason: The value 'inactive' in 34.018 is not valid with asn.1

definition v360

Constraint Name : c_DL_CommonInformationRB_SetUp (p_Sf: SF512_AndPilot)

Group :

ASN1 Type : DL_CommonInformation

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
dl_DPCH_InfoCommon{
 cfnHandling maintain: NULL,
 modeSpecificInfo fdd:{
  dl_DPCH_PowerControlInfo {
   modeSpecificInfo fdd:{
    dpc_Mode singleTPC
   }
  },
  powerOffsetPilot_pdpdch tsc_DPCH_PowerOffsetPILOT,
  dl_rate_matching_restriction OMIT,
  spreadingFactorAndPilot p_Sf,
  positionFixedOrFlexible flexible,
  tfci_Existence TRUE
 }
modeSpecificInfo fdd:{
 defaultDPCH_OffsetValue OMIT,
 dpch\_CompressedModeInfo\ OMIT ,
 tx_DiversityMode noDiversity,
 ssdt\_Information\ OMIT
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonTransChInfoDCH(p_Tfcs:TFCS)

Group :

ASN1 Type : DL_CommonTransChInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
sccpch_TFCS OMIT,
modeSpecificInfo fdd:
{
    dl_Parameters dl_DCH_TFCS : p_Tfcs
}
}
```

```
ASN.1 Type Constraint Declaration

Constraint Name : c_DL_CommonTransChInfoSameAsUL

Group :
ASN1 Type : DL_CommonTransChInfo

Derivation Path :
Encoding Variation :
Comments :

Constraint Value

{
sccpch_TFCS OMIT,
modeSpecificInfo fdd:{
dl_Parameters sameAsUL: NULL
}
}
Detailed Comments :
```

```
ASN.1 Type Constraint Declaration
Constraint Name
                : c_DL_InfoPerRL_DPCH_Offset (
                    p_ScrmbCode : PrimaryScramblingCode ;
                   p_SecScrmbCode : SecondaryScramblingCode ;
                    p_Sf: SF512_AndCodeNumber
Group
ASN1 Type
                  : DL_InformationPerRL_List
Derivation Path
Encoding Variation:
Comments
                                               Constraint Value
{{
  modeSpecificInfo fdd : {
   primaryCPICH_Info { primaryScramblingCode p_ScrmbCode } ,
```

```
pdsch_SHO_DCH_Info OMIT,
 pdsch_CodeMapping OMIT
dl_DPCH_InfoPerRL fdd : {
 pCPICH_UsageForChannelEst mayBeUsed,
 dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
 -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
 -- Actual value DPCH-FrameOffset = IE value * 256
 -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512
 secondaryCPICH_Info OMIT,
 dl_ChannelisationCodeList {{
   secondaryScramblingCode p_SecScrmbCode,
   sf_AndCodeNumber p_Sf,
   scramblingCodeChange noCodeChange
 tpc\_CombinationIndex\ tsc\_TPC\_CombinationIndex,
 ssdt_CellIdentity OMIT,
 closedLoopTimingAdjMode OMIT
sccpch_InfoforFACH OMIT
```

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Constraint Name : c_DL_InformationPerRL (p_ScrmbCode: PrimaryScramblingCode; p_Sf:

SF512_AndCodeNumber; p_SecondaryScramblingCode : SecondaryScramblingCode)

Group :

ASN1 Type : DL_InformationPerRL_List

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{{
  modeSpecificInfo fdd: {
   primaryCPICH_Info { primaryScramblingCode p_ScrmbCode },
   pdsch_SHO_DCH_Info OMIT,
   pdsch_CodeMapping OMIT
  dl_DPCH_InfoPerRL fdd : {
   pCPICH_UsageForChannelEst mayBeUsed,
   dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
   -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
   -- Actual value DPCH-FrameOffset = IE value * 256
   -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512
   secondaryCPICH_Info OMIT,
   dl_ChannelisationCodeList {{
     secondary Scrambling Code\ p\_Secondary Scrambling Code\ ,
     sf_AndCodeNumber p_Sf,
     scramblingCodeChange OMIT
   tpc_CombinationIndex tsc_TPC_CombinationIndex,
   ssdt_CellIdentity OMIT,
   closedLoopTimingAdjMode OMIT
  sccpch_InfoforFACH OMIT
```

Constraint Name : c_FACH_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for FACH

```
Constraint Value
```

```
{
  tti tti10 :{ {
    tb_Size 168,
    numberOfTbSizeList { zero : NULL, one : NULL, small : 2 },
    logicalChannelList allSizes : NULL
  }},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 220,
    crc_Size crc16
  }
}
```

Detailed Comments: TTI = 10 ms;

three transport formats: TransportBlocks = 2, TB size = 168 bits; TransportBlocks = 1, TB size =

168 bits; TansportBlock = 0, Size = 168.

coding = convolutional;

rate = 1/2; CRCsize = 16; RateMatching = 220

ASN.1 Type Constraint Declaration

Constraint Name : c_FACH_TFS_PS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for FACH (PS) used for SS configuration

Constraint Value

```
tti tti10 :{ {
    tb_Size 360,
    numberOfTbSizeList { zero : NULL, one : NULL},
    logicalChannelList allSizes : NULL
    }},
    semistaticTF_Information {
        channelCodingType turbo : NULL,
        rateMatchingAttribute 130,
        crc_Size crc16
    }
}
```

Detailed Comments: TTI = 10 ms;

two transport formats: TransportBlocks = 1, TB size = 360 bits; TansportBlock = 0, Size = 360.

coding = turbo; CRCsize = 16; RateMatching = 130

Constraint Name : c_FACH_TFS_PS_UE

Group :

ASN1 Type : CommonTransChTFS

Derivation Path : Encoding Variation :

Comments: transport format set for FACH (PS)

Constraint Value

```
{
  tti tti10 :{ {
    rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType2: 3},
    numberOfTbSizeList { zero : NULL, one : NULL},
    logicalChannelList allSizes : NULL
}},
semistaticTF_Information {
    channelCodingType turbo : NULL,
    rateMatchingAttribute 130,
    crc_Size crc16
}
}
```

Detailed Comments: TTI = 10 ms;

two transport formats:

TransportBlocks = 1, TB size = 360 bits; TansportBlock = 0, Size = 360.

rlc_Size = TB_Size (FACH)

coding = turbo; CRCsize = 16; RateMatching = 130

Constraint Name : c_FACH_TFS_UE

Group :

ASN1 Type : CommonTransChTFS

Derivation Path : Encoding Variation :

Comments: transport format set for FACH

```
Constraint Value
```

```
{
  tti tti10 :{ {
    rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 15},
    numberOfTbSizeList { zero : NULL, one : NULL, small : 2},
    logicalChannelList allSizes : NULL
}},
  semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 220,
    crc_Size crc16
}
}
```

Detailed Comments: TTI = 10 ms;

three transport formats:

TransportBlocks = 2, TB size = 168 bits; TransportBlocks = 1, TB size = 168 bits; TansportBlock =

0, Size = 168.

rlc_Size = TB_Size (FACH) coding = convolutional;

rate = 1/2; CRCsize = 16; RateMatching = 220

ASN.1 Type Constraint Declaration

Constraint Name : c_FreqInfo (p_uarfcnUL , p_uarfcnDL : UARFCN)

Group

ASN1 Type : FrequencyInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    modeSpecificInfo fdd: {
        uarfcn_UL p_uarfcnUL ,
        uarfcn_DL p_uarfcnDL
    }
```

```
ASN.1 Type Constraint Declaration
```

 $\textbf{Constraint Name} \qquad \textbf{:} \ \ c_MAC_PagingCfg(p_E18: B18; p_dRX: INTEGER)$

Group :

ASN1 Type : CmacPagingConfigReq

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    pl_BitMapInfo e18: p_E18,
    dRX_CycleLength p_dRX,
    iMSI o_ConvertIMSI(px_IMSI_Def),
    t_pich_T_sccpch FALSE
```

Constraint Name : c_MIB_Def (p_CellInfo : CellInfoCfg)

Group :

ASN1 Type : MasterInformationBlock

Derivation Path : Encoding Variation :

Comments : Default setting of MIB. 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
mib_ValueTag 1,
plmn_Type gsm_MAP : {
 plmn_Identity {
  mcc o_HexToDigitsMCC ( p_CellInfo.mcc),
  mnc o_HexToDigitsMNC (p_CellInfo.mnc ) }
sibSb_ReferenceList {
  sibSb_Type sysInfoTypeSB1: 1,
  scheduling {scheduling {
    sib_Pos rep16:1
  }}
 },
 {
  sibSb_Type sysInfoType1: 1,
  scheduling {scheduling {
    sib_Pos rep64:11
  }}
  sibSb_Type sysInfoType2: 1,
  scheduling {scheduling {
    sib_Pos rep64:11
  }}
  sibSb_Type sysInfoType3: 1,
  scheduling {scheduling {
    sib_Pos rep64: 10
 },
  sibSb_Type sysInfoType4: 1,
  scheduling {scheduling {
    sib_Pos rep64: 26
  }}
  sibSb_Type sysInfoType5 : 1,
  scheduling {scheduling {
    segCount 4,
    sib_Pos rep64: 19,
    sib_PosOffsetInfo {so4, so2, so2}
  }}
}
```

Detailed Comments: Assum no segmentation for SIB1, SIB2, SIB3, SIB4.

Contains scheduling informations for SIB1, SIB2, SIB3, SIB4, SIB5 and SB1 only, the scheduling information for other SIBs are in SysInfoTypeSB1.

Information for other SIBs are in Sysinfo lypeSB1.

The value 1 of valueTags is a place holder, actual values of them will be non-zero and assigned.

dynamically in various SendSystemInformation test Steps.

Constraint Name : c_PCH_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for PCH

```
Constraint Value
```

```
{
    tti tti10 :{ {
        tb_Size 240,
            numberOfTbSizeList { zero : NULL, one : NULL},
            logicalChannelList allSizes : NULL
    }},
    semistaticTF_Information {
        channelCodingType convolutional : half,
        rateMatchingAttribute 230,
        crc_Size crc16
    }
}
```

Detailed Comments: TTI = 10 ms;

two transport formats: TransportBlocks = 1, TB size = 240 bits; TansportBlock = 0, Size = 240.

coding = convolutional;

rate = 1/2; CRCsize = 16; RateMatching = 230

ASN.1 Type Constraint Declaration

Constraint Name : c_PCH_TFS_UE

Group :

ASN1 Type : CommonTransChTFS

Derivation Path : Encoding Variation :

Comments: transport format set for PCH

Constraint Value

```
{
    tti tti10 :{ {
        rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 24},
        numberOfTbSizeList { zero : NULL, one : NULL},
        logicalChannelList allSizes : NULL
    }},
    semistaticTF_Information {
        channelCodingType convolutional : half,
        rateMatchingAttribute 230,
        crc_Size crc16
    }
}
```

Detailed Comments: TTI = 10 ms;

two transport formats:

TransportBlocks = 1, TB size = 240 bits; TansportBlock = 0, Size = 240.

rlc_Size = TB_Size (PCH) coding = convolutional;

rate = 1/2; CRCsize = 16; RateMatching = 230

```
ASN.1 Type Constraint Declaration
Constraint Name
                 : c_PagingType1_P_TMSI (
                   p_PagCause: PagingCause;
                   p_P_Tmsi : P_TMSI_GSM_MAP;
                   p_Domain: CN_DomainIdentity)
Group
ASN1 Type
                  : PagingType1
Derivation Path
Encoding Variation:
Comments
                                               Constraint Value
 pagingRecordList {
  cn_Identity:{
   pagingCause p_PagCause,
   cn_DomainIdentity p_Domain,
   cn_pagedUE_Identity p_TMSI_GSM_MAP : p_P_Tmsi
 },
 bcch_ModificationInfo OMIT,
 laterNonCriticalExtensions OMIT
Detailed Comments:
```

```
ASN.1 Type Constraint Declaration
                  : c_PagingType1_TMSI ( p_PagCause: PagingCause; p_Tmsi: TMSI_GSM_MAP;
Constraint Name
                      p_Domain : CN_DomainIdentity )
Group
ASN1 Type
                  : PagingType1
Derivation Path
Encoding Variation:
Comments
                                                Constraint Value
 pagingRecordList {
  cn_Identity:{
   pagingCause p_PagCause,
   cn_DomainIdentity p_Domain,
   cn\_pagedUE\_Identity\ tmsi\_GSM\_MAP:\ p\_Tmsi
  }
 bcch_ModificationInfo OMIT,
 laterNonCriticalExtensions OMIT
Detailed Comments:
```

Constraint Name : c_PichInfo

Group

ASN1 Type : PICH_Info

Derivation Path : Encoding Variation :

Comments : value for pi_CountPerFrame FFS

Constraint Value

fdd :{
 channelisationCode256 tsc_PICH1_ChC,
 pi_CountPerFrame e18,
 sttd_Indicator FALSE

ASN.1 Type Constraint Declaration : c_RAB_InfoListFACH_PS (p_Reesttimer: Re_EstablishmentTimer; p_RAB_Id: BITSTRING; p_RLC_Info: RLC_Info) :

ASN1 Type : RAB_InformationSetupList

Derivation Path : Encoding Variation : Comments :

Constraint Name

Group

Constraint Value

```
rab_Info { -- RAB_Info
 rab_Identity gsm_MAP_RAB_Identity : p_RAB_Id,
 cn_DomainIdentity ps_domain,
 re_EstablishmentTimer p_Reesttimer
rb_InformationSetupList {{ --RB_InformationSetupList
  rb_Identity tsc_RB20,
  pdcp_Info OMIT,
  rlc_InfoChoice rlc_Info: p_RLC_Info,
  rb_MappingInfo {
   { --RB_MappingInfo
     ul_LogicalChannelMappings oneLogicalChannel:{ --UL_LogicalChannelMapping,
      ul_TransportChannelType dch : tsc_UL_DCH1,
      logicalChannelIdentity OMIT,
      rlc_SizeList configured: NULL,
      mac_LogicalChannelPriority 8
     dl_LogicalChannelMappingList {{
       dl_TransportChannelType dch : tsc_DL_DCH1,
       logicalChannelIdentity OMIT
    }}
   },
   { --RB_MappingInfo
     ul_LogicalChannelMappings oneLogicalChannel:{ --UL_LogicalChannelMapping,
      ul_TransportChannelType rach : NULL,
      logicalChannelIdentity tsc_UL_DTCH1,
      rlc_SizeList explicitList : { { rlc_SizeIndex 2} },
      mac_LogicalChannelPriority 8
    dl_LogicalChannelMappingList {{
       dl TransportChannelType fach : NULL,
       logicalChannelIdentity tsc_DL_DTCH1
}}
```

Constraint Name : c_RACH_TFS

Group :

ASN1 Type : CommonOrDedicatedTFS

Derivation Path : Encoding Variation :

Comments: transport format set for RACH

Constraint Value

```
{
  tti tti20 :{{
     tb_Size 168,
     numberOfTbSizeList { one : NULL},
     logicalChannelList configured : NULL
},
  {
     tb_Size 360,
     numberOfTbSizeList { one : NULL },
     logicalChannelList configured : NULL
}},
  semistaticTF_Information {
     channelCodingType convolutional : half,
     rateMatchingAttribute 150,
     crc_Size crc16
}
}
```

Detailed Comments: TTI = 20 ms;

two transport formats: TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size =

360 bits;

coding = convolutional;

rate = 1/2; CRCsize = 16

Constraint Name : c_RACH_TFS_UE

Group :

ASN1 Type : CommonTransChTFS

Derivation Path : Encoding Variation :

Comments : transport format set for RACH used in message sent to UE

Constraint Value

```
{
tti tti20 :{{
    rlc_Size fdd : {octetModeRLC_SizeInfoType2 sizeType1: 15},
    numberOfTbSizeList { one : NULL},
    logicalChannelList configured : NULL
},
{
    rlc_Size fdd : { octetModeRLC_SizeInfoType2 sizeType2 : 3},
    numberOfTbSizeList { one : NULL },
    logicalChannelList configured : NULL
}},
semistaticTF_Information {
    channelCodingType convolutional : half,
    rateMatchingAttribute 150,
    crc_Size crc16
}
}
```

Detailed Comments: TTI = 20 ms;

two transport formats:

TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size = 360 bits;

rlc_Size = TB_Size (RACH)
coding = convolutional;

rate = 1/2; CRCsize = 16; RateMatching = 1

ASN.1 Type Constraint Declaration

Constraint Name : c_RB2_IntegrityProtActivationInfoList(p_RRCSN : RRC_MessageSequenceNumber)

Group :

ASN1 Type : IntegrityProtActivationInfoList

Derivation Path : Encoding Variation :

Comments : To Start Integrity on RB2 in UL

Constraint Value

```
{{
    rb_Identity tsc_RB2,
    rrc_MessageSequenceNumber p_RRCSN
}}
```

ASN.1 Type Constraint Declaration : c_RB_ActTimeInfo(p_RB_Id: INTEGER; p_N: RLC_SequenceNumber)

Constraint Name : Group :

ASN1 Type : RB_ActivationTimeInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

{
 rb_Identity p_RB_Id,
 rlc_SequenceNumber p_N

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_RLC_InfoAM_Def

Group

ASN1 Type : RLC_Info

Derivation Path : Encoding Variation : Comments :

Constraint Value

{
 ul_RLC_Mode ul_AM_RLC_Mode: cb_UL_AM_RLC ,
 dl_RLC_Mode dl_AM_RLC_Mode : cb_DL_AM_RLC
}

Constraint Name: c_RestRB_IntegrityProtActivationInfoList(p_SN0, p_SN1, p_SN3, p_SN4:

RRC_MessageSequenceNumber)

Group :

ASN1 Type : IntegrityProtActivationInfoList

Derivation Path : Encoding Variation :

Comments : To Start Integrity on RB2 in UL

Constraint Value

```
{{
    rb_Identity tsc_RB0,
    rrc_MessageSequenceNumber p_SN0
},
    {
    rb_Identity tsc_RB1,
    rrc_MessageSequenceNumber p_SN1
},
    {
    rb_Identity tsc_RB3,
    rrc_MessageSequenceNumber p_SN3
},
    {
    rb_Identity tsc_RB4,
    rrc_MessageSequenceNumber p_SN4
}}
```

Constraint Name : c_SB1_Def

Group :

ASN1 Type : SysInfoTypeSB1

Derivation Path : Encoding Variation :

Comments : Default setting of SB1. scheduling is defined in 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
sib_ReferenceList {
  sib_Type sysInfoType6: 1,
  scheduling {scheduling {
     segCount 4,
     sib_Pos rep64: 3,
     sib_PosOffsetInfo {so4, so2, so2}
  }}
 },
  sib_Type sysInfoType7: NULL,
  scheduling {scheduling {
     sib_Pos rep16: 2
  }}
  sib_Type sysInfoType11: 1,
  scheduling { scheduling {
     segCount 3,
     sib_Pos rep64: 29,
     sib_PosOffsetInfo {so2, so2}
  }}
 },
  sib_Type sysInfoType12: 1,
  scheduling { scheduling {
     segCount 3,
     sib_Pos rep64: 13,
     sib_PosOffsetInfo {so2, so2}
  }}
 },
  sib_Type sysInfoType18: 1,
  scheduling { scheduling {
     sib_Pos rep64: 18
}},
nonCriticalExtensions OMIT
```

Detailed Comments: Assum no segmentation for SIB7.

Contains scheduling informations for SIB6, SIB7, SIB11, SIB12, SIB18 only, the scheduling

information for other SIBs may be added later.

The value 1 of valueTags is a place holder, actual values of them will be non-zero and assigned

dynamically in various SendSystemInformation test Steps.

ASN.1 Type Constraint Declaration Constraint Name : c_SB1_Schedul1 Group : ASN1 Type : SchedulingInformation Derivation Path : Encoding Variation : Comments : SB1 of one segment Constraint Value { scheduling { sib_Pos rep16 :1 }

Detailed Comments :

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB11_Schedul1

Group :

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments : SIB11 of one segment, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
{
    scheduling {
        sib_Pos rep64 :29
    }
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB11_Schedul2

Group

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments : SIB11 of two segments, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
{
    scheduling {
        segCount 2,
        sib_Pos rep64 :29,
        sib_PosOffsetInfo {so2}
    }
```

ASN.1 Type Constraint Declaration Constraint Name : c_SIB11_Schedul3 Group : ASN1 Type : SchedulingInformation Derivation Path : Encoding Variation : Comments : SIB11 of three segments, 3GPP TS 34.123–3 clause 8.4.3 Constraint Value { scheduling { segCount 3, sib_Pos rep64 :29, sib_PosOffsetInfo {so2, so2}

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB12_Schedul1

Group :

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments: SIB12 of one segment, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
{
    scheduling {
        sib_Pos rep64 :13
    }
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB12_Schedul2

Group

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments : SIB12 of two segments, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 2,
    sib_Pos rep64 : 13,
    sib_PosOffsetInfo {so2}
  }
}
```

Constraint Name : c_SIB12_Schedul3

Group :

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments : SIB12 of three segments, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep64 :13,
    sib_PosOffsetInfo {so2, so2}
  }
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB18_2PLMN (p_InterCellInfo : CellInfoCfg)

Group :

ASN1 Type : SysInfoType18

Derivation Path : Encoding Variation :

Comments: The Cell Info will be of the cell of other PLMN

Constraint Value

```
{
idleModePLMNIdentities
{
  plmnsOfIntraFreqCellsList OMIT,
  plmnsOfInterFreqCellsList
  {{
     plmn_Identity {
        mcc o_HexToDigitsMCC ( p_InterCellInfo.mcc),
        mnc o_HexToDigitsMNC (p_InterCellInfo.mnc )
     }
  }},
  plmnsOfInterRATCellsList OMIT
},
  connectedModePLMNIdentities OMIT,
  nonCriticalExtensions OMIT
```

Constraint Name : c_SIB18_3PLMN (p_Inter1CellInfo, p_Inter2CellInfo : CellInfoCfg)

Group :

ASN1 Type : SysInfoType18

Derivation Path : Encoding Variation :

Comments : The Cell Info will be of the one cell each of other PLMN's

Constraint Value

```
idleModePLMNIdentities
 plmnsOfIntraFreqCellsList OMIT,
 plmnsOfInterFreqCellsList\\
   plmn_Identity {
    mcc o_HexToDigitsMCC ( p_Inter1CellInfo.mcc),
    mnc o_HexToDigitsMNC (p_Inter1CellInfo.mnc )
   },{
   plmn_Identity {
    mcc o_HexToDigitsMCC ( p_Inter1CellInfo.mcc),
    mnc o_HexToDigitsMNC (p_Inter1CellInfo.mnc )
   plmn_Identity {
    mcc o_HexToDigitsMCC ( p_Inter1CellInfo.mcc),
    mnc o_HexToDigitsMNC (p_Inter1CellInfo.mnc)
   plmn_Identity {
    mcc o_HexToDigitsMCC ( p_Inter2CellInfo.mcc),
    mnc o_HexToDigitsMNC (p_Inter2CellInfo.mnc )
 }},
 plmnsOfInterRATCellsList OMIT
connectedModePLMNIdentities OMIT,
nonCriticalExtensions OMIT
```

ASN.1 Type Constraint Declaration Constraint Name : c_SIB18_Def (p_CellInfo : CellInfoCfg) Group **ASN1 Type** : SysInfoType18 **Derivation Path Encoding Variation:** Comments **Constraint Value** idleModePLMNIdentities plmnsOfIntraFreqCellsList OMIT, plmnsOfInterFreqCellsList OMIT, plmnsOfInterRATCellsList OMIT connectedModePLMNIdentities OMIT, nonCriticalExtensions OMIT **Detailed Comments:**

```
ASN.1 Type Constraint Declaration

Constraint Name : c_SIB2_Def ( p_CellInfo : CellInfoCfg )

Group :
ASN1 Type : SysInfoType2

Derivation Path :
Encoding Variation :
Comments : Default system information block type 2

Constraint Value

{
    ura_IdentityList { p_CellInfo.ura_Identity },
    nonCriticalExtensions OMIT
}

Detailed Comments : for cell 1 and cell 2.
```

```
ASN.1 Type Constraint Declaration

Constraint Name : c_SIB5_Schedul1
Group : SchedulingInformation
Derivation Path : Encoding Variation :
Comments : SIB5 of one segment, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

{
scheduling {
sib_Pos rep64 :19
}
}
Detailed Comments :
```

Constraint Name : c_SIB5_Schedul2

Group :

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments : SIB5 of two segments, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
{
    scheduling {
        segCount 2,
        sib_Pos rep64 :19,
        sib_PosOffsetInfo {so4}
    }
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB5_Schedul3

Group :

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments: SIB5 of three segments, 3GPP TS 34.123–3 clause 8.4.3

Constraint Value

```
{
    scheduling {
        segCount 3,
        sib_Pos rep64 :19,
        sib_PosOffsetInfo {so4, so2}
    }
```

ASN.1 Type Constraint Declaration Constraint Name : c_SIB5_Schedul4 Group : ASN1 Type : SchedulingInformation Derivation Path : Encoding Variation : Comments : SIB5 of four segments, 3GPP TS 34.123–3 clause 8.4.3 Constraint Value { scheduling { scheduling { segCount 4, sib_Pos rep64:19, sib_PosOffsetInfo {so4, so2, so2} } } }

```
ASN.1 Type Constraint Declaration

Constraint Name : c_SIB6_Schedul1
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB6 of one segment

Constraint Value

{
    scheduling {
        sib_Pos rep64 : 3
    }
}
Detailed Comments :
```

```
ASN.1 Type Constraint Declaration

Constraint Name : c_SIB6_Schedul2
Group :
ASN1 Type : SchedulingInformation
Derivation Path :
Encoding Variation :
Comments : SIB6 of two segments

Constraint Value

{
    scheduling {
        segCount 2,
        sib_Pos rep64 :3,
        sib_PosOffsetInfo {so4}
    }
}
Detailed Comments :
```

Constraint Name : c_SIB6_Schedul3

Group :

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments : SIB6 of three segments

Constraint Value

```
{
  scheduling {
    segCount 3,
    sib_Pos rep64 :3,
    sib_PosOffsetInfo {so4, so2}
  }
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_SIB6_Schedul4

Group :

ASN1 Type : SchedulingInformation

Derivation Path : Encoding Variation :

Comments : SIB6 of four segments

Constraint Value

```
{
  scheduling {
    segCount 4,
    sib_Pos rep64 :3,
    sib_PosOffsetInfo {so4, so2, so2}
  }
}
```

Constraint Name : c_SIB7_Def

Group :

ASN1 Type : SysInfoType7

Derivation Path : Encoding Variation :

Comments : Default system information block type 7

Constraint Value

```
{
    modeSpecificInfo fdd : {
        ul_Interference –100
    },
    prach_Information_SIB5_List { 2 },
    prach_Information_SIB6_List { 2 },
    nonCriticalExtensions OMIT
    }
```

```
ASN.1 Type Constraint Declaration
Constraint Name
                  : c_SRB_InfoSetupAM_DCH (
                     p_UI_lgchId: LogicalChannelIdentity;
                    p_MAC_lgch_prtDCH , p_MAC_lgch_prtRACH : MAC_LogicalChannelPriority ;
                    p_DI_lgchId: LogicalChannelIdentity
Group
ASN1 Type
                   : SRB_InformationSetup
Derivation Path
Encoding Variation:
Comments
                                                  Constraint Value
 rb_Identity OMIT,
 rlc_InfoChoice rlc_Info:
  ul_RLC_Mode ul_AM_RLC_Mode: cd_UL_AM_RLC_SRB,
  dl_RLC_Mode dl_AM_RLC_Mode : cd_DL_AM_RLC_SRB
 rb_MappingInfo
 {
   ul_LogicalChannelMappings oneLogicalChannel: {
    ul_TransportChannelType dch: tsc_UL_DCH5,
    logicalChannelIdentity p_UI_lgchId,
    rlc_SizeList configured :NULL,
    mac_LogicalChannelPriority p_MAC_lgch_prtDCH
   dl_LogicalChannelMappingList{{
     dl_TransportChannelType dch: tsc_DL_DCH5,
     logicalChannelIdentity p_DI_lgchld
   }}
  },
   ul_LogicalChannelMappings oneLogicalChannel: {
    ul_TransportChannelType rach:NULL,
    logicalChannelIdentity p_UI_lgchId,
    rlc\_SizeList\ explicitList\ :\ \{\ rlc\_SizeIndex\ 1\}\ \},
    mac_LogicalChannelPriority p_MAC_lgch_prtRACH
   dl_LogicalChannelMappingList{{
     dl_TransportChannelType fach: NULL,
     logicalChannelIdentity p_DI_lgchld
}
Detailed Comments:
```

Constraint Name: c_SRB_InfoSetupAM_FACH (p_RB_Id: RB_Identity; p_UI_IgchId:

LogicalChannelIdentity;p_MAC_lgch_prtDCH, p_MAC_lgch_prt: MAC_LogicalChannelPriority;

p_DI_lgchld: LogicalChannelIdentity)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
rb_Identity p_RB_Id,
rlc_InfoChoice rlc_Info:
 ul_RLC_Mode ul_AM_RLC_Mode: cd_UL_AM_RLC_SRB,
 dl_RLC_Mode dl_AM_RLC_Mode: cd_DL_AM_RLC_SRB
rb_MappingInfo
  ul_LogicalChannelMappings oneLogicalChannel: {
   ul_TransportChannelType rach: NULL,
   logicalChannelIdentity p_UI_lgchId,
   rlc_SizeList explicitList : { { rlc_SizeIndex 1} },
   mac_LogicalChannelPriority p_MAC_lgch_prt
  dl_LogicalChannelMappingList{{
    dl_TransportChannelType fach: NULL,
    logicalChannelIdentity p_DI_lgchld
  }}
 },
  ul_LogicalChannelMappings oneLogicalChannel: {
   ul_TransportChannelType dch: tsc_UL_DCH5,
   logicalChannelIdentity p_UI_lgchId,
   rlc_SizeList configured :NULL,
   mac_LogicalChannelPriority p_MAC_lgch_prtDCH
  dl_LogicalChannelMappingList{{
    dl_TransportChannelType dch: tsc_DL_DCH5,
    logicalChannelIdentity p_DI_lgchld
  }}
 }
```

Constraint Name : c_SRB_InfoSetupUM_DCH (p_UI_lgchId : LogicalChannelIdentity ; p_MAC_lgch_prtDCH, p_MAC_lgch_prtRACH : MAC_LogicalChannelPriority ; p_DI_lgchId : LogicalChannelIdentity)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
rb_Identity OMIT,
rlc_InfoChoice rlc_Info:
 ul_RLC_Mode ul_UM_RLC_Mode:
  transmissionRLC_Discard OMIT
 dl_RLC_Mode dl_UM_RLC_Mode: NULL
rb_MappingInfo
{
  ul_LogicalChannelMappings oneLogicalChannel: {
   ul_TransportChannelType dch: tsc_UL_DCH5,
   logicalChannelIdentity p_UI_lgchId,
   rlc_SizeList configured :NULL,
   mac_LogicalChannelPriority p_MAC_lgch_prtDCH
  dl_LogicalChannelMappingList{{
     dl_TransportChannelType dch: tsc_DL_DCH5,
     logicalChannelIdentity p_DI_lgchld
  }}
 },
  ul_LogicalChannelMappings oneLogicalChannel: {
   ul_TransportChannelType rach:NULL,
   logicalChannelIdentity p_UI_lgchId,
   rlc_SizeList explicitList : { { rlc_SizeIndex 1} },
mac_LogicalChannelPriority p_MAC_lgch_prtRACH
  dl_LogicalChannelMappingList{{
     dl_TransportChannelType fach: NULL,
     logicalChannelIdentity p_DI_lgchld
```

 $\textbf{Constraint Name} \hspace{0.3cm} : \hspace{0.3cm} c_SRB_InfoSetupUM_FACH \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Identity; \hspace{0.1cm} p_UI_IgchId: \hspace{0.1cm} LogicalChannelIdentity; \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Identity; \hspace{0.1cm} p_UI_IgchId: \hspace{0.1cm} LogicalChannelIdentity; \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Identity; \hspace{0.1cm} p_UI_IgchId: \hspace{0.1cm} LogicalChannelIdentity; \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Identity; \hspace{0.1cm} p_UI_IgchId: \hspace{0.1cm} LogicalChannelIdentity; \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Identity; \hspace{0.1cm} p_UI_IgchId: \hspace{0.1cm} LogicalChannelIdentity; \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Identity; \hspace{0.1cm} p_UI_IgchId: \hspace{0.1cm} LogicalChannelIdentity; \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Identity; \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} (\hspace{0.1cm} p_RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1cm} RB_Id: \hspace{0.1c$

p_MAC_lgch_prtDCH , p_MAC_lgch_prt: MAC_LogicalChannelPriority; p_Dl_lgchld:

LogicalChannelIdentity)

Group :

ASN1 Type : SRB_InformationSetup

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
rb_Identity p_RB_Id,
rlc_InfoChoice rlc_Info:
 ul_RLC_Mode ul_UM_RLC_Mode:
  transmissionRLC_Discard timerBasedNoExplicit: dt50
 dl_RLC_Mode dl_UM_RLC_Mode: NULL
rb_MappingInfo
{
  ul_LogicalChannelMappings oneLogicalChannel: {
   ul_TransportChannelType rach:NULL,
   logicalChannelIdentity p_UI_lgchId,
   rlc_SizeList explicitList : { { rlc_SizeIndex 1} },
   mac_LogicalChannelPriority p_MAC_lgch_prt
  dl_LogicalChannelMappingList{{
    dl_TransportChannelType fach: NULL,
    logicalChannelIdentity p_DI_lgchld
  }}
 },
  ul_LogicalChannelMappings oneLogicalChannel: {
   ul_TransportChannelType dch: tsc_UL_DCH5,
   logicalChannelIdentity p_UI_lgchId,
   rlc_SizeList configured :NULL,
   mac_LogicalChannelPriority p_MAC_lgch_prtDCH
  dl_LogicalChannelMappingList{{
    dl_TransportChannelType dch: tsc_DL_DCH5,
    logicalChannelIdentity p_DI_lgchld
```

```
ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0 ( p_PowerOffsetInformation : PowerOffsetInformation )

Group :

ASN1 Type : TFCS

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

normalTFCI_Signalling: complete: {
    ctfcSize ctfc2Bit:{
    {
        ctfc2 0, powerOffsetInformation p_PowerOffsetInformation }
    }
    }
}

Detailed Comments :
```

```
Constraint Name : c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx
```

Group :

ASN1 Type : TFCS

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

```
normalTFCI_Signalling: complete: {
 ctfcSize ctfc4Bit:{
   powerOffsetInformation OMIT
  },
   ctfc4 1,
   powerOffsetInformation OMIT
   ctfc4 2,
   powerOffsetInformation OMIT
   ctfc4 3,
   powerOffsetInformation OMIT
   powerOffsetInformation OMIT
   ctfc4 5,
   powerOffsetInformation OMIT
   powerOffsetInformation OMIT
   ctfc47,
   powerOffsetInformation OMIT
   powerOffsetInformation OMIT
   ctfc4 9,
   powerOffsetInformation OMIT
```

```
\textbf{Constraint Name} \quad : c\_TFCS\_Cmpl0\_1\_2\_3\_4\_5\_6\_7\_8\_9\_Tx \ ( \ p\_PowerOffsetInformation : PowerOffsetInformation : Powe
```

)

Group :
ASN1 Type : TFCS
Derivation Path :

Encoding Variation:
Comments:

Constraint Value

```
normalTFCI_Signalling: complete: {
 ctfcSize ctfc4Bit:{
   ctfc4 0,
   powerOffsetInformation c_PowerOffsetInfoComputed
   ctfc4 1,
   powerOffsetInformation c_PowerOffsetInfoComputed
   ctfc4 2,
   powerOffsetInformation c_PowerOffsetInfoComputed
  },
   powerOffsetInformation c_PowerOffsetInfoComputed
   powerOffsetInformation c_PowerOffsetInfoComputed
   powerOffsetInformation c_PowerOffsetInfoComputed
   ctfc4 6,
   powerOffsetInformation c_PowerOffsetInfoComputed
   ctfc4 7,
   powerOffsetInformation c_PowerOffsetInfoComputed
   ctfc4 8,
   powerOffsetInformation c_PowerOffsetInfoComputed
   powerOffsetInformation p_PowerOffsetInformation
```

Constraint Name : c_TFCS_Cmpl0_1_2_3_Rx

Group : TFCS
ASN1 Type : TFCS
Derivation Path : Encoding Variation :

Comments : TFCS information without power offset information – for receiver

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    ctfc4 0,
    powerOffsetInformation OMIT
  },
  {
    ctfc4 1,
    powerOffsetInformation OMIT
  },
  {
    ctfc4 2,
    powerOffsetInformation OMIT
  },
  {
    ctfc4 3,
    powerOffsetInformation OMIT
  }
}
```

Constraint Name : c_TFCS_Cmpl0_1_2_3_Tx (p_PowerOffsetInformation : PowerOffsetInformation)

Group : TFCS
ASN1 Type : TFCS
Derivation Path : Encoding Variation :

Comments: TFCS information with power offset information – for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {
  ctfcSize ctfc4Bit:{
    {
      ctfc4 0,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 1,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 2,
      powerOffsetInformation c_PowerOffsetInfoComputed
    },
    {
      ctfc4 3,
      powerOffsetInformation p_PowerOffsetInformation
    }
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_TFCS_Cmpl0_1_Rx

Group :
ASN1 Type : TFCS
Derivation Path :
Encoding Variation :

Comments: TFCS information without power offset information – for receiver

Constraint Value

 $\textbf{Constraint Name} \quad : c_TFCS_Cmpl0_1_Tx \ (\ p_PowerOffsetInformation \ : PowerOffsetInformation \)$

Group : TFCS
ASN1 Type : TFCS
Derivation Path : Encoding Variation :

Comments : TFCS information with power offset information – for transmitter

Constraint Value

```
normalTFCI_Signalling: complete: {
    ctfcSize ctfc2Bit:{
        ctfc2 0,
        powerOffsetInformation c_PowerOffsetInfoComputed
        },
        {
        ctfc2 1,
        powerOffsetInformation p_PowerOffsetInformation
        }
    }
}
```

 $\textbf{Constraint Name} \quad : c_TFCS_CmplFACH_Tx \ (\ p_PowerOffsetInformation \ : PowerOffsetInformation \)$

Group : TFCS
ASN1 Type : TFCS
Derivation Path : Encoding Variation :

Comments: TFCS information with power offset information – for transmitter

Constraint Value

```
normalTFCl_Signalling: complete: {
    ctfc4 0,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    {
        ctfc4 1,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    {
        ctfc4 2,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    {
        ctfc4 3,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    {
        ctfc4 4,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    {
        ctfc4 5,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    {
        ctfc4 6,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    {
        ctfc4 8,
        powerOffsetInformation c_PowerOffsetInfoComputed },
    }
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChConfigTypeDCH_NoSHO

Group

ASN1 Type : TrChConfigType

Derivation Path : Encoding Variation : Comments :

Constraint Value

dch : normal

ASN.1 Type Constraint Declaration Constraint Name : c_TrChInfoBCH1 Group **ASN1 Type** : TrCHInfo **Derivation Path Encoding Variation:** Comments **Constraint Value** dlconnectedTrCHList { { trchid tsc_BCH1, transportChannelInfo { tti tti20 : {{tb_Size 246, numberOfTbSizeList {one : NULL}, logicalChannelList configured: NULL}}, semistaticTF_Information { channelCodingType convolutional :half, rateMatchingAttribute 1, crc_Size crc16 } }}, dITFCS c_TFCS_Cmpl0 (c_PowerOffsetInfoBelow64k)

ASN.1 Type Constraint Declaration Constraint Name : c_TrChInfoDL_13_6_StandAlone Group : ASN1 Type : TrCHInfo Derivation Path : Encoding Variation : Comments : Constraint Value { dlconnectedTrCHList { { trchid tsc_DL_DCH5, transportChannelInfo c_DCH_148_TTI_10_TFS }}, dlTFCS c_TFCS_Cmpl0_1_Tx (c_PowerOffsetInfoBelow64k) } Detailed Comments :

Constraint Name : c_TrChInfoPCH_FACH

Group

ASN1 Type : TrCHInfo

Derivation Path : Encoding Variation :

Comments : For FDD mode only

Constraint Value

```
{
  dlconnectedTrCHList {
    { trchid tsc_PCH1,
        transportChannelInfo c_PCH_TFS
  },
  { trchid tsc_FACH1,
        transportChannelInfo c_FACH_TFS
  },
  { trchid tsc_FACH2,
        transportChannelInfo c_FACH_TFS_PS
  },
  dlTFCS c_TFCS_CmplFACH_Tx ( c_PowerOffsetInfoBelow64k ) --- sent to SS
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_TrChInfoPCH_FACH_PS

Group :

ASN1 Type: TrCHInfo

Derivation Path : Encoding Variation :

Comments : For FDD mode only (PS)

Constraint Value

```
{
    dlconnectedTrCHList {
        { trchid tsc_PCH1,
            transportChannelInfo c_PCH_TFS
        },
        { trchid tsc_FACH1,
            transportChannelInfo c_FACH_TFS
        },
        { trchid tsc_FACH2,
            transportChannelInfo c_FACH_TFS_PS
        },
        { dlTFCS c_TFCS_CmplFACH_Tx ( c_PowerOffsetInfoBelow64k ) --- sent to SS
    }
}
```

ASN.1 Type Constraint Declaration Constraint Name : c_TrChInfoUL_13_6_StandAlone Group : ASN1 Type : TrCHInfo Derivation Path : Encoding Variation : Comments : Constraint Value { ulconnectedTrCHList { { trchid tsc_UL_DCH5, transportChannelInfo c_DCH_148_TTI_10_TFS }}, ulTFCS c_TFCS_Cmpl0_1_Rx -- sent to SS

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_TrLogMappingBCH1

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

Constraint Name : c_TrLogMappingDL_4DCCH

Group

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Detailed Comments:

Constraint Value

```
ulconnectedTrCHList OMIT,
dlconnectedTrCHList {
  trchid tsc_DL_DCH5,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DCCH1,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 1
    rB_Identity tsc_RB1
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc DL DCCH2,
     logicalChannelType dCCH,
     rlc_SizeList configured : NULL,
     mac_LogicalChannelPriority 2
    rB_Identity tsc_RB2
   },
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DCCH3,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 3
    rB_Identity tsc_RB3
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType dch,
     logicalChannelIdentity tsc_DL_DCCH4,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 4
    rB_Identity tsc_RB4
```

Constraint Name : c_TrLogMappingPCH_FACH_CellDCH

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation :

Comments : For FDD mode only. map PCCH to PCH and CCCH and BCCH(for BCCH_FACH)

To be used for the Cell DCH configuration

Constraint Value

```
ulconnectedTrCHList OMIT,
dlconnectedTrCHList {
  trchid tsc_PCH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType pch,
     logicalChannelIdentity tsc_PCCH1,
     logicalChannelType pCCH,
     rlc_SizeList configured : NULL,
     mac_LogicalChannelPriority 1
    rB_Identity tsc_RB_PCCH
  trchid tsc FACH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType fach,
     logicalChannelIdentity tsc_DL_CCCH5,
     logicalChannelType cCCH,
     rlc_SizeList configured : NULL,
     mac_LogicalChannelPriority 1
    rB_Identity tsc_RB0
```

Constraint Name : c_TrLogMappingPCH_FACH_PS

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation :

Comments: For FDD mode only (PS). map PCCH to PCH and DCCH1, DCCH2, DCCH3, DCCH4, CCCH,

BCCH(for BCCH_FACH) to FACH2, and DTCH to FACH1

Constraint Value

```
ulconnectedTrCHList OMIT,
dlconnectedTrCHList {
  trchid tsc_PCH1,
  trCH_LogCHMappingList {
    logical Channel\_Mapping \ dl\_Logical Channel Mapping: \{ \\
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType pch,
     logicalChannelIdentity tsc_PCCH1,
     logicalChannelType pCCH,
     rlc_SizeList configured : NULL,
     mac_LogicalChannelPriority 1
    rB_Identity tsc_RB_PCCH
  trchid tsc_FACH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType fach,
     logicalChannelIdentity tsc_BCCH6,
     logicalChannelType bCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 6
    rB_Identity tsc_RB_BCCH_FACH
   },
    logicalChannel_Mapping dl_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType fach,
     logicalChannelIdentity tsc_DL_CCCH5,
     logicalChannelType cCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 1
    rB_Identity tsc_RB0
    logicalChannel_Mapping dl_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     dl_TransportChannelType fach,
     logicalChannelIdentity tsc_DL_DCCH1,
     logicalChannelType dCCH,
     rlc_SizeList configured: NULL,
     mac_LogicalChannelPriority 1
```

Continued on next page

Constraint Value

```
rB_Identity tsc_RB1
  logicalChannel_Mapping dl_LogicalChannelMapping : {
   macHeaderManipulation normalMacHeader,
   dl_TransportChannelType fach,
   logicalChannelIdentity tsc_DL_DCCH2,
   logicalChannelType dCCH,
   rlc_SizeList configured : NULL,
   mac_LogicalChannelPriority 2
  rB_Identity tsc_RB2
  logicalChannel_Mapping dl_LogicalChannelMapping : {
   macHeaderManipulation normalMacHeader,
   dl_TransportChannelType fach,
   logicalChannelIdentity tsc_DL_DCCH3,
   logicalChannelType dCCH,
   rlc_SizeList configured : NULL,
   mac_LogicalChannelPriority 3
  rB_Identity tsc_RB3
  logicalChannel_Mapping dl_LogicalChannelMapping : {
   macHeaderManipulation normalMacHeader,
   dl_TransportChannelType fach,
   logicalChannelIdentity tsc_DL_DCCH4,
   logicalChannelType dCCH,
   rlc_SizeList configured : NULL,
   mac_LogicalChannelPriority 4
  rB_Identity tsc_RB4
},{
trchid tsc_FACH2,
trCH_LogCHMappingList {
  logicalChannel_Mapping dl_LogicalChannelMapping: {
   macHeaderManipulation normalMacHeader,
   dl_TransportChannelType fach,
   logicalChannelIdentity tsc_DL_DTCH1,
   logicalChannelType dTCH,
   rlc_SizeList configured : NULL,
   mac_LogicalChannelPriority 8
  rB_Identity tsc_RB20
```

Constraint Name : c_TrLogMappingRACH_DTCH

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList {
  trchid tsc_RACH1,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul TransportChannelType rach,
     logicalChannelIdentity tsc_UL_CCCH5,
     logicalChannelType cCCH
    rB_Identity tsc_RB0
    logicalChannel_Mapping ul_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType rach,
     logicalChannelIdentity tsc_UL_DCCH1,
     logicalChannelType dCCH
    rB_Identity tsc_RB1
    logicalChannel_Mapping ul_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType rach,
     logicalChannelIdentity tsc_UL_DCCH2,
     logicalChannelType dCCH
    rB_Identity tsc_RB2
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType rach,
     logicalChannelIdentity tsc_UL_DCCH3,
     logicalChannelType dCCH
    rB_Identity tsc_RB3
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType rach,
     logicalChannelIdentity tsc_UL_DCCH4,
     logicalChannelType dCCH
    rB_Identity tsc_RB4
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType rach,
     logicalChannelIdentity tsc_UL_DTCH1,
```

Continued on next page

```
ASN.1 Type Constraint Declaration

Constraint Value

logicalChannelType dTCH
},
rB_Identity tsc_RB20
}
}
dlconnectedTrCHList OMIT
}
Detailed Comments:
```

Constraint Name : c_TrLogMappingUL_4DCCH

Group :

ASN1 Type : TrCH_LogCHMappingList1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
ulconnectedTrCHList {
  trchid tsc_UL_DCH5,
  trCH_LogCHMappingList {
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH1,
     logicalChannelType dCCH
    rB_Identity tsc_RB1
   },
    logical Channel\_Mapping\ ul\_Logical Channel Mapping\ :\ \{
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH2,
     logicalChannelType dCCH
    rB_Identity tsc_RB2
    logicalChannel_Mapping ul_LogicalChannelMapping : {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH3,
     logicalChannelType dCCH
    rB_Identity tsc_RB3
    logicalChannel_Mapping ul_LogicalChannelMapping: {
     macHeaderManipulation normalMacHeader,
     ul_TransportChannelType dch,
     logicalChannelIdentity tsc_UL_DCCH4,
     logicalChannelType dCCH
    rB_Identity tsc_RB4
},
dlconnectedTrCHList OMIT
```

Constraint Name : c_UE_IdDefIMSI

Group :

ASN1 Type : InitialUE_Identity

Derivation Path : Encoding Variation : Comments :

Constraint Value

imsi : o_ConvertIMSI(px_IMSI_Def)

Detailed Comments:

ASN.1 Type Constraint Declaration

 $\textbf{Constraint Name} \hspace{0.3cm} : \hspace{0.1cm} c_UE_Info \hspace{0.1cm} (\hspace{0.1cm} p_U_RNTI : U_RNTI \hspace{0.1cm} ; \hspace{0.1cm} p_CRNTI : BITSTRING \hspace{0.1cm})$

Group :

ASN1 Type : UE_Info

Derivation Path : Encoding Variation : Comments :

Constraint Value

{
 u_RNTI p_U_RNTI,
 c_RNTI p_CRNTI

Detailed Comments : p_SRNCId: BITSTRING (SIZE (12))

p_SRNTI: BITSTRING (SIZE (20)) p_CRNTI: BITSTRING (SIZE (16))

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_AddReconfTransChInfoListDCCH_13_6k

Group

ASN1 Type : UL_AddReconfTransChInfoList

Derivation Path : Encoding Variation : Comments :

Constraint Value

{{
 ul_TransportChannelType dch,
 transportChannelIdentity tsc_UL_DCH5,
 transportFormatSet dedicatedTransChTFS: c_DCH_148_TTI_10_TFS_UE

Constraint Name : c_UL_AddReconfTransChInfoListDCCH_3_4k

Group :

ASN1 Type : UL_AddReconfTransChInfoList

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{{
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH5,
    transportFormatSet dedicatedTransChTFS: c_DCH_148_TFS_UE_UL
}}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_AddReconfTransChInfoListDCH_PS_64k

Group :

ASN1 Type : UL_AddReconfTransChInfoList

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{{
    ul_TransportChannelType dch,
    transportChannelIdentity tsc_UL_DCH1,
    transportFormatSet dedicatedTransChTFS: c_DCH_336_TFS_UE
    },
    {
     ul_TransportChannelType dch,
     transportChannelIdentity tsc_UL_DCH5,
     transportFormatSet dedicatedTransChTFS: c_DCH_148_TFS_UE_UL
}}
```

ASN.1 Type Constraint Declaration Constraint Name : c_UL_CommTrChInfoDCCH_13_6k : UL_CommonTransChInfo **Derivation Path Encoding Variation:**

```
Constraint Value
tfc_Subset OMIT,
prach_TFCS OMIT,
modeSpecificInfo fdd:{
 ul_TFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
}
```

Detailed Comments:

Group **ASN1 Type**

Comments

ASN.1 Type Constraint Declaration

Constraint Name : c_UL_CommTrChInfoDCH_PS_64k

Group

ASN1 Type : UL_CommonTransChInfo

Derivation Path Encoding Variation: Comments

Constraint Value

```
tfc_Subset OMIT,
prach_TFCS OMIT,
modeSpecificInfo fdd:{
 ul_TFCS c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Tx ( c_PowerOffsetInfoHigher64k )
```

 $\textbf{Constraint Name} \qquad : \ c_UL_DPCH_13_6_StandAlone \ (\ p_UL_ScramblingCode \ : \ UL_ScramblingCode \)$

Group :

ASN1 Type : UL_DPCH_Info

Derivation Path : Encoding Variation :

Comments : this DPCH is the same as stand-alone UL:13.6 bps SRBs for DCCH. Used for RLC AM

and UM mode testing.

Constraint Value

```
{
    ul_DPCH_PowerControlInfo fdd:{
        dpcch_PowerOffset tsc_DPCCH_PowerOffset,
        pc_Preamble 1,
        sRB_delay 7,
        powerControlAlgorithm algorithm1: tsc_TpcStepSize
    },
    modeSpecificInfo fdd :{
        scramblingCodeType longSC,
        scramblingCode p_UL_ScramblingCode,
        numberOfDPDCH OMIT,
        spreadingFactor tsc_UL_DPDCH_SF_SRB,
        tfci_Existence TRUE,
        numberOfFBI_Bits OMIT,
        puncturingLimit pl1
    }
}
```

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : c_U_RNTI

Group

ASN1 Type : U_RNTI

Derivation Path : Encoding Variation : Comments :

Constraint Value

{
 srnc_Identity '000000000001'B,
 s_RNTI '0000000000000000001'B

```
ASN.1 Type Constraint Declaration

Constraint Name : c_U_RNTI_Def
Group :
ASN1 Type : U_RNTI
Derivation Path :
Encoding Variation :
Comments : Default U_RNTI identity

Constraint Value

{
    srnc_Identity px_SRNC_Id,
    s_RNTI px_SRNTI
}

Detailed Comments :
```

```
ASN.1 Type Constraint Declaration
Constraint Name
                 : cb_DL_AM_RLC
Group
ASN1 Type
                 : DL_AM_RLC_Mode
Derivation Path
Encoding Variation:
Comments
                                              Constraint Value
 inSequenceDelivery TRUE,
 receivingWindowSize rw128,
 dl_RLC_StatusInfo {
 timerStatusProhibit tsp200,
  --timerEPC OMIT
  missingPDU_Indicator TRUE,
  timerStatusPeriodic OMIT
Detailed Comments:
```

Constraint Name : cb_DL_DPCH_64K_CS (p_DL_CommonInformation : DL_CommonInformation ;

p_SecondaryScramblingCode : SecondaryScramblingCode)

Group

ASN1 Type : DL_DPCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
dl_CommonInformation p_DL_CommonInformation,
dl_DPCH_InfoPerRL fdd: {
 pCPICH_UsageForChannelEst mayBeUsed,
 dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
 -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
 -- Actual value DPCH-FrameOffset = IE value * 256
 -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512,
 dl_ChannelisationCodeList { {secondaryScramblingCode p_SecondaryScramblingCode ,
   sf_AndCodeNumber tsc_DL_DPCH1_ChC_64k_CS
 }},
 tpc_CombinationIndex 0
powerOffsetOfTFCI_PO1 tsc_DPCH_PowerOffsetTFCI,
powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
dl_TxPower tsc_DL_TxPower_DPCH,
dl_TxPowerMax 15,
dl_TxPowerMin -35
```

Constraint Name : cb_DL_DPCH_64K_PS (p_DL_CommonInformation : DL_CommonInformation ;

p_SecondaryScramblingCode : SecondaryScramblingCode)

Group

ASN1 Type : DL_DPCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
dl_CommonInformation p_DL_CommonInformation,
dl_DPCH_InfoPerRL fdd: {
 pCPICH_UsageForChannelEst mayBeUsed,
 dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
 -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
 -- Actual value DPCH-FrameOffset = IE value * 256
 -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512,
 dl_ChannelisationCodeList { {secondaryScramblingCode p_SecondaryScramblingCode ,
   sf_AndCodeNumber tsc_DL_DPCH1_ChC_64k_PS
 }},
 tpc_CombinationIndex 0
powerOffsetOfTFCI_PO1 tsc_DPCH_PowerOffsetTFCI,
powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
dl_TxPower tsc_DL_TxPower_DPCH_64k,
dl_TxPowerMax 15,
dl_TxPowerMin -35
```

Constraint Name : cb_DL_DPCH_SRB_StandAloneDPCH_Offset (p_SecondaryScramblingCode :

SecondaryScramblingCode)

Group :

ASN1 Type : DL_DPCHInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
dl_CommonInformation cd_DL_CommonInformationDCH_DPCH_Offset (tsc_DL_DPCH1_SFP_SRB),
dl_DPCH_InfoPerRL fdd: {
 pCPICH_UsageForChannelEst mayBeUsed,
 dpch_FrameOffset (( (tsc_DefaultDPCH_OffsetValue*512 ) MOD 38400) / 256 ),
 -- DPCH-FrameOffset = DefaultDPCH-OffsetValueFDD MOD 38400
 -- Actual value DPCH-FrameOffset = IE value * 256
 -- Actual value DefaultDPCH-OffsetValueFDD = IE value * 512,
 dl_ChannelisationCodeList { { secondaryScramblingCode p_SecondaryScramblingCode ,
   sf_AndCodeNumber tsc_DL_DPCH1_ChC_SRB
 }},
 tpc_CombinationIndex 0
powerOffsetOfTFCI_PO1 tsc_DPCH_PowerOffsetTFCI,
powerOffsetOfTPC_PO2 tsc_DPCH_PowerOffsetTPC,
powerOffsetOfPILOT_PO3 tsc_DPCH_PowerOffsetPILOT,
dl_TxPower tsc_DL_TxPower_DPCH,
dl_TxPowerMax 15,
dl_TxPowerMin -35
```

Constraint Name : cb_SIB11_Def (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_IntraCellInfo4, p_IntraCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg)

Group

ASN1 Type : SysInfoType11

Derivation Path : Encoding Variation :

Comments : Default system information block type 11. To be used by cell A,B,C,G and H:

5 intra cells frequency of the same frequency3 inter cell frequency of the same frequency.

Constraint Value

```
sib12indicator TRUE,
measurementControlSysInfo {
 use_of_HCS hcs_not_used : {
  cellSelectQualityMeasure cpich_RSCP: {
   intraFreqMeasurementSysInfo {
     intraFreqMeasurementID OMIT, -- default value
     intraFreqCellInfoSI_List {
      removedIntraFreqCellList OMIT, -- removedIntraFreqCellList in SIB11 is not used and ignored by the UE
      newIntraFreqCellList {{
        intraFreqCellID p_ActiveCellInfo.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primary CPICH\_Info \ \{\ primary Scrambling Code \ p\_Active CellInfo.pri Scrm Code \ \},
           readSFN_Indicator FALSE
           tx_DiversityIndicator FALSE
         },
          cellSelectionReselectionInfo OMIT
        }
        intraFreqCellID p_IntraCellInfo2.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo2.priScrmCode },
           readSFN_Indicator TRUE,
           tx_DiversityIndicator FALSE
         },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        intraFreqCellID p_IntraCellInfo3.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo3.priScrmCode },
           readSFN_Indicator TRUE.
           tx_DiversityIndicator FALSE
         },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
        intraFreqCellID p_IntraCellInfo4.cellId,
          cellIndividualOffset OMIT, -- default value
```

Constraint Value

```
referenceTimeDifferenceToCell OMIT,
     modeSpecificInfo fdd: {
     primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo4.priScrmCode },
      readSFN_Indicator TRUE,
     tx_DiversityIndicator FALSE
    cellSelectionReselectionInfo OMIT -- value same as the serving cell
   intraFreqCellID p_IntraCellInfo5.cellId,
   cellInfo {
    cellIndividualOffset OMIT, -- default value
     referenceTimeDifferenceToCell OMIT,
    modeSpecificInfo fdd : {
     primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo5.priScrmCode },
      readSFN_Indicator TRUE,
     tx_DiversityIndicator FALSE
    }.
    cellSelectionReselectionInfo OMIT -- value same as the serving cell
}}
intraFreqMeasQuantity {
filterCoefficient OMIT, -- default value
modeSpecificInfo fdd : {
  intraFreqMeasQuantity_FDD cpich_RSCP
},
reportingInfoForCellDCH {
intraFreqReportingQuantity {
  activeSetReportingQuantities {
   dummy noReport,
   cellIdentity_reportingIndicator TRUE,
   cellSynchronisationInfoReportingIndicator FALSE,
   modeSpecificInfo fdd: {
    cpich_Ec_N0_reportingIndicator FALSE,
    cpich_RSCP_reportingIndicator TRUE,
    pathloss_reportingIndicator FALSE }
  monitoredSetReportingQuantities {
   dummy noReport,
   cellIdentity_reportingIndicator TRUE,
   cellSynchronisationInfoReportingIndicator TRUE,
   modeSpecificInfo fdd: {
    cpich_Ec_N0_reportingIndicator FALSE,
    cpich_RSCP_reportingIndicator TRUE,
    pathloss_reportingIndicator FALSE }
 measurementReportingMode {
  measurementReportTransferMode acknowledgedModeRLC,
  periodicalOrEventTrigger eventTrigger
 reportCriteria intraFreqReportingCriteria: {
  eventCriteriaList {{
     event e1a: {
     triggeringCondition monitoredSetCellsOnly,
      reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
      reportDeactivationThreshold t2,
      reportingAmount ra4
```

Constraint Value

```
reportingInterval ri4
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
      event e1b: {
       triggeringCondition activeSetCellsOnly,
       reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
       forbiddenAffectCellList OMIT,
       w 1},
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
      event e1c: {
       replacementActivationThreshold t3,
       reportingAmount ra4,
       reportingInterval ri4
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
  }}
}
interFreqMeasurementSysInfo
 interFreqCellInfoSI_List {
  removedInterFreqCellList OMIT, -- removedInterFreqCellList in SIB11 is not used and ignored by the UE
  newInterFreqCellList { {
    interFreqCellID p_InterCellInfo6.cellId,
    frequencyInfo p_InterCellInfo6.frequencyInfo,
    cellInfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo6.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
     },
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
    interFreqCellID p_InterCellInfo7.cellId,
    frequencyInfo OMIT,
    cellInfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo7.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
     },
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
```

Constraint Value

```
{
    interFreqCellID p_InterCellInfo8.cellId,
    frequencyInfo OMIT,
    cellInfo {
        cellIndividualOffset OMIT, -- default value
        referenceTimeDifferenceToCell OMIT,
        modeSpecificInfo fdd : {
            primaryCPICH_Info { primaryScramblingCode p_InterCellInfo8.priScrmCode },
            readSFN_Indicator FALSE,
            tx_DiversityIndicator FALSE
        },
        cellSelectionReselectionInfo OMIT -- value same as the serving cell
      }
    }
}
}
-- nonCriticalExtensions OMIT
}
```

Constraint Name : cb_SIB11_Freq2 (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3, p_InterCellInfo4, p_InterCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg)

Group

ASN1 Type : SysInfoType11

Derivation Path : Encoding Variation :

Comments : Default system information block type 11. To be used by cell D,E,F:

3 intra cells frequency of the same frequency5 inter cell frequency of the same frequency.

Constraint Value

```
sib12indicator TRUE,
measurementControlSysInfo {
 use_of_HCS hcs_not_used : {
  cellSelectQualityMeasure cpich_RSCP: {
   intraFreqMeasurementSysInfo {
     intraFreqMeasurementID OMIT, -- default value
     intraFreqCellInfoSI_List {
      removedIntraFreqCellList OMIT, -- removeNoIntraFreqCells in SIB11 is not used and ignored by the UE
      newIntraFreqCellList {{
        intraFreqCellID p_ActiveCellInfo.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primary CPICH\_Info \ \{\ primary Scrambling Code \ p\_Active CellInfo.pri Scrm Code \ \},
           readSFN_Indicator FALSE
           tx_DiversityIndicator FALSE
         },
          cellSelectionReselectionInfo OMIT
        }
        intraFreqCellID p_IntraCellInfo2.cellId,
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo2.priScrmCode },
           readSFN_Indicator TRUE,
           tx_DiversityIndicator FALSE
         },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        intraFreqCellID p_IntraCellInfo3.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo3.priScrmCode },
           readSFN_Indicator TRUE.
           tx_DiversityIndicator FALSE
         },
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
        }
     }},
     intraFreqMeasQuantity {
      filterCoefficient OMIT, -- default value
      modeSpecificInfo fdd : {
```

Constraint Value

```
intraFreqMeasQuantity_FDD cpich_RSCP
},
reportingInfoForCellDCH {
intraFreqReportingQuantity {
  activeSetReportingQuantities {
   dummy noReport,
   cellIdentity_reportingIndicator TRUE,
   cellSynchronisationInfoReportingIndicator FALSE,
   modeSpecificInfo fdd: {
    cpich Ec N0 reportingIndicator FALSE,
    cpich_RSCP_reportingIndicator TRUE,
    pathloss_reportingIndicator FALSE }
  monitoredSetReportingQuantities {
   dummy noReport,
   cellIdentity_reportingIndicator TRUE,
   cellSynchronisationInfoReportingIndicator TRUE,
   modeSpecificInfo fdd: {
     cpich_Ec_N0_reportingIndicator FALSE,
    cpich_RSCP_reportingIndicator TRUE,
    pathloss_reportingIndicator FALSE }
  }
}.
 measurementReportingMode {
  measurementReportTransferMode acknowledgedModeRLC,
  periodicalOrEventTrigger eventTrigger
 reportCriteria intraFreqReportingCriteria: {
  eventCriteriaList {{
     event e1a: {
      triggeringCondition monitoredSetCellsOnly,
      reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
      reportDeactivationThreshold t2,
      reportingAmount ra4,
      reportingInterval ri4
    },
    hysteresis 0,
    timeToTrigger ttt640,
    reporting Cell Status\ within Active And Or Monitored Used Freq: e3
     event e1b: {
      triggeringCondition activeSetCellsOnly,
      reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
      forbiddenAffectCellList OMIT,
      w 1},
     hysteresis 0,
    timeToTrigger ttt640,
     reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
     event e1c: {
      replacementActivationThreshold t3,
      reportingAmount ra4,
      reportingInterval ri4
    hysteresis 0,
    timeToTrigger ttt640,
     reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
```

Constraint Value

```
}}
 }
interFreqMeasurementSysInfo
 interFreqCellInfoSI_List {
  removedInterFreqCellList OMIT,
  newInterFreqCellList {
     interFreqCellID p InterCellInfo4.cellId,
     frequencyInfo p_InterCellInfo4.frequencyInfo,
     cellinfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd : {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo4.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
     interFreqCellID p_InterCellInfo5.cellId,
     frequencyInfo OMIT,
     cellInfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo5.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
      },
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
     interFreqCellID p_InterCellInfo6.cellId,
     frequencyInfo OMIT,
     cellInfo {
      cellIndividualOffset OMIT, -- dafault value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo6.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
     interFreqCellID p_InterCellInfo7.cellId,
     frequencyInfo OMIT,
     cellinfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo7.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
```

```
Constraint Value
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
         }
       },
         interFreqCellID p_InterCellInfo8.cellId,
         frequencyInfo OMIT,
         cellinfo {
          cellIndividualOffset OMIT, -- default value referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
            primary CPICH\_Info~\{~primary Scrambling Code~p\_Inter CellInfo 8.pri Scrm Code~\},
            readSFN_Indicator FALSE,
            tx_DiversityIndicator FALSE
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
   } }}
}}}
  -nonCriticalExtensions OMIT
```

Constraint Name : cb_SIB11_Freq3_PLMN1Or2 (p_ActiveCellInfo, p_IntraCellInfo2, p_IntraCellInfo3,

p_InterCellInfo4, p_InterCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8:

CellInfoCfg)

Group

ASN1 Type : SysInfoType11

Derivation Path : Encoding Variation :

Comments: Default system information block type 11. To be used by cell D,E,F:

3 intra cells frequency of the same frequency5 inter cell frequency of the same frequency.

Constraint Value

```
sib12indicator TRUE.
measurementControlSysInfo {
 use_of_HCS hcs_not_used : {
  cellSelectQualityMeasure cpich RSCP: {
   intraFreqMeasurementSysInfo {
     intraFreqMeasurementID OMIT, -- default value
     intraFreqCellInfoSI_List {
      removedIntraFreqCellList OMIT, -- removeNoIntraFreqCells in SIB11 is not used and ignored by the UE
      newIntraFreqCellList {{
        intraFreqCellID p_ActiveCellInfo.cellId,
        cellInfo {
         cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_ActiveCellInfo.priScrmCode },
           readSFN_Indicator FALSE,
           tx DiversityIndicator FALSE
         },
         cellSelectionReselectionInfo OMIT
        intraFreqCellID p_IntraCellInfo2.cellId,
        cellInfo {
         cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
         modeSpecificInfo fdd : {
           primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo2.priScrmCode },
           readSFN_Indicator TRUE,
           tx_DiversityIndicator FALSE
         cellSelectionReselectionInfo OMIT -- value same as the serving cell
        intraFreqCellID p_IntraCellInfo3.cellId,
        cellInfo {
         cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo3.priScrmCode },
           readSFN_Indicator TRUE,
           tx_DiversityIndicator FALSE
         cellSelectionReselectionInfo OMIT -- value same as the serving cell
     intraFreqMeasQuantity {
      filterCoefficient OMIT, -- default value
```

Constraint Value

```
modeSpecificInfo fdd: {
  intraFreqMeasQuantity_FDD cpich_RSCP
},
reportingInfoForCellDCH {
 intraFreqReportingQuantity {
  activeSetReportingQuantities {
   dummy noReport,
   cellIdentity_reportingIndicator TRUE,
   cellSynchronisationInfoReportingIndicator FALSE,
   modeSpecificInfo fdd: {
    cpich_Ec_N0_reportingIndicator FALSE,
    cpich_RSCP_reportingIndicator TRUE,
    pathloss_reportingIndicator FALSE }
  monitoredSetReportingQuantities {
   dummy noReport,
   cellIdentity_reportingIndicator TRUE,
   cellSynchronisationInfoReportingIndicator TRUE,
   modeSpecificInfo fdd: {
    cpich_Ec_N0_reportingIndicator FALSE,
    cpich_RSCP_reportingIndicator TRUE,
    pathloss_reportingIndicator FALSE }
  }
},
 measurementReportingMode {
  measurementReportTransferMode acknowledgedModeRLC,
  periodicalOrEventTrigger eventTrigger
 reportCriteria intraFreqReportingCriteria : {
  eventCriteriaList {{
     event e1a: {
     triggeringCondition monitoredSetCellsOnly,
      reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
     reportDeactivationThreshold t2,
      reportingAmount ra4,
     reportingInterval ri4
    hysteresis 0.
    timeToTrigger ttt640,
     reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
    event e1b: {
     triggeringCondition activeSetCellsOnly,
      reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
     forbiddenAffectCellList OMIT,
      w 1},
    hysteresis 0,
    timeToTrigger ttt640,
     reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
     event e1c: {
     replacementActivationThreshold t3,
      reportingAmount ra4,
     reportingInterval ri4
    },
    hysteresis 0,
    timeToTrigger ttt640,
     reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
```

Constraint Value

```
}
  }}
interFreqMeasurementSysInfo
 interFreqCellInfoSI_List {
  removedInterFreqCellList OMIT,
  newInterFreqCellList {
    interFreqCellID p_InterCellInfo4.cellId,
    frequencyInfo p_InterCellInfo4.frequencyInfo,
    cellInfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo4.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
     },
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
    interFreqCellID p_InterCellInfo5.cellId,
    frequencyInfo OMIT,
    cellInfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd : {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo5.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
    interFreqCellID p InterCellInfo6.cellId,
    frequencyInfo OMIT,
    cellinfo {
      cellIndividualOffset OMIT, -- dafault value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primaryCPICH_Info { primaryScramblingCode p_InterCellInfo6.priScrmCode },
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
      },
      cellSelectionReselectionInfo OMIT -- value same as the serving cell
    interFreqCellID p_InterCellInfo7.cellId,
    frequencyInfo p_InterCellInfo7.frequencyInfo,
    cellInfo {
      cellIndividualOffset OMIT, -- default value
      referenceTimeDifferenceToCell OMIT,
      modeSpecificInfo fdd: {
       primary CPICH\_Info\ \{\ primary Scrambling Code\ p\_Inter CellInfo 7.pri Scrm Code\ \},
       readSFN_Indicator FALSE,
       tx_DiversityIndicator FALSE
```

Constraint Value

```
\mbox{cellSelectionReselectionInfo OMIT} -- \mbox{value same as the serving cell}
         interFreqCellID p_InterCellInfo8.cellId,
         frequencyInfo OMIT,
         cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd : {
           primary CPICH\_Info\ \{\ primary Scrambling Code\ p\_Inter CellInfo 8.pri Scrm Code\ \},
           readSFN_Indicator FALSE,
           tx_DiversityIndicator FALSE
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
   } }}
}}}
-- nonCriticalExtensions OMIT
```

Constraint Name : cb_SIB11_Freq3_PLMN3 (p_ActiveCellInfo, p_IntraCellInfo2, p_InterCellInfo3, p_InterCellInfo4,

p_InterCellInfo5, p_InterCellInfo6, p_InterCellInfo7, p_InterCellInfo8 : CellInfoCfg)

Group

ASN1 Type : SysInfoType11

Derivation Path : Encoding Variation :

Comments : Default system information block type 11. To be used by cell D,E,F:

3 intra cells frequency of the same frequency5 inter cell frequency of the same frequency.

Constraint Value

```
sib12indicator TRUE,
measurementControlSysInfo {
 use_of_HCS hcs_not_used : {
  cellSelectQualityMeasure cpich_RSCP: {
   intraFreqMeasurementSysInfo {
     intraFreqMeasurementID OMIT, -- default value
     intraFreqCellInfoSI_List {
      removedIntraFreqCellList OMIT, -- removeNoIntraFreqCells in SIB11 is not used and ignored by the UE
      newIntraFreqCellList {{
        intraFreqCellID p_ActiveCellInfo.cellId,
        cellInfo {
          cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
          modeSpecificInfo fdd: {
           primary CPICH\_Info \ \{\ primary Scrambling Code \ p\_Active CellInfo.pri Scrm Code \ \},
           readSFN_Indicator FALSE
           tx_DiversityIndicator FALSE
         },
         cellSelectionReselectionInfo OMIT
        }
        intraFreqCellID p_IntraCellInfo2.cellId,
         cellIndividualOffset OMIT, -- default value
         referenceTimeDifferenceToCell OMIT,
         modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_IntraCellInfo2.priScrmCode },
           readSFN_Indicator TRUE,
           tx_DiversityIndicator FALSE
         },
         cellSelectionReselectionInfo OMIT -- value same as the serving cell
     intraFreqMeasQuantity {
      filterCoefficient OMIT, -- default value
      modeSpecificInfo fdd: {
       intraFreqMeasQuantity_FDD cpich_RSCP
     reportingInfoForCellDCH {
      intraFreqReportingQuantity {
       activeSetReportingQuantities {
        dummy noReport,
        cellIdentity_reportingIndicator TRUE,
        cellSynchronisationInfoReportingIndicator FALSE,
        modeSpecificInfo fdd: {
         cpich_Ec_N0_reportingIndicator FALSE,
         cpich_RSCP_reportingIndicator TRUE,
         pathloss_reportingIndicator FALSE }
```

Constraint Value

```
monitoredSetReportingQuantities {
    dummy noReport,
    cellIdentity_reportingIndicator TRUE,
    cellSynchronisationInfoReportingIndicator TRUE,
    modeSpecificInfo fdd: {
      cpich_Ec_N0_reportingIndicator FALSE,
      cpich_RSCP_reportingIndicator TRUE,
      pathloss_reportingIndicator FALSE }
  measurementReportingMode {
   measurementReportTransferMode acknowledgedModeRLC,
   periodicalOrEventTrigger eventTrigger
  reportCriteria intraFreqReportingCriteria : {
   eventCriteriaList {{
      event e1a : {
       triggeringCondition monitoredSetCellsOnly,
       reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
       reportDeactivationThreshold t2,
       reportingAmount ra4,
       reportingInterval ri4
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
      event e1b: {
       triggeringCondition activeSetCellsOnly,
       reportingRange 10, -- Actual value ReportingRange = IE value * 0.5
       forbiddenAffectCellList OMIT,
       w 1},
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
      event e1c: {
       replacementActivationThreshold t3,
       reportingAmount ra4,
       reportingInterval ri4
      hysteresis 0,
      timeToTrigger ttt640,
      reportingCellStatus withinActiveAndOrMonitoredUsedFreq: e3
  }}
interFreqMeasurementSysInfo
 interFreqCellInfoSI List {
  removedInterFreqCellList OMIT,
  newInterFreqCellList {
    interFreqCellID p_InterCellInfo3.cellId,
    frequencyInfo p_InterCellInfo3.frequencyInfo,
    cellInfo {
```

Constraint Value

```
cellIndividualOffset OMIT, -- default value
 referenceTimeDifferenceToCell OMIT,
 modeSpecificInfo fdd: {
  primaryCPICH_Info { primaryScramblingCode p_InterCellInfo3.priScrmCode },
  readSFN_Indicator FALSE.
  tx_DiversityIndicator FALSE
 },
 cellSelectionReselectionInfo OMIT -- value same as the serving cell
interFreqCellID p_InterCellInfo4.cellId,
frequencyInfo OMIT,
cellInfo {
 cellIndividualOffset OMIT, -- default value
 referenceTimeDifferenceToCell OMIT,
 modeSpecificInfo fdd: {
  primaryCPICH_Info { primaryScramblingCode p_InterCellInfo4.priScrmCode },
  readSFN_Indicator FALSE,
  tx_DiversityIndicator FALSE
},
 cellSelectionReselectionInfo OMIT -- value same as the serving cell
interFreqCellID p_InterCellInfo5.cellId,
frequencyInfo OMIT,
cellInfo {
 cellIndividualOffset OMIT, -- default value
 referenceTimeDifferenceToCell OMIT,
 modeSpecificInfo fdd : {
  primaryCPICH_Info { primaryScramblingCode p_InterCellInfo5.priScrmCode },
  readSFN_Indicator FALSE,
  tx_DiversityIndicator FALSE
 cellSelectionReselectionInfo OMIT -- value same as the serving cell
interFreqCellID p InterCellInfo6.cellId,
frequencyInfo p_InterCellInfo6.frequencyInfo,
cellinfo {
 cellIndividualOffset OMIT, -- dafault value
 referenceTimeDifferenceToCell OMIT,
 modeSpecificInfo fdd: {
  primaryCPICH_Info { primaryScramblingCode p_InterCellInfo6.priScrmCode },
  readSFN_Indicator FALSE
  tx_DiversityIndicator FALSE
 },
 cellSelectionReselectionInfo OMIT -- value same as the serving cell
interFreqCellID p_InterCellInfo7.cellId,
frequencyInfo OMIT,
cellInfo {
 cellIndividualOffset OMIT, -- default value
 referenceTimeDifferenceToCell OMIT,
 modeSpecificInfo fdd: {
  primary CPICH\_Info \ \{\ primary Scrambling Code\ p\_Inter CellInfo 7.pri Scrm Code\ \},
  readSFN_Indicator FALSE,
  tx_DiversityIndicator FALSE
```

```
ASN.1 Type Constraint Declaration
                                                    Constraint Value
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
         interFreqCellID p_InterCellInfo8.cellId,
         frequencyInfo OMIT,
         cellinfo {
           cellIndividualOffset OMIT, -- default value
          referenceTimeDifferenceToCell OMIT,
           modeSpecificInfo fdd: {
           primaryCPICH_Info { primaryScramblingCode p_InterCellInfo8.priScrmCode },
           readSFN_Indicator FALSE,
           tx_DiversityIndicator FALSE
          cellSelectionReselectionInfo OMIT -- value same as the serving cell
    } }}
 }}}
 — nonCriticalExtensions OMIT
Detailed Comments:
```

Constraint Name : cb_SIB12_Def

Group

ASN1 Type : SysInfoType12

Derivation Path : Encoding Variation :

Comments : Default system information block type 12, used in connected mode. To be used by cell A,B,C,G and

H:

5 intra cells frequency of the same frequency
3 inter cell frequency of the same frequency.

Constraint Value

```
{
  measurementControlSysInfo {
    use_of_HCS hcs_not_used : {
    cellSelectQualityMeasure cpich_RSCP : {
        intraFreqMeasurementSysInfo OMIT,
        interFreqMeasurementSysInfo OMIT
    },
    interRATMeasurementSysInfo OMIT
    }
} -- nonCriticalExtensions OMIT
}
```

Detailed Comments: Similar to c_SIB11_def except that "detectedSetReportingQuantities" is not present and "timeToTrigger" = 0

Constraint Name : cb_SIB12_Freq2

Group :

ASN1 Type : SysInfoType12

Derivation Path : Encoding Variation :

Comments : Default system information block type 12, used in connected mode. To be used by cell D,E,F:

- 3 intra cells frequency of the same frequency- 5 inter cell frequency of the same frequency.

Constraint Value

```
{
  measurementControlSysInfo {
    use_of_HCS hcs_not_used : {
    cellSelectQualityMeasure cpich_RSCP : {
        intraFreqMeasurementSysInfo OMIT,
        interFreqMeasurementSysInfo OMIT
    },
    interRATMeasurementSysInfo OMIT
    }
} --nonCriticalExtensions OMIT
}
```

 $\textbf{Detailed Comments} \ : \ Similar \ to \ c_SIB11_def \ except \ that \ "detectedSetReportingQuantities" \ is \ not \ present \ and$

"timeToTrigger" = 0

Constraint Name : cb_SIB1_Def (p_CellInfo : CellInfoCfg)

Group :

ASN1 Type : SysInfoType1

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
cn_CommonGSM_MAP_NAS_SysInfo p_CellInfo.lac,
cn_DomainSysInfoList {{cn_DomainIdentity ps_domain,
  cn_Type gsm_MAP: o_OctetstringConcat ( p_CellInfo.rac, p_CellInfo.nmo ),
  cn\_DRX\_CycleLengthCoeff\ p\_CellInfo.dRX\_CycleLength.cN\_PS\_DRX\_CycleLength
 {cn_DomainIdentity cs_domain,
  cn_Type gsm_MAP: o_OctetstringConcat ( p_CellInfo.t3212, o_IntToOct ( p_CellInfo.attFlag,1) ),
  cn_DRX_CycleLengthCoeff p_CellInfo.dRX_CycleLength.cN_CS_DRX_CycleLength
},
ue_ConnTimersAndConstants {
t_301 OMIT,
 n_301 OMIT,
 t_302 OMIT,
 n_302 OMIT,
 t_304 OMIT,
 n_304 OMIT,
 t_305 OMIT,
 t_307 OMIT,
 t_308 OMIT,
 t 309 OMIT,
 t_310 OMIT,
 n_310 OMIT,
 t_311 OMIT,
 t_312 OMIT,
 n_312 OMIT,
 t_313 OMIT,
 n_313 OMIT,
 t_314 OMIT,
 t_315 OMIT,
 n_315 OMIT,
 t_316 OMIT,
 t_317 OMIT
ue_IdleTimersAndConstants {
 t_300 ms4000,
 n_300 tsc_N300,
 t_312 10,
 n_312 s1
v3a0NonCriticalExtensions OMIT
```

Constraint Name : cb_SIB3_DefUTRAN (p_CellInfoCfg : CellInfoCfg)

Group :

ASN1 Type : SysInfoType3

Derivation Path : Encoding Variation :

Comments : Default system information block type 3 for UTRAN only

Constraint Value

```
sib4indicator TRUE,
cellIdentity INT_TO_BIT ( p_CellInfoCfg.cellId , 28 ) ,
cellSelectReselectInfo {
 mappingInfo OMIT,
 cellSelectQualityMeasure cpich_RSCP: NULL,
 modeSpecificInfo fdd: {
  s_Intrasearch 8, -- IE value * 2
  s_Intersearch 8, -- IE value * 2
  s_SearchHCS OMIT,
  rat_List OMIT,
  q_QualMin -24,
  q_RxlevMin -40 -- (IE value * 2) + 1
 q_Hyst_I_S 1, -- (IE value*2)
 t_Reselection_S 0,
 hcs_ServingCellInformation OMIT,
 maxAllowedUL_TX_Power 21
cellAccessRestriction {
 cellBarred notBarred: NULL,
 cellReservedForOperatorUse notReserved,
 cellReservationExtension notReserved,
 accessClassBarredList { notBarred,
  notBarred.
  notBarred,
  notBarred.
  notBarred,
  notBarred

    nonCriticalExtensions OMIT
```

Constraint Name : cb_SIB3_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)

Group :

ASN1 Type : SysInfoType3

Derivation Path : Encoding Variation :

Comments : Default system information block type 3 for UTRAN/GERAN

Constraint Value

```
sib4indicator TRUE,
cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
cellSelectReselectInfo {
 mappingInfo OMIT,
 cellSelectQualityMeasure cpich_RSCP : NULL,
 modeSpecificInfo fdd: {
  s_Intrasearch 8, -- IE value * 2
  s_Intersearch 8, -- IE value * 2
  s_SearchHCS OMIT,
  rat_List {{
     rat_Identifier gsm,
     s_SearchRAT -16,
     s_HCS_RAT OMIT,
     s_Limit_SearchRAT 0
  q_QualMin -24,
  q_RxlevMin -40 -- (IE value * 2) + 1
 q_Hyst_I_S 1, -- (IE value*2)
 t_Reselection_S 0,
 hcs ServingCellInformation OMIT,
 maxAllowedUL_TX_Power 21
cellAccessRestriction {
 cellBarred notBarred: NULL,
 cellReservedForOperatorUse notReserved,
 cellReservationExtension notReserved,
 accessClassBarredList { notBarred,
  notBarred,
  notBarred,
  notBarred.
  notBarred,
  notBarred,
  notBarred.
  notBarred,
  notBarred.
  notBarred,
  notBarred,
  notBarred,
  notBarred,
  notBarred,
  notBarred,
  notBarred

    nonCriticalExtensions OMIT
```

Constraint Name : cb_SIB4_DefUTRAN (p_CellInfoCfg : CellInfoCfg)

Group :

ASN1 Type : SysInfoType4

Derivation Path : Encoding Variation :

Comments: Default system information block type 4 for UTRAN only, used in connected mode.

Constraint Value

```
cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
cellSelectReselectInfo {
 mappingInfo OMIT,
 cellSelectQualityMeasure cpich_RSCP: NULL,
 modeSpecificInfo fdd : {
  s_Intrasearch 8, -- IE value * 2
  s_Intersearch 8, -- IE value * 2
  s_SearchHCS OMIT,
  rat_List OMIT,
  q_QualMin -24,
  q_RxlevMin -40 -- (IE value * 2) + 1
 q_Hyst_I_S 1, -- (IE value*2)
 t_Reselection_S 0,
 hcs_ServingCellInformation OMIT,
 maxAllowedUL_TX_Power 21
cellAccessRestriction {
 cellBarred notBarred: NULL,
 cellReservedForOperatorUse notReserved,
 cellReservationExtension notReserved,
 accessClassBarredList OMIT

    nonCriticalExtensions OMIT
```

Constraint Name : cb_SIB4_DefUTRAN_GERAN (p_CellInfoCfg : CellInfoCfg)

Group :

ASN1 Type : SysInfoType4

Derivation Path : Encoding Variation :

Comments : Default system information block type 4 for UTRAN/GERAN, used in connected mode.

Constraint Value

```
cellIdentity INT_TO_BIT (p_CellInfoCfg.cellId ,28) ,
cellSelectReselectInfo {
 mappingInfo OMIT,
 cellSelectQualityMeasure cpich_RSCP: NULL,
 modeSpecificInfo fdd : {
  s_Intrasearch 8, -- IE value * 2
  s_Intersearch 8, -- IE value * 2
  s SearchHCS OMIT,
  rat_List {{
    rat_Identifier gsm,
    s_SearchRAT -16,
    s_HCS_RAT OMIT,
    s_Limit_SearchRAT 0
  }},
  q_QualMin -24,
  q_RxlevMin -40 -- (IE value * 2) + 1
 q_Hyst_I_S 1, -- (IE value*2)
 t_Reselection_S 0,
 hcs_ServingCellInformation OMIT,
 maxAllowedUL_TX_Power 21
cellAccessRestriction {
 cellBarred notBarred: NULL,
 cell Reserved For Operator Use\ not Reserved,
 cellReservationExtension notReserved,
 accessClassBarredList OMIT

    nonCriticalExtensions OMIT
```

Constraint Name : cb_SIB5_Def (p_CellInfo : CellInfoCfg)

Group :

ASN1 Type : SysInfoType5

Derivation Path : Encoding Variation :

Comments: Default system information block type 5

Constraint Value

```
sib6indicator TRUE,
pich_PowerOffset p_CellInfo.powerPICH,
modeSpecificInfo fdd: {
 aich_PowerOffset p_CellInfo.powerAICH
primaryCCPCH_Info OMIT,
prach_SystemInformationList {{
  prach_RACH_Info {
   modeSpecificInfo fdd: {
    availableSignatures tsc_PRACH1_Signatures,
    availableSF tsc_PRACH1_SF,
    preamble Scrambling Code Word Number\ tsc\_PRACH1\_ScrC,
    puncturingLimit pl1,
    availableSubChannelNumbers '11111111111'B
  transportChannelIdentity tsc_RACH1,
  rach_TransportFormatSet commonTransChTFS: c_RACH_TFS_UE,
  rach_TFCS normalTFCI_Signalling : complete : {
   ctfcSize ctfc2Bit : {{
     ctfc2 0,
     powerOffsetInformation { gainFactorInformation computedGainFactors : 0,
       powerOffsetPp_m 0
    { ctfc2 1,
     powerOffsetInformation {
       gainFactorInformation signalledGainFactors : {
        modeSpecificInfo fdd: {
         gainFactorBetaC 11
        gainFactorBetaD 15,
        referenceTFC_ID 0 },
       powerOffsetPp_m 0
  }},
  prach_Partitioning fdd: {{
    accessServiceClass_FDD OMIT
   },
    accessServiceClass_FDD {
     availableSignatureStartIndex 0,
     availableSignatureEndIndex 7,
     assignedSubChannelNumber '1111'B
    accessServiceClass_FDD OMIT
    accessServiceClass_FDD {
     availableSignatureStartIndex 0,
     availableSignatureEndIndex 7
```

Constraint Value

```
assignedSubChannelNumber '1111'B
    }
   },
    accessServiceClass_FDD OMIT
    accessServiceClass_FDD {
     availableSignatureStartIndex 0,
     availableSignatureEndIndex 7,
     assignedSubChannelNumber '1111'B
    accessServiceClass_FDD OMIT
    accessServiceClass_FDD {
     availableSignatureStartIndex 0,
     availableSignatureEndIndex 7,
     assignedSubChannelNumber '1111'B
  }},
  persistenceScalingFactorList { psf0_9, psf0_9, psf0_9, psf0_9, psf0_9, psf0_9 },
  ac_To_ASC_MappingTable { 6, 5, 4, 3, 2, 1, 0 },
  modeSpecificInfo fdd: {
   primaryCPICH_TX_Power 31,
   constantValue -10,
   prach_PowerOffset {
    powerRampStep 3, -- db
    preambleRetransMax 4
   rach_TransmissionParameters {
    mmax 2,
    nb01Min 3,
    nb01Max 10
   aich_Info {
    channelisationCode256 tsc_AICH1_ChC,
    sttd Indicator FALSE,
    aich_TransmissionTiming e0
  }
sCCPCH_SystemInformationList {{
  secondaryCCPCH_Info {
   modeSpecificInfo fdd: {
    dummy1 mayBeUsed, -- mandatory ie
    secondaryScramblingCode OMIT,
    sttd_Indicator FALSE,
    sf_AndCodeNumber tsc_S_CCPCH1_ChC,
    pilotSymbolExistence FALSE,
    tfci Existence TRUE,
    positionFixedOrFlexible flexible,
    timingOffset 0
  tfcs normalTFCI_Signalling : complete: {ctfcSize ctfc4Bit : {
    {ctfc4 0 }, {ctfc4 1 }, {ctfc4 2 }, {ctfc4 3 }, {ctfc4 4}, {ctfc4 5 }, {ctfc4 6 }, {ctfc4 8}}},
  fach_PCH_InformationList { {
    transportFormatSet commonTransChTFS: c_PCH_TFS_UE,
    transportChannelIdentity tsc_PCH1, -- PCH
```

Detailed Comments:

ASN.1 Type Constraint Declaration Constraint Value ctch_Indicator FALSE transportFormatSet commonTransChTFS: c_FACH_TFS_UE, transportChannelIdentity tsc_FACH1, -- FACH ctch_Indicator FALSE transportFormatSet commonTransChTFS: c_FACH_TFS_PS_UE, transportChannelIdentity tsc_FACH2, -- FACH ctch Indicator FALSE pich_Info fdd :{ channelisationCode256 tsc_PICH1_ChC, pi_CountPerFrame e18, sttd_Indicator FALSE }}, cbs_DRX_Level1Information OMIT -- nonCriticalExtensions OMIT

ASN.1 Type Constraint Declaration Constraint Name : cb_SIB6_Def (p_CellInfo : CellInfoCfg) Group **ASN1 Type** : SysInfoType6 **Derivation Path Encoding Variation:** Comments : Default system information block type 6, used in connected mode. **Constraint Value** pich_PowerOffset p_CellInfo.powerPICH, modeSpecificInfo fdd: { aich_PowerOffset p_CellInfo.powerAICH primaryCCPCH_Info OMIT, prach_SystemInformationList OMIT, sCCPCH_SystemInformationList OMIT, cbs_DRX_Level1Information OMIT Detailed Comments: Similar to cb_SIB5_Def, except "AC-to-ASC mapping table" not present

ASN.1 Type Constraint Declaration Constraint Name : cb_TrChInfoRACH1 Group **ASN1 Type** : TrCHInfo **Derivation Path Encoding Variation:** Comments **Constraint Value** ulconnectedTrCHList { { trchid tsc_RACH1, transportChannelInfo c_RACH_TFS ulTFCS c_TFCS_Cmpl0_1_Rx, -- sent to SS dlconnectedTrCHList OMIT, dITFCS OMIT

```
ASN.1 Type Constraint Declaration
Constraint Name : cb_TrLogMappingRACH2
Group
ASN1 Type
                  : TrCH_LogCHMappingList1
Derivation Path
Encoding Variation:
Comments
                                               Constraint Value
 ulconnectedTrCHList {
   trchid tsc_RACH1,
   trCH_LogCHMappingList {
     logicalChannel_Mapping ul_LogicalChannelMapping: {
      macHeaderManipulation normalMacHeader,
      ul_TransportChannelType rach,
      logicalChannelIdentity tsc_UL_CCCH5,
      logicalChannelType cCCH
     rB_Identity tsc_RB0
 dlconnectedTrCHList OMIT
Detailed Comments:
```

ASN.1 Type Constraint Declaration Constraint Name : cb_UL_AM_RLC Group **ASN1 Type** : UL_AM_RLC_Mode **Derivation Path Encoding Variation:** Comments **Constraint Value** transmissionRLC_Discard noDiscard: dat15, transmissionWindowSize tw128, timerRST tr500, max_RST rst4, pollingInfo { timerPollProhibit tpp200, timerPoll tp200, poll_PDU OMIT, poll_SDU sdu1, lastTransmissionPDU_Poll TRUE, lastRetransmissionPDU_Poll TRUE, pollWindow pw99, timerPollPeriodic OMIT }

```
ASN.1 Type Constraint Declaration
Constraint Name
                 : cb_UL_DPCH_Info (p_SprdFct: SpreadingFactor; p_PuncLimit: PuncturingLimit;
                    p_UL_ScramblingCode : UL_ScramblingCode )
Group
ASN1 Type
                  : UL_DPCH_Info
Derivation Path
Encoding Variation:
Comments
                                                Constraint Value
 ul_DPCH_PowerControlInfo fdd:{
  dpcch_PowerOffset tsc_DPCCH_PowerOffset,
  pc_Preamble 1,
  sRB_delay 7,
  powerControlAlgorithm algorithm1: tsc_TpcStepSize
 modeSpecificInfo fdd :{
  scramblingCodeType longSC,
  scramblingCode p_UL_ScramblingCode,
  numberOfDPDCH OMIT,
  spreadingFactor p_SprdFct,
  tfci_Existence TRUE,
  numberOfFBI_Bits OMIT,
  puncturingLimit p_PuncLimit
Detailed Comments:
```

Constraint Name : cd_DL_AM_RLC_SRB

Group

ASN1 Type : DL_AM_RLC_Mode

Derivation Path : cb_DL_AM_RLC.

Encoding Variation:
Comments:

Constraint Value

REPLACE receivingWindowSize BY rw32

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cd_DL_CommonInformationDCH_DPCH_Offset (p_Sf: SF512_AndPilot)

Group

ASN1 Type : DL_CommonInformation

Derivation Path : c_DL_CommonInformationDCH_DPCH_Offset.

Encoding Variation:
Comments:

Constraint Value

REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.positionFixedOrFlexible BY fixed,

REPLACE dl_DPCH_InfoCommon.modeSpecificInfo.fdd.tfci_Existence BY FALSE

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cd_UL_AM_RLC_SRB

Group :

ASN1 Type : UL_AM_RLC_Mode Derivation Path : cb_UL_AM_RLC.

Encoding Variation:
Comments:

Constraint Value

REPLACE transmissionWindowSize BY tw32,

REPLACE max_RST BY rst1

Constraint Name : cs_CipheringModeCmdOn (p_CipheringAlgorithm : CipheringAlgorithm)

Group :

ASN1 Type : CipheringModeCommand

Derivation Path : Encoding Variation : Comments :

Constraint Value

startRestart : p_CipheringAlgorithm

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cs_IntegrityCheckInfo0

Group :

ASN1 Type : IntegrityCheckInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

{
 messageAuthenticationCode tsc_MessAuthCode,
 rrc_MessageSequenceNumber tsc_MSN
}

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cs_IntegrityProtectModify_P(p1,p2,p3,p4,p5 : RRC_MessageSequenceNumber)

Group

ASN1 Type : IntegrityProtectionModeInfo

Derivation Path : Encoding Variation : Comments :

Constraint Value

```
{
    integrityProtectionModeCommand modify : {
        dl_IntegrityProtActivationInfo {
            rrc_MessageSequenceNumberList {p1,p2,p3,p4,p5 } --- fixed reasonnable value
        }
    },
    integrityProtectionAlgorithm uia1
```

ASN.1 Type Constraint Declaration Constraint Name : cs_IntegrityProtectStart (p_Integrityprotnumber: BITSTRING) Group : ASN1 Type : IntegrityProtectionModeInfo Derivation Path : Encoding Variation : Comments : Constraint Value { integrityProtectionModeCommand startIntegrityProtection : { integrityProtlnitNumber p_Integrityprotnumber }, integrityProtectionAlgorithm uia1

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cs_Null_CipheringModeCommand

Group :

ASN1 Type : CipheringModeCommand

Derivation Path : Encoding Variation : Comments :

Constraint Value

dummy: NULL

Detailed Comments:

ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoList20 (p_RLC_SN20 : RLC_SequenceNumber)

Group

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path : Encoding Variation : Comments :

Constraint Value

{
 c_RB_ActTimeInfo(tsc_RB20, p_RLC_SN20)
}

```
ASN.1 Type Constraint Declaration

Constraint Name : cs_RB_ActTimeInfoList20_22( p_RLC_SN20, p_RLC_SN22 : RLC_SequenceNumber )

Group :

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path :

Encoding Variation :

Comments :

Constraint Value

{
    c_RB_ActTimeInfo( tsc_RB20, p_RLC_SN20 ), c_RB_ActTimeInfo( tsc_RB22, p_RLC_SN22 )
}

Detailed Comments :
```

```
ASN.1 Type Constraint Declaration
Constraint Name
                  : cs_RB_ActTimeInfoListSRBs ( p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4 :
                   RLC_SequenceNumber)
Group
ASN1 Type
                  : RB_ActivationTimeInfoList
Derivation Path
Encoding Variation:
Comments
                                              Constraint Value
 c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1),
 c_RB_ActTimeInfo ( tsc_RB2, p_RLC_SN2 ) ,
 c_RB_ActTimeInfo ( tsc_RB3, p_RLC_SN3 ),
 c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ) }
Detailed Comments:
```

```
ASN.1 Type Constraint Declaration
Constraint Name
               : cs_RB_ActTimeInfoListSRBs_20 ( p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4,
                   p_RLC_SN20 : RLC_SequenceNumber)
Group
ASN1 Type
                 : RB_ActivationTimeInfoList
Derivation Path
Encoding Variation:
Comments
                                             Constraint Value
c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1),
c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2),
c_RB_ActTimeInfo (tsc_RB3, p_RLC_SN3),
c_RB_ActTimeInfo (tsc_RB4, p_RLC_SN4),
c_RB_ActTimeInfo (tsc_RB20, p_RLC_SN20)
Detailed Comments:
```

```
ASN.1 Type Constraint Declaration
                 : cs_RB_ActTimeInfoListSRBs_20_21 ( p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4,
Constraint Name
                   p_RLC_SN20, p_RLC_SN21 : RLC_SequenceNumber)
Group
ASN1 Type
                  : RB_ActivationTimeInfoList
Derivation Path
Encoding Variation:
Comments
                                              Constraint Value
 c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1),
 c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2),
 c\_RB\_ActTimeInfo\ (\ tsc\_RB3,\ p\_RLC\_SN3\ ),
 c_RB_ActTimeInfo ( tsc_RB4, p_RLC_SN4 ),
 c_RB_ActTimeInfo (tsc_RB20, p_RLC_SN20),
 c_RB_ActTimeInfo (tsc_RB21, p_RLC_SN21)
Detailed Comments:
```

```
ASN.1 Type Constraint Declaration
Constraint Name : cs_RB_ActTimeInfoListSRBs_20_22 ( p_RLC_SN1, p_RLC_SN2, p_RLC_SN3, p_RLC_SN4,
                   p_RLC_SN20, p_RLC_SN22 : RLC_SequenceNumber)
Group
ASN1 Type
                 : RB_ActivationTimeInfoList
Derivation Path
Encoding Variation:
Comments
                                             Constraint Value
 c_RB_ActTimeInfo (tsc_RB1, p_RLC_SN1),
 c_RB_ActTimeInfo (tsc_RB2, p_RLC_SN2),
 c_RB_ActTimeInfo (tsc_RB3, p_RLC_SN3),
 c_RB_ActTimeInfo (tsc_RB4, p_RLC_SN4),
 c_RB_ActTimeInfo ( tsc_RB20, p_RLC_SN20 ),
 c_RB_ActTimeInfo ( tsc_RB22, p_RLC_SN22 )
Detailed Comments:
```

ASN.1 Type Constraint Declaration

 $\begin{array}{ll} \textbf{Constraint Name} & : cs_RB_ActTimeInfoListSRBs_21 \ (\ p_RLC_SN1, \ p_RLC_SN2, \ p_RLC_SN3, \ p_RLC_SN4, \\ & p_RLC_SN21 : RLC_SequenceNumber) \end{array}$

Group

ASN1 Type : RB_ActivationTimeInfoList

Derivation Path Encoding Variation: Comments

Constraint Value

```
c\_RB\_ActTimeInfo\ (\ tsc\_RB1,\ p\_RLC\_SN1\ )\ ,
 \begin{array}{l} c\_RB\_ActTimeInfo~(~tsc\_RB2,~p\_RLC\_SN2~)~,\\ c\_RB\_ActTimeInfo~(~tsc\_RB3,~p\_RLC\_SN3~), \end{array} 
c\_RB\_ActTimeInfo\ (\ tsc\_RB4,\ p\_RLC\_SN4\ ),
c_RB_ActTimeInfo (tsc_RB21, p_RLC_SN21)
```

ASN.1 Type Constraint Declaration Constraint Name : cs_RRC_SecModeCmdCiphInt (p_RRC_Ti : RRC_TransactionIdentifier; p_CipheringModeCommand: CipheringModeCommand; p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList ; p_ActTimeDPCH : INTEGER; p_cn_domain : CN_DomainIdentity; p_integrityMode : IntegrityProtectionModeInfo; p_SecurityCapability:BITSTRING; p_SystemSpecCap: InterRAT_UE_SecurityCapList) Group **ASN1 Type** : SecurityModeCommand **Derivation Path Encoding Variation:** Comments **Constraint Value** r3 securityModeCommand_r3 rrc_TransactionIdentifier p_RRC_Ti, securityCapability cipheringAlgorithmCap p_SecurityCapability, $integrity Protection Algorithm Cap\ tsc_Integr Prot Alg Cap$ cipheringModeInfo cipheringModeCommand p_CipheringModeCommand, activationTimeForDPCH p_ActTimeDPCH, rb_DL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList $integrity Protection Mode Info\ p_integrity Mode,$

Detailed Comments:

cn_DomainIdentity p_cn_domain,

laterNonCriticalExtensions OMIT

ue_SystemSpecificSecurityCap p_SystemSpecCap

```
ASN.1 Type Constraint Declaration
Constraint Name
                  : cs_RRC_SecModeCmdInt (p_RRC_Ti: RRC_TransactionIdentifier; p_cn_domain:
                    CN_DomainIdentity; p_integrityMode : IntegrityProtectionModeInfo;
                    p_SecurityCapability:BITSTRING;
                    p_SystemSpecCap: InterRAT_UE_SecurityCapList )
Group
ASN1 Type
                   : SecurityModeCommand
Derivation Path
Encoding Variation:
Comments
                                                 Constraint Value
r3
 securityModeCommand_r3
  rrc_TransactionIdentifier p_RRC_Ti,
  securityCapability
   cipheringAlgorithmCap p_SecurityCapability,
   integrityProtectionAlgorithmCap tsc_IntegrProtAlgCap
  cipheringModeInfo OMIT,
  integrityProtectionModeInfo p_integrityMode,
  cn_DomainIdentity p_cn_domain,
  ue_SystemSpecificSecurityCap p_SystemSpecCap
 laterNonCriticalExtensions OMIT
```

Constraint Name : ca_AT_AnyRsp

Group :

ASP Type : AT_CmdCnf

Derivation Path :

Comments: Expect any response via AT port

Parameter Name	Parameter Value	Comments
result	*	
resultString	*	
sMS_BlockMode	_	Defined for future development

Detailed Comments:

ASP Constraint Declaration

Constraint Name : ca_AT_CmdCnfWithString

Group :

ASP Type : AT_CmdCnf

Derivation Path :

Comments: The ASP is used get a positive result only for a requested command to the UT (UT ->LT).

Parameter Name	Parameter Value	Comments
result	TRUE IF_PRESENT	
resultString	?	
sMS_BlockMode	-	Defined for future development
Detailed Comments :	<u> </u>	

Detailed Comments:

ASP Constraint Declaration

Constraint Name: ca_MMI_CmdCnfNeg

Group :

ASP Type : MMI_CmdCnf

Derivation Path :

Comments: The ASP is used get the negative result of a requested MMI command to the UT (UT ->LT).

Parameter Name	Parameter Value	Comments
result	FALSE	
resultString	*	
resultString		

Constraint Name: ca_AT_CmdCnf

Group :

ASP Type : AT_CmdCnf

Derivation Path :

Comments: The ASP is used get a positive result only for a requested command to the UT (UT ->LT).

Parameter Name	Parameter Value	Comments
result	TRUE IF_PRESENT	
resultString	tsc_AT_ResultOK IF_PRESENT	
sMS_BlockMode	_	Defined for future development

Detailed Comments:

ASP Constraint Declaration

Constraint Name: ca_AT_CmdReq (p_Cmd: IA5String)

Group :

ASP Type : AT_CmdReq

Derivation Path :

Comments: The ASP is used to request a command to the UT (LT ->UT).

Parameter Name	Parameter Value	Comments
cmd	p_Cmd	
sMS_BlockMode	_	Defined for future development

Detailed Comments:

ASP Constraint Declaration

Constraint Name: ca_DataReq (p_CellId: INTEGER; p_Rb: SS_RB_Identity; p_Pdu: PDU)

Group :

ASP Type : RRC_DataReq

Derivation Path :

Comments : The ASP is used to request the transmission of the NAS PDU message using acknowledged

operation (NAS -> RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_ld	p_Rb	
ch	_	GERAN only
sapld	-	GERAN only
cN_Domain	tsc_SS_CS_Domain	
msg	p_Pdu	

Constraint Name: ca_MMI_CmdCnf

Group :

ASP Type : MMI_CmdCnf

Derivation Path :

Comments: The ASP is used get the result of a requested MMI command to the UT (UT ->LT).

Parameter Value	Comments
TRUE	
*	

Detailed Comments:

ASP Constraint Declaration

Constraint Name: ca_MMI_CmdReq (p_Cmd: IA5String)

Group :

ASP Type : MMI_CmdReq

Derivation Path :

Comments: The ASP is used to request a MMI command to the UT (LT ->UT).

	Parameter Value Comments
cmd p_Cmd command line	p_Cmd command line

Detailed Comments:

ASP Constraint Declaration

 $\textbf{Constraint Name} \hspace{0.2cm} \textbf{:} \hspace{0.2cm} ca_PS_DataReq \hspace{0.2cm} \textbf{(} \hspace{0.2cm} p_CellId : INTEGER; p_Rb : SS_RB_Identity ; p_Pdu : PDU \textbf{)} \\$

Group :

ASP Type : RRC_DataReq

Derivation Path : Comments :

Parameter Name	Parameter Value	Comments
cellid	p_CellId	
rB_ld	p_Rb	
ch	-	GERAN only
sapld	-	GERAN only
cN_Domain	tsc_SS_PS_Domain	
msg	p_Pdu	
Detailed Comments		

Constraint Name: car_InitDirectTransfer (p_CellId: INTEGER; p_Rb: SS_RB_Identity; p_Pdu: PDU)

Group :

ASP Type : RRC_DataInd

Derivation Path :

Comments: The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation

(NAS <- RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_ld	p_Rb	
ch	_	GERAN only
sapld	_	GERAN only
cN_Domain	tsc_SS_CS_Domain	
start	?	
msg	p_Pdu	

Detailed Comments:

ASP Constraint Declaration

Constraint Name: car_PS_InitDirectTransfer (p_CellId: INTEGER; p_Rb:SS_RB_Identity; p_Pdu: PDU)

Group :

ASP Type : RRC_DataInd

Derivation Path :

Comments: The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation

(NAS <- RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_ld	p_Rb	
ch	_	GERAN only
sapld	-	GERAN only
cN_Domain	tsc_SS_PS_Domain	
start	?	
msg	p_Pdu	

Constraint Name: car_PS_UplinkDirectTransfer (p_CellId: INTEGER; p_Rb:SS_RB_Identity; p_Pdu: PDU)

Group :

ASP Type : RRC_DataInd

Derivation Path :

Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation

(NAS <- RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_ld	p_Rb	
ch	_	GERAN only
sapld	_	GERAN only
cN_Domain	tsc_SS_PS_Domain	
start	_	
msg	p_Pdu	

Detailed Comments:

ASP Constraint Declaration

Constraint Name: car_StatusInd (p_RB_Id: SS_RB_Identity)

Group :

ASP Type : RLC_TR_TestDataInd

Derivation Path :

Comments : This constraint is used to receive a STATUS PDU with the given super fields, and using the given RB

ld.

Any padding octets present are ignored.

Parameters:

 $p_RB_Id\text{: }The \ identifier \ for \ the \ RB \ to \ be \ used \ for \ reception \ of \ data. \ This \ is \ expected \ to \ be \ one \ of \ the$

following values, depending on the RLC configuration being tested.

tsc_RB_AM_7_RLC, tsc_RB_UM_7_RLC, tsc_RB_AM_15_RLC, tsc_RB_UM_15_RLC

 $p_SuperFields$: The super fields expected to be included in the STATUS PDU.

Parameter Name	Parameter Value	Comments
cellid	tsc_CellDedicated	
rB_ld	p_RB_ld	
data	cr_StatusAny	

 $\textbf{Constraint Name} \hspace{0.2cm} \textbf{:} \hspace{0.2cm} car_UplinkDirectTransfer \hspace{0.2cm} (p_CellId: \hspace{0.2cm} INTEGER; \hspace{0.2cm} p_Rb: SS_RB_Identity; \hspace{0.2cm} p_Pdu: PDU \hspace{0.2cm})$

Group :

ASP Type : RRC_DataInd

Derivation Path :

Comments : The ASP is used to indicate the receipt of the NAS PDU message using acknowledged operation

(NAS <- RRC).

Parameter Name	Parameter Value	Comments
cellId	p_CellId	
rB_ld	p_Rb	
ch	_	GERAN only
sapld	_	GERAN only
cN_Domain	tsc_SS_CS_Domain	
start	_	
msg	p_Pdu	

Constraint Name: ca_4DCH_DL_Info (p_CellId: INTEGER; p_PhyChld: INTEGER; p_Type:

TrChConfigType;p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing

Constraint Value

```
cellId p_CellId,
routingInfo physicalChannelIdentity: p_PhyChld,
ratType fdd,
trchConfigType\ p\_Type,
configMessage {
 activation Time\ activation CFN: p\_Activation Time,
 dlconnectedTrCHList {{
   trchid tsc_DL_DCH1,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_81_TFS_DL
   trchid tsc_DL_DCH2,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_103_TFS
   trchid tsc DL DCH3,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_60_TFS
   trchid tsc_DL_DCH5,
   dl_TransportChannelType dch,
   transportChannelInfo c_DCH_148_TFS_DL
 dITFCS c_TFCS_CmpI0_1_11_12_13_23_Tx ( c_PowerOffsetInfoBelow64k )
```

Detailed Comments: For DCH1 transport channel the following parameters are fixed by core spec.(34.123 cl. 7.2):

TTI = 40 ms;

two transport formats: Transport Blocks = 1, TB size = 148 bits; Tansport Block = 0, Size = 148.

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 155

Constraint Name: ca_4DCH_UL_Info(p_CellId: INTEGER; p_PhyChld: INTEGER; p_Type: TrChConfigType;

p_ActivationTime : ActivationTime)

Group

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only, used in aknowledged mode RLC testing

Constraint Value

```
cellId p_CellId,
routingInfo physicalChannelIdentity: p_PhyChld,
ratType fdd,
trchConfigType p_Type,
configMessage {
 activation Time\ activation CFN: p\_Activation Time,
 ulconnectedTrCHList {{
   trchid tsc_UL_DCH1,
   ul_TransportChannelType dch,
   transportChannelInfo c_DCH_81_TFS
   trchid tsc_UL_DCH2,
   ul_TransportChannelType dch,
   transportChannelInfo c_DCH_103_TFS
   trchid tsc UL DCH3,
   ul_TransportChannelType dch,
   transportChannelInfo c_DCH_60_TFS
   trchid tsc_UL_DCH5,
   ul_TransportChannelType dch,
   transportChannelInfo c_DCH_148_TFS_UL
 ulTFCS c_TFCS_Cmpl0_1_11_12_13_23_Rx
```

Detailed Comments: For DCH1 transport channel the following parameters are fixed by core spec.(34.123 cl. 7.2):

TTI = 40 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 155

```
ASN.1 ASP Constraint Declaration
Constraint Name : ca_AichInfo(
                    p_CellId: INTEGER;
                   p_PhyChld: INTEGER;
p_AICH_Info: AICH_Info;
                    p_TxPower: AICH_PowerOffset)
Group
ASP Type
                  : CPHY_RL_Setup_REQ
Derivation Path
Comments
                                                    Constraint Value
 cellId p_CellId,
 routingInfo physicalChannelIdentity: p_PhyChId,
 ratType fdd,
 setupMessage {
  physicalChannelInfo alCHInfo : {
   aichinfo p_AICH_Info,
   dl_TxPower p_TxPower
}
Detailed Comments: The following are fixed in this constraint (34.108):
                      transmission diversity is off,
                      speading factor is set to 256,
                      AICH timing scheme is 0
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_BCH_InfoActNow (p_CellId: INTEGER)
Group
ASP Type
                  : CPHY_TrCH_Config_REQ
Derivation Path
Comments
                 : For FDD mode only
                                                   Constraint Value
 cellid p_Cellid,
 routingInfo physicalChannelIdentity: tsc_P_CCPCH,
 ratType fdd.
 trchConfigType nonDch: NULL,
 configMessage {
  activationTime activateNow: NULL,
  ulconnectedTrCHList OMIT,
  ulTFCS OMIT,
  dlconnectedTrCHList {{
    trchid tsc_BCH1,
    dl_TransportChannelType bch,
    transportChannelInfo {
     tti tti20: {{tb_Size 246,
        numberOfTbSizeList {one : NULL},
        logicalChannelList configured: NULL}},
     semistaticTF_Information {
      channelCodingType convolutional :half,
      rateMatchingAttribute 1,
       crc_Size crc16
    }
  dITFCS c_TFCS_CmpI0 ( c_PowerOffsetInfoBelow64k )
Detailed Comments: For BCH transport channel the following parameters are fixed by core spec.(25.212 and 25.302):
                       TTI = 20 \text{ ms};
                      TransportBlocks = 1;
                      transport block size = 246 bits;
                      coding = convolutional;
                      coding rate = 1/2;
                      CRCsize = 16;
                      RateMatching = 1 (this parameter is not relevant to BCH, value can be any number between 1 to
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_CellCfgCnf(p_CellId : INTEGER)

Group :
ASP Type : CPHY_Cell_Config_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId
}

Detailed Comments :
```

 $\begin{tabular}{ll} \textbf{Constraint Name} &: ca_CellCfgReq(p_CellId:INTEGER; p_Tcell:INTEGER; p_FreqInfo:FrequencyInfo; p_PriScmCode:INTEGER; p_DL_TxAttenLevel:INTEGER; p_SfnOffset:INTEGER; p_totalCellPower:INTEGER; p_totalCell$

CellTxPowerLevel)

Group

ASP Type : CPHY_Cell_Config_REQ

Derivation Path Comments

Constraint Value

```
cellid p_Cellid,
tcell p_Tcell,
sfnOffset p_SfnOffset,
frequencyInfo p_FreqInfo,
primaryScramblingCode_SS p_PriScmCode,
cellTxPowerLevel p_totalCellPower,
dLTxAttenuationLevel p_DL_TxAttenLevel
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: ca_CMAC_CfgCnf (p_CellId: INTEGER; p_PhyChId: INTEGER)

Group

ASP Type : CMAC_Config_CNF

Derivation Path Comments

Constraint Value

cellid p_Cellid,

routingInfo physicalChannelIdentity: p_PhyChId

ASN.1 ASP Constraint Declaration Constraint Name : ca_CMAC_CfgInfo(p_CellId: INTEGER; p_PhyChld: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1)

Group :

ASP Type : CMAC_Config_REQ

Derivation Path : Comments :

```
Constraint Value
```

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  configMessage setup: {
    activationTime activateNow : NULL,
    uE_Info p_UEInfo,
    trCHInfo p_TrCHInfo,
    trCH_LogCHMapping p_TrCH_LogCHMapping
  }
}
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: ca_CMAC_CipherActCnf(p_CellId: INTEGER; p_PhyChId: INTEGER)

Group :

ASP Type : CMAC_Ciphering_Activate_CNF

Derivation Path : Comments :

Constraint Value

{
 cellId p_CellId,
 routingInfo physicalChannelIdentity: p_PhyChId

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_CMAC_DL_CipherActReq (p_CellId: INTEGER; p_PhyChld: INTEGER; p_CipherMode:
                  CipheringModeCommand; p_ActTimeDPCH: INTEGER;p_IncrDcr : Increment_Mode)
Group
ASP Type
                : CMAC_Ciphering_Activate_REQ
Derivation Path
Comments
                                                Constraint Value
 cellId p_CellId,
 routingInfo physicalChannelIdentity: p_PhyChld,
 ratType fdd,
 cn_DomainIdentity cs_domain, -- the domain is hard coded as no TM RAB in PS domain
 cipheringModeInfo
  ciphering Mode Command \ p\_Cipher Mode,
  activationTimeForDPCH p_ActTimeDPCH,
  rb\_DL\_CiphActivationTimeInfo\ OMIT
 incHFN p_IncrDcr
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_CMAC_PagingCfgCnf(p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity
)

Group :
ASP Type : CMAC_PAGING_Config_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_CMAC_PagingCfgReq(
                  p_CellId: INTEGER;
                  p_PhysicalChannelIdentity: PhysicalChannelIdentity;
                  p_RatType: RatType;
                  p_Pdu: CmacPagingConfigReq
Group
ASP Type
                 : CMAC_PAGING_Config_REQ
Derivation Path
Comments
                                                Constraint Value
 cellid p_Cellid,
 routing Info\ physical Channell dentity:\ p\_Physical Channell dentity,
 ratType p_RatType,
 configMessage p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_CMAC_ReconfigInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info;
                  p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1; p_ActivationTime:
                  ActivationTime)
Group
ASP Type
                 : CMAC_Config_REQ
Derivation Path
Comments
                                                Constraint Value
 cellId p_CellId,
 routingInfo physicalChannelIdentity: p_PhyChld,
 ratType fdd,
 configMessage reconfigure: {
  activationTime activationCFN: p_ActivationTime,
  uE_Info p_UEInfo,
  trCHInfo p_TrCHInfo,
  trCH_LogCHMapping p_TrCH_LogCHMapping
Detailed Comments:
```

ASN.1 ASP Constraint Declaration Constraint Name: ca_CMAC_ReconfigInfoActNow (p_CellId: INTEGER; p_PhyChId: INTEGER; p_UEInfo: UE_Info; p_TrCHInfo: TrCHInfo; p_TrCH_LogCHMapping: TrCH_LogCHMappingList1) Group **ASP Type** : CMAC_Config_REQ **Derivation Path** Comments **Constraint Value** cellId p_CellId, routingInfo physicalChannelIdentity: p_PhyChld, ratType fdd, configMessage reconfigure: { activationTime activateNow: NULL, uE_Info p_UEInfo, trCHInfo p_TrCHInfo, trCH_LogCHMapping p_TrCH_LogCHMapping

ASN.1 ASP Constraint Declaration Constraint Name : ca_CMAC_SecurityModeCfgCnf (p_CellId: INTEGER) Group : ASP Type : CMAC_SecurityMode_Config_CNF Derivation Path : Comments : Constraint Value { cellId p_CellId }

Detailed Comments:

Constraint Name : ca_CMAC_SecurityModeCfgReq (p_CellId: INTEGER; p_Domain : CN_DomainIdentity; p_Hfn:

 $HyperFrameNumber; p_KC: KeyCiphering; p_IK:IntegrityKey; p_GSM_ck: GSM_CipheringKey) \\$

Group :

ASP Type : CMAC_SecurityMode_Config_REQ

Derivation Path : Comments :

Constraint Value

```
{
    cellId p_CellId,
    macCipheringInfo
    {
        cn_DomainIdentity p_Domain,
        startValue p_Hfn,
        cipheringKey p_KC,
        integrityKey p_IK,
        gsmCipheringKey p_GSM_ck
    }
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

 $\textbf{Constraint Name} \hspace{0.1cm} : \hspace{0.1cm} \text{ca_CMAC_UL_CipherActReq (p_CellId: INTEGER; p_PhyChId: INTEGER; p_CipherMode: } \\$

CipheringModeCommand; p_ActTimeDPCH: INTEGER;p_IncrDcr : Increment_Mode)

Group

ASP Type : CMAC_Ciphering_Activate_REQ

Derivation Path : Comments :

Constraint Value

```
{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChId,
    ratType fdd,
    cn_DomainIdentity cs_domain, — domain hard coded as no TM RAB in PS Domain
    cipheringModeInfo
    {
        cipheringModeCommand p_CipherMode,
        activationTimeForDPCH p_ActTimeDPCH,
        rb_DL_CiphActivationTimeInfo OMIT
    },
    incHFN p_IncrDcr
}
```

Constraint Name: ca_CPHY_Cell_Release_CNF(

p_CellId: INTEGER)

Group

ASP Type : CPHY_Cell_Release_CNF

Derivation Path :

Comments : 1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a

test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag

ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE.

2. Releases the associated Memory Buffers (if any).

3. Cancels all active timers (if any) With "Soft Reset" flag OFF:

1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any)

2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List

3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.

Constraint Value

```
{
    soft_Reset FALSE,
    cell_ID_List { p_CellId }
}
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: ca_CPHY_Cell_Release_REQ(

p_CellId: INTEGER)

Group :

ASP Type : CPHY_Cell_Release_REQ

Derivation Path :

Comments : 1. This Primitive with "Soft_Reset" flag ON gives a common known starting point/state of SS for a

test case. The SS performs the following whenever it receives this primitive with "Soft_Reset" flag

ON:Releases all configured Channels and cells (if any) irrespective of Cell ID list IE.

2. Releases the associated Memory Buffers (if any).

3. Cancels all active timers (if any) With "Soft_Reset" flag OFF:

1. Releases cells listed in IE Cell_ID_List and associated configured Channels (if any)

2. Releases the Memory Buffers(if any) associated with Cells listed in IE Cell_ID_List

3. Cancels all active timers (if any) associated with Cells listed in IE Cell_ID_List.

Constraint Value

```
{
    soft_Reset FALSE,
    cell_ID_List { p_CellId }
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_CfgCnf(p_CellId: INTEGER; p_RB_Id: INTEGER)

Group :
ASP Type : CRLC_Config_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId, routingInfo rB_Identity: p_RB_Id
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_CipherActCnf(p_CellId: INTEGER )

Group :
ASP Type : CRLC_Ciphering_Activate_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
\textbf{Constraint Name} \hspace{0.2cm} \textbf{:} \hspace{0.2cm} \text{ca\_CRLC\_DL\_CipherActReq} (\textbf{p\_CellId: INTEGER; p\_CN\_Domain: CN\_DomainIdentity; p\_RB\_Id: p\_RB
                                                                                              INTEGER; p_CipherMode: CipheringModeCommand; p_N: RLC_SequenceNumber ;p_IncMode :
                                                                                              RLC_IncMode
Group
ASP Type
                                                                                      : CRLC_Ciphering_Activate_REQ
Derivation Path
Comments
                                                                                                                                                                                                                                                      Constraint Value
     cellid p_Cellid,
     ratType fdd,
     cn_DomainIdentity p_CN_Domain,
       ciphActivationInfo cipheringModeInfo:
           ciphering Mode Command \ p\_Cipher Mode,
           activationTimeForDPCH OMIT,
           rb_DL_CiphActivationTimeInfo
                 c_RB_ActTimeInfo(p_RB_Id, p_N)
     incHFN p_IncMode
Detailed Comments:
```

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_IntegrityActivateCnf(p_CellId: INTEGER)

Group :
ASP Type : CRLC_Integrity_Activate_CNF

Derivation Path :
Comments :

Constraint Value

{
 cellId p_CellId
}

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_RB_RelReq (p_CellId: INTEGER; p_RB_Id: INTEGER)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments :

Constraint Value

{
 cellId p_CellId,
 routingInfo rB_Identity: p_RB_Id,
 ratType fdd,
 configMessage release : NULL
}

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_SecurityModeCfgCnf(p_CellId: INTEGER)

Group :
ASP Type : CRLC_SecurityMode_Config_CNF

Derivation Path :
Comments :

Constraint Value

{
 cellId p_CellId
}

Detailed Comments :

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_CRLC_SecurityModeCfgReq(p_CellId: INTEGER; p_Domain: CN_DomainIdentity; p_Hfn:
                  HyperFrameNumber; p_KC: KeyCiphering; p_lk: IntegrityKey; p_GSM_ck: GSM_CipheringKey)
Group
                : CRLC_SecurityMode_Config_REQ
ASP Type
Derivation Path
Comments
                                               Constraint Value
 cellId p_CellId,
 rlcSecurityInfo
  cn_DomainIdentity p_Domain,
  startValue p_Hfn,
  cipheringKey p_KC,
  integrityKey p_lk,
  gsmCipheringKey p_GSM_ck
```

ASN.1 ASP Constraint Declaration Constraint Name : ca_CRLC_SetRRC_MSN_CNF (p_CellID :INTEGER ; p_RBID : INTEGER) Group : ASP Type : CRLC_SetRRC_MessageSN_CNF Derivation Path : Comments : Constraint Value { cellId p_CellID, routingInfo rB_Identity : p_RBID } Detailed Comments :

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_CRLC_UL_CipherActReq (p_CellId: INTEGER; p_CN_Domain: CN_DomainIdentity; p_RB_ActivationTimeInfoList: RB_ActivationTimeInfoList;p_IncMode: RLC_IncMode
)

Group :

ASP Type : CRLC_Ciphering_Activate_REQ

Derivation Path :
Comments :

Constraint Value

{
    cellIld p_CellId, ratType fdd, cn_DomainIdentity p_CN_Domain, ciphActivationInfor b_UL_CipheringActivationTimeInfo: p_RB_ActivationTimeInfoList, incHFN p_IncMode
}

Detailed Comments :
```

ASN.1 ASP Constraint Declaration Constraint Name : ca_CRLC_UL_IntegrityActivateReq (p_CellId: INTEGER ; p_Domain : CN_DomainIdentity; p_IntegrityProtActivationInfo : IntegrityProtActivationInfoList) Group : ASP Type : CRLC_Integrity_Activate_REQ Derivation Path : Comments : Constraint Value { cellId p_CellId, cn_DomainIdentity p_Domain , integrityActivationInfo ul_IntegProtActivationInfo : p_IntegrityProtActivationInfo } Detailed Comments :

Constraint Name: ca_DCH_148_TTI_10_DL_InfoActNow (p_CellId: INTEGER; p_PhyChld: INTEGER)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments: For FDD mode only. The configuration is defined in TS 34.123-1 cl. 6.10.2.4.1.3

Constraint Value

```
{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChId,
    ratType fdd,
    trchConfigType c_TrChConfigTypeDCH_NoSHO,
    configMessage {
        activationTime activateNow : NULL,
        dlconnectedTrCHList {{
            trchid tsc_DL_DCH5,
            dl_TransportChannelType dch,
            transportChannelInfo c_DCH_148_TTI_10_TFS
        }},
        dlTFCS c_TFCS_Cmpl0_1_Tx ( c_PowerOffsetInfoBelow64k )
    }
}
```

Detailed Comments: For DCH1 transport channel the following parameters are fixed by core spec.

TTI = 10 ms;

two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.

rlc_Size = RLC PDU SIZE = 144 bits.

coding = convolutional; coding rate = 1/3; CRCsize = 16; RateMatching = 192

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_DCH_148_TTI_10_UL_InfoActNow (p_CellId: INTEGER; p_PhyChId: INTEGER)
Group
ASP Type
                 : CPHY_TrCH_Config_REQ
Derivation Path
Comments
                 : For FDD mode only. The configuration is defined in TS 34.123-1 cl. 6.10.2.4.1.3
                                                  Constraint Value
 cellid p_Cellid,
 routingInfo physicalChannelIdentity: p_PhyChld,
 ratType fdd.
 trchConfigType c_TrChConfigTypeDCH_NoSHO,
 configMessage {
  activationTime activateNow: NULL,
  ulconnectedTrCHList {{
    trchid tsc_UL_DCH5,
    ul_TransportChannelType dch,
    transportChannelInfo c_DCH_148_TTI_10_TFS
  ulTFCS c_TFCS_Cmpl0_1_Rx
}
Detailed Comments: For DCH1 transport channel the following parameters are fixed by core spec.:
                      TTI = 10 \text{ ms};
                      two transport formats: TransportBlocks = 1, TB size = 148 bits; TansportBlock = 0, Size = 148.
                      rlc_Size = RLC PDU Size = 144 bits.
                      coding = convolutional;
                      coding rate = 1/3;
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_DL_CRLC_SetRRC_MSN_REQ (p_CellID :INTEGER; p_RBID : INTEGER; p_DL_MSN : RRC_SequenceNumber )

Group : ASP Type : CRLC_SetRRC_MessageSN_REQ

Derivation Path : Comments :

Comments : Constraint Value

{ cellId p_CellID, routingInfo rB_Identity : p_RBID, count__LSB_UL OMIT, count__LSB_UL OMIT, count__LSB_DL p_DL_MSN }

Detailed Comments :
```

CRCsize = 16; RateMatching = 192

Constraint Name: ca_DL_DPCH_Info(p_CellId: INTEGER; p_PhyChId: INTEGER; p_DL_DPCHInfo: DL_DPCHInfo)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments: To setup down link physical channel DPCH.

```
Constraint Value
```

```
{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChId,
    ratType fdd,
    setupMessage {
        physicalChannelInfo dPCHInfo : {
            dI_DPCHInfo p_DL_DPCHInfo
        }
    }
}
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: ca_DL_DPCH_ModifyInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_DL_DPCHInfo:

DL_DPCHInfo; p_ActivationTime : ActivationTime)

Group

ASP Type : CPHY_RL_Modify_REQ

Derivation Path :

Comments: To modify down link physical channel DPCH.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  modifyMessage {
    activationTime activationCFN : p_ActivationTime,
    physicalChannelInfo dPCHInfo : {
        dl_DPCHInfo p_DL_DPCHInfo
     }
  }
}
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_OutOfSyncInd ( p_PhysicalChannelIdentity : PhysicalChannelIdentity )

Group :
ASP Type : CPHY_Out_of_Sync_IND

Derivation Path :
Comments :

Constraint Value

{
    cellId ?,
    routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_pCCPCH_Info(p_CellId: INTEGER; p_TxPower: DL_TxPower)
Group
ASP Type
                : CPHY_RL_Setup_REQ
Derivation Path :
Comments
                : For FDD mode only
                                               Constraint Value
{ cellId p_CellId,
 routingInfo physicalChannelIdentity: tsc_P_CCPCH,
 ratType fdd,
 setupMessage {
  physicalChannelInfo primaryCCPCHInfo : {
   sttd_Indicator FALSE,
   dl_TxPower p_TxPower
 }
Detailed Comments: PhysycalChannelIdentity for p-CCPCH is fixed as tsc_pCCPCH;
```

```
ASN.1 ASP Constraint Declaration
```

Constraint Name: ca_PCH_2_FACH_InfoActNow (p_CellId: INTEGER; p_PhyChId: INTEGER)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments : For FDD mode only (PS)

```
Constraint Value
```

```
cellid p_Cellid,
 routingInfo physicalChannelIdentity: p_PhyChld,
 ratType fdd,
 trchConfigType nonDch: NULL,
 configMessage {
  activationTime activateNow: NULL,
  ulconnectedTrCHList OMIT,
  ulTFCS OMIT,
  dlconnectedTrCHList {
   { trchid tsc_PCH1,
     dl_TransportChannelType pch,
    transportChannelInfo c_PCH_TFS},
   { trchid tsc_FACH1,
     dl_TransportChannelType fach,
     transportChannelInfo c_FACH_TFS},
   { trchid tsc_FACH2,
     dl_TransportChannelType fach,
    transportChannelInfo c_FACH_TFS_PS} },
  dITFCS c_TFCS_CmpIFACH_Tx ( c_PowerOffsetInfoBelow64k )
Detailed Comments: For PCH transport channel the following parameters are fixed by core spec. (34.108 cl.
                       6.10.2.4.3):
                       TTI = 10 \text{ ms}:
                       two transport formats: TransportBlocks = 0, TB size = 240 bits; and TransportBlocks = 1, TB size =
                       240 bits:
                       coding = convolutional;
                       coding rate = 1/2;
                       CRCsize = 16:
                       RateMatching = 210
                       For FACH1 transport channel the following parameters are fixed by core spec.(34.108 cl.
                       6.10.2.4.3.2):
                       TTI = 10 \text{ ms};
                       two transport formats: TransportBlocks = 0, TB size = 360 bits; TransportBlocks = 1, TB size = 360
                       bits;
                       coding = turbo;
                       CRCsize = 16;
                       RateMatching = 110
                       For FACH2 transport channel the following parameters are fixed by core spec.(34.108 cl.
                       6.10.2.4.3):
                       TTI = 10 ms;
                       three transport formats: TransportBlocks = 0, TB size = 168 bits; TransportBlocks = 1, TB size =
                       168 bits; and TransportBlocks = 2, TB size = 168 bits
                       coding = convolutional;
```

coding rate = 1/2; CRCsize = 16; RateMatching = 210

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_pCPICH_Info(p_CellId: INTEGER; p_TxPower: DL_TxPower_PCPICH)
Group
ASP Type
                : CPHY_RL_Setup_REQ
Derivation Path :
Comments
                : For FDD mode only
                                               Constraint Value
 cellid p_Cellid,
 routingInfo physicalChannelIdentity: tsc_P_CPICH,
 ratType fdd.
 setupMessage {
  physicalChannelInfo primaryCPICHInfo:{
   dl_TxPower_PCPICH p_TxPower,
   txdiversityIndicator FALSE
}
Detailed Comments: PhysycalChannelIdentity for p-CPICH is fixed as tsc_pCPICH;
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_PHY_RelCnf ( p_CellId : INTEGER; p_PhyChId: INTEGER )

Group :
ASP Type : CPHY_TrCH_Release_CNF

Derivation Path :
Comments : To confirm to release tthe Radio Link

Constraint Value

{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChId
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_PHY_RelReqDCH_NoSHO ( p_CellId : INTEGER; p_PhyChld: INTEGER )

Group :

ASP Type : CPHY_TrCH_Release_REQ

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChld,
    trchConfigType dch : normal
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_PHY_RelReqNonDch ( p_CellId : INTEGER; p_PhyChId: INTEGER )

Group :
ASP Type : CPHY_TrCH_Release_REQ

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChId,
    trchConfigType nonDch: NULL
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_PICH_Info(p_CellId: INTEGER; p_PICH_Info: PICH_Info; p_TxPower:
                  PICH_PowerOffset;p_SCCPCH_Ass: INTEGER)
Group
ASP Type
                 : CPHY_RL_Setup_REQ
Derivation Path
Comments
                 : For FDD mode only
                                                Constraint Value
 cellId p_CellId,
 routingInfo physicalChannelIdentity: tsc_PICH1,
 ratType fdd,
 setupMessage {
  physicalChannelInfo pICHInfo : {
   pichinfo p_PICH_Info,
   dl_TxPower p_TxPower,
   sccpchId_associated p_SCCPCH_Ass
Detailed Comments: Value of PI per frame is fixed to 18 (34.108)
                     Value of sndScramCode can be 2 (34.108)
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_PRACH_Info(
                  p_CellId: INTEGER;
                  p_PhyChld: INTEGER;
                  p_Signatures:AvailableSignatures;
                  p_PreScramCodeWord: PreambleScramblingCodeWordNumber;
                  p_PuncLimit: PuncturingLimit;
                  p_SF_PRACH: SF_PRACH;
                  p_SubChNum: AvailableSubChannelNumbers
Group
ASP Type
                 : CPHY_RL_Setup_REQ
Derivation Path
Comments
                                               Constraint Value
 cellId p_CellId,
 routingInfo physicalChannelIdentity: p_PhyChld,
 ratType fdd,
 setupMessage {
  physicalChannelInfo pRACHInfo :{
   fdd_tdd fdd : {
    preambleSignature p_Signatures,
    spreadingFactorForDataPart p_SF_PRACH,
    preambleScramblingCode p_PreScramCodeWord,
    puncturingLimit p_PuncLimit,
    accessSlot p_SubChNum
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_pSCH_Info(p_CellId: INTEGER; p_TxPower: DL_TxPower)
Group
ASP Type
                 : CPHY_RL_Setup_REQ
Derivation Path :
Comments
                : For FDD mode only
                                                Constraint Value
 cellid p_Cellid,
 routingInfo physicalChannelIdentity: tsc_P_SCH,
 ratType fdd,
 setupMessage {
  physicalChannelInfo primarySCHInfo: {
   tstdIndicator FALSE,
   dl_TxPower p_TxPower
Detailed Comments: PhysycalChannelIdentity for p–SCH is fixed as tsc_pSCH;
```

ASN.1 ASP Constraint Declaration

Constraint Name: ca_RB_AM_Info_RAB(p_CellId: INTEGER; p_RB_Id: INTEGER;p_TimerPollProhbt

:TimerPollProhibit; p_Timer_poll: TimerPoll; p_PollSDU: Poll_SDU; p_PollWindw: PollWindow;

p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments : Used to setup AM RLC entity

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cb_DL_AM_RLC,
    sS_dl_RLC_Mode {
       dl_PayloadSize p_PayLoad,
       dl_RLCModeInfo ul_AM_RLC_Mode : cb_UL_AM_RLC
    }
  },
  rB_LogCH_Mapping p_LogChMapping
}
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: ca_RB_AM_Info_SRB(p_CellId: INTEGER; p_RB_Id: INTEGER;p_TimerPollProhbt

:TimerPollProhibit; p_Timer_poll: TimerPoll; p_PollSDU: Poll_SDU; p_PollWindw: PollWindow;

p_LogChMapping : RB_LogCH_Mapping; p_PayLoad : INTEGER)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path :

Comments: Used to setup AM RLC entity

Constraint Value

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_AM_RLC_Mode :cd_DL_AM_RLC_SRB,
        sS_dl_RLC_Mode {
        dl_PayloadSize p_PayLoad,
        dl_RLCModeInfo ul_AM_RLC_Mode : cd_UL_AM_RLC_SRB
        }
    },
    rB_LogCH_Mapping p_LogChMapping
}
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_RB_BCCH_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping:
                  RB_LogCH_Mapping)
Group
ASP Type
                : CRLC_Config_REQ
Derivation Path
Comments
                                               Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB_Id,
 ratType fdd,
 configMessage setup : {
  sS_rlc_Info { sS_dl_RLC_Mode {
    dl_PayloadSize 246,
    dl_RLCModeInfo ul_TM_RLC_Mode :{
     segmentationIndication FALSE
   }
  rB_LogCH_Mapping p_LogChMapping
Detailed Comments: dl_PayloadSize = TB_Size
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_RB_PCCH_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping:
                  RB_LogCH_Mapping)
Group
ASP Type
                : CRLC_Config_REQ
Derivation Path
Comments
                                               Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB_Id,
 ratType fdd,
 configMessage setup : {
  sS_rlc_Info { sS_dl_RLC_Mode {
    dl_PayloadSize 240,
    dl_RLCModeInfo ul_TM_RLC_Mode :{
     segmentationIndication FALSE
  rB_LogCH_Mapping p_LogChMapping
Detailed Comments: dl_PayloadSize = TB_Sze
```

ASN.1 ASP Constraint Declaration

 $\textbf{Constraint Name} \hspace{0.2cm} : \hspace{0.2cm} \text{ca} \hspace{0.2cm} \text{RB} \hspace{0.2cm} \text{TM} \hspace{0.2cm} \text{DL} \hspace{0.2cm} \text{InfoNoSeg} \hspace{0.2cm} \text{(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER; p_PayloadSi$

p_LogChMapping : RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path : Comments :

```
Constraint Value
```

```
{
  cellId p_CellId,
  routingInfo rB_Identity: p_RB_Id,
  ratType fdd,
  configMessage setup : {
    sS_rlc_Info { sS_dI_RLC_Mode {
        dI_PayloadSize p_PayloadSize,
        dI_RLCModeInfo ul_TM_RLC_Mode :{
        segmentationIndication FALSE
      }
    }
  },
  rB_LogCH_Mapping p_LogChMapping
}
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: ca_RB_TM_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_PayloadSize: INTEGER;

p_LogChMapping : RB_LogCH_Mapping)

Group

ASP Type : CRLC_Config_REQ

Derivation Path : Comments :

Constraint Value

```
cellid p_Cellid,
routingInfo rB_Identity: p_RB_Id,
ratType fdd,
configMessage setup : {
    sS_rlc_Info { sS_ul_RLC_Mode dl_TM_RLC_Mode :{
        segmentationIndication FALSE
    },
    sS_dl_RLC_Mode {
        dl_PayloadSize p_PayloadSize,
        dl_RLCModeInfo ul_TM_RLC_Mode :{
        segmentationIndication FALSE
    }
},
rB_LogCH_Mapping p_LogChMapping
}
```

ASN.1 ASP Constraint Declaration Constraint Name: ca_RB_TM_UL_Info(p_CellId: INTEGER; p_RB_Id: INTEGER;p_PayloadSize: INTEGER; p_LogChMapping : RB_LogCH_Mapping) Group **ASP Type** : CRLC_Config_REQ **Derivation Path** Comments **Constraint Value** cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_ul_RLC_Mode dl_TM_RLC_Mode :{ segmentationIndication FALSE sS_dl_RLC_Mode { dl_PayloadSize p_PayloadSize, dl_RLCModeInfo ul_TM_RLC_Mode :{ segmentationIndication FALSE rB_LogCH_Mapping p_LogChMapping

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_RB_UM_DL_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping:
                  RB_LogCH_Mapping)
Group
ASP Type
                : CRLC_Config_REQ
Derivation Path
Comments
                                               Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB_Id,
 ratType fdd,
 configMessage setup : {
  sS_rlc_Info { sS_dl_RLC_Mode {
    dl_PayloadSize 152,
    dl_RLCModeInfo ul_UM_RLC_Mode : {
     transmissionRLC_Discard timerBasedNoExplicit: dt100
  rB_LogCH_Mapping p_LogChMapping
Detailed Comments:
```

ASN.1 ASP Constraint Declaration Constraint Name: ca_RB_UM_Info(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping: RB_LogCH_Mapping) Group **ASP Type** : CRLC_Config_REQ **Derivation Path** Comments : Used to setup UM RLC entity **Constraint Value** cellId p_CellId, routingInfo rB_Identity: p_RB_Id, ratType fdd, configMessage setup : { sS_rlc_Info { sS_ul_RLC_Mode dl_UM_RLC_Mode :NULL, sS_dl_RLC_Mode{ dl_PayloadSize 136, dl_RLCModeInfo ul_UM_RLC_Mode: { transmissionRLC_Discard timerBasedNoExplicit: dt100 rB_LogCH_Mapping p_LogChMapping

Detailed Comments: dl_PayloadSize = TB_Size - 12 = 136

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_RB_UM_ReconfInfo (p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping:
                  RB_LogCH_Mapping)
Group
ASP Type
                : CRLC_Config_REQ
Derivation Path
Comments
                : Used to setup UM RLC entity
                                                Constraint Value
 cellid p_Cellid,
 routingInfo rB_Identity: p_RB_Id,
 ratType fdd,
 configMessage reconfigure : {
  sS_rlc_Info { sS_ul_RLC_Mode dl_UM_RLC_Mode :NULL,
   sS_dl_RLC_Mode{
    dl_PayloadSize 136,
    dl\_RLCModeInfo\ ul\_UM\_RLC\_Mode: \{
     transmissionRLC_Discard timerBasedNoExplicit: dt100
  rB_LogCH_Mapping p_LogChMapping
Detailed Comments: dl_PayloadSize = TB_Size - 12 = 136
```

ASN.1 ASP Constraint Declaration

Constraint Name : ca_RL_RelCnf (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)
Group :
ASP Type : CPHY_RL_Release_CNF
Derivation Path :
Comments : To confirm that a specified physical channel has been released

Constraint Value

{
 cellId p_CellId,
 routingInfo physicalChannelIdentity : p_PhyCH
}
Detailed Comments :

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_RL_RelReq(p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)

Group :
ASP Type : CPHY_RL_Release_REQ
Derivation Path :
Comments : To release the specified physical channel.

Constraint Value

{
    cellId p_CellId,
    routingInfo physicalChannelIdentity : p_PhyCH
}
Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_RL_SetupCnf(
                  p_CellId: INTEGER;
                  p_PhyChld: INTEGER
Group
ASP Type
                : CPHY_RL_Setup_CNF
Derivation Path
Comments
                                              Constraint Value
 cellid p_Cellid,
 routingInfo physicalChannelIdentity: p_PhyChId
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_sCCPCH_Info (p_CellId: INTEGER; p_PhyChId: INTEGER; p_SndScramCode: INTEGER;
                  p_ChannelizationCode: SF256_AndCodeNumber;
                  p_SlotFormat: SCCPCHSlotFormat;
                  p_TxPower : DL_TxPower;
                  p_Timing: INTEGER )
Group
ASP Type
                : CPHY_RL_Setup_REQ
Derivation Path :
Comments
                : For FDD mode only,
                                               Constraint Value
 cellid p_Cellid,
 routingInfo physicalChannelIdentity: p_PhyChId,
 ratType fdd,
 setupMessage {
  physicalChannelInfo secondaryCCPCHInfo : {
   scramblingCode p_SndScramCode,
   dl_ChannelizationCode p_ChannelizationCode,
   sCCPCHSlotFormat p_SlotFormat,
   timingOffset p_Timing,
   positionFixedOrFlexible flexible,
   sttd_Indicator FALSE,
   dl_TxPower p_TxPower,
   powerOffsetOfTFCI_PO1 tsc_sCCPCH_PowerOffsetTFCI,
   powerOffsetOfPILOT_PO3 tsc_sCCPCH_PowerOffsetPILOT
}
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
\textbf{Constraint Name} \ : \ ca\_SchedulLater(p\_CellId: INTEGER; p\_REP: INTEGER; p\_POS: INTEGER; p\_Timing: later (p\_CellId: INTEGER; p\_REP: INTEGER; 
                                                                                                    BCCH_ModificationTime)
Group
                                                                                        : CMAC_SYSINFO_Config_REQ
ASP Type
Derivation Path :
Comments
                                                                                         : scheduling information for system information change at the frame = p_Timing.
                                                                                                                                                                                                                                                                   Constraint Value
     cellId p_CellId,
     routingInfo rB_Identity: tsc_RB_BCCH,
     ratType fdd,
     configMessage {
           sg_REP p_REP,
sg_POS p_POS,
           bcch_ModificationTime p_Timing
Detailed Comments: ?? for MIB
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_SchedulNow(p_CellId: INTEGER; p_REP: INTEGER; p_POS: INTEGER)
Group
ASP Type
                : CMAC_SYSINFO_Config_REQ
Derivation Path :
Comments
                : scheduling information for immediately change
                                              Constraint Value
 cellid p_Cellid,
 routingInfo rB_Identity: tsc_RB_BCCH,
 ratType fdd,
 configMessage {
  sg_REP p_REP,
  sg_POS p_POS,
  bcch_ModificationTime OMIT
}
Detailed Comments: ?? for MIB
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: ca_sSCH_Info(p_CellId: INTEGER; p_TxPower: DL_TxPower)
Group
ASP Type
                : CPHY_RL_Setup_REQ
Derivation Path :
Comments
                : For FDD mode only
                                                Constraint Value
 cellid p_Cellid,
 routingInfo physicalChannelIdentity: tsc_S_SCH,
 ratType fdd,
 setupMessage {
  physicalChannelInfo secondarySCHInfo : {
   tstdIndicator FALSE,
   dl_TxPower p_TxPower
}
Detailed Comments: PhysycalChannelIdentity for s-SCH is fixed as tsc_sSCH;
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_SyncInd (p_PhysicalChannelIdentity : PhysicalChannelIdentity)
Group :
ASP Type : CPHY_Sync_IND
Derivation Path :
Comments :

Constraint Value

{
    cellId ?,
    routingInfo physicalChannelIdentity: p_PhysicalChannelIdentity
}
Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_SysInfoCfgCnf(p_CellId: INTEGER; p_RB_Identity: SS_RB_Identity)
Group :
ASP Type : CMAC_SYSINFO_Config_CNF
Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity : p_RB_Identity
}
Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : ca_TR_DataReq(p_CellId : INTEGER; p_RB : SS_RB_Identity ; p_Message : BCCH_BCH_Message)

Group :

ASP Type : RLC_TR_DATA_REQ

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity : p_RB,
    tM_message bCCH_BCH_Message : p_Message
}

Detailed Comments :
```

ASN.1 ASP Constraint Declaration

Constraint Name : ca_TrChCfgCnf(p_CellId: INTEGER; p_PhyChId: INTEGER)

Group :
ASP Type : CPHY_TrCH_Config_CNF

Derivation Path :
Comments :

Constraint Value

{
 cellId p_CellId,
 routingInfo physicalChannelIdentity: p_PhyChId
}

Detailed Comments :

ASN.1 ASP Constraint Declaration

Constraint Name: ca_UL_DPCH_Info(p_CellId: INTEGER; p_PhyChld: INTEGER; p_UL_DPCHInfo:

UL_DPCH_Info)

Group :

ASP Type : CPHY_RL_Setup_REQ

Derivation Path :

Comments: To setup uplink physical channel DPCH.

Constraint Value

```
{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChId,
    ratType fdd,
    setupMessage {
        physicalChannelInfo dPCHInfo : {
            ul_DPCHInfo p_UL_DPCHInfo
        }
    }
```

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: ca_UL_DPCH_ModifyInfo(p_CellId: INTEGER; p_PhyChId: INTEGER; p_UL_DPCHInfo:

UL_DPCH_Info; p_ActivationTime : ActivationTime)

Group :

ASP Type : CPHY_RL_Modify_REQ

Derivation Path :

Comments: To setup uplink physical channel DPDCH.

Constraint Value

```
{
  cellId p_CellId,
  routingInfo physicalChannelIdentity: p_PhyChId,
  ratType fdd,
  modifyMessage {
    activationTime activationCFN : p_ActivationTime,
    physicalChannelInfo dPCHInfo : {
    ul_DPCHInfo p_UL_DPCHInfo
    }
}
```

ASN.1 ASP Constraint Declaration

Constraint Name: cab_RACH_InfoActNow (p_CellId: INTEGER; p_PhyChId: INTEGER)

Group :

ASP Type : CPHY_TrCH_Config_REQ

Derivation Path :

Comments: For FDD mode only

```
Constraint Value
```

```
{
cellId p_CellId,
routingInfo physicalChannelIdentity: p_PhyChId,
ratType fdd,
trchConfigType nonDch: NULL,
configMessage {
   activationTime activateNow : NULL,
   ulconnectedTrCHList {{
     trchid tsc_RACH1,
     ul_TransportChannelType rach,
     transportChannelInfo c_RACH_TFS
}},
ulTFCS c_TFCS_Cmpl0_1_Rx,
dlconnectedTrCHList OMIT,
dlTFCS OMIT
}
```

Detailed Comments: For RACH transport channel the following parameters are fixed by core spec. (34.108 cl.

6.10.2.4.4): TTI = 20 ms;

two transport format: TransportBlocks = 1, TB size = 168 bits and TransportBlocks = 1, TB size =

360 bits;

coding = convolutional; coding rate = 1/2; CRCsize = 16; RateMatching = 1

ASN.1 ASP Constraint Declaration

Constraint Name: cad_RB_UM_ReconfInfo(p_CellId: INTEGER; p_RB_Id: INTEGER; p_LogChMapping:

RB_LogCH_Mapping)

Group :

ASP Type : CRLC_Config_REQ

Derivation Path : ca_RB_UM_ReconfInfo.

Comments : Used to setup UM RLC entity for 120 RLC size

Constraint Value

REPLACE configMessage.reconfigure.sS_rlc_Info.sS_dl_RLC_Mode.dl_PayloadSize BY 120

Detailed Comments: dl_PayloadSize = TB_Size - 12 = 136 -16 (U-RNTI -C-RNTI = 32-16 =16) ==>120

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_CRLC_IntegrityFail
Group :
ASP Type : CRLC_Integrity_Failure_IND
Derivation Path :
Comments :

Constraint Value

{
    cellId ?,
    routingInfo ?,
    failureCause codeNotMatched
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_CRLC_RRC_MessageSN_CNF(p_CellId, p_RBID : INTEGER )

Group :
ASP Type : CRLC_RRC_MessageSN_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfor rB_Identity : p_RBID,
    count_I_MSB_UL ?,
    count_I_LSB_UL ?,
    count_I_MSB_DL ?,
    count_I_MSB_DL ?,
    count_I_LSB_DL ?
}
Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_GetFrameNum (p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity)

Group :

ASP Type : CPHY_Frame_Number_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo physicalChannelIdentity : p_PhysicalChannelIdentity,
    frameNumber ?
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_GetRLC_SeqNum(p_CellId: INTEGER; p_RB_Id: INTEGER)

Group :
ASP Type : CRLC_SequenceNumber_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    count_C_MSB_UL?,
    count_C_LSB_UL?,
    count_C_LSB_DL?,
    count_C_LSB_DL?
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_IniCnf
Group :
ASP Type : CPHY_Ini_CNF
Derivation Path :
Comments : Confirm the test initialisation

Constraint Value

{
    confirmation NULL
}
Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: car_MeasRepAM (
                 p_CellId : INTEGER;
                 p_RB: INTEGER;
                 p_Pdu: UL_DCCH_Message
Group
ASP Type
               : RLC_AM_DATA_IND
Derivation Path
               :
Comments
                                             Constraint Value
cellId p_CellId,
routingInfo rB_Identity: p_RB,
integrityResult?,
aM_message uL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name : car_MeasRepUM(
                 p_CellId: INTEGER;
                 p_RB: INTEGER;
                 p_Pdu: UL_DCCH_Message )
Group
ASP Type
               : RLC_UM_DATA_IND
Derivation Path
Comments
                                             Constraint Value
 cellId p_CellId,
routingInfo rB_Identity: p_RB,
integrityResult?,
uM_message uL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name : car_RB_SetUpCmpl(
                 p_CellId: INTEGER;
                 p_RB :INTEGER ;
                 p_Pdu: UL_DCCH_Message
Group
ASP Type
               : RLC_AM_DATA_IND
Derivation Path :
Comments
                                             Constraint Value
cellId p_CellId,
routingInfo rB_Identity: p_RB,
integrityResult?,
aM_message uL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)

Group :
ASP Type : CRLC_Resume_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnRelCmpl(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: UL_DCCH_Message)

Group :
ASP Type : RLC_AM_DATA_IND

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    integrityResult ?,
    aM_message uL_DCCH_Message : p_Pdu
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnRelCmplUM(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu:UL_DCCH_Message)

Group :

ASP Type : RLC_UM_DATA_IND

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    integrityResult ?,
    uM_message uL_DCCH_Message : p_Pdu
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnReq(p_CellId: INTEGER; p_RB_Id: SS_RB_Identity; p_Pdu: UL_CCCH_Message)

Group :

ASP Type : RLC_TR_DATA_IND

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    tM_message uL_CCCH_Message : p_Pdu
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_RRC_ConnSetupCmpl(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: UL_DCCH_Message)

Group :
ASP Type : RLC_AM_DATA_IND

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    integrityResult ?,
    aM_message uL_DCCH_Message : p_Pdu
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
\textbf{Constraint Name} \ : \ \mathsf{car} \_ \mathsf{RRC} \_ \mathsf{SecModeCmpl} (
                    p_CellId: INTEGER;
                    p_RB : INTEGER ;
                    p_Pdu: UL_DCCH_Message
Group
ASP Type
                  : RLC_AM_DATA_IND
Derivation Path
Comments
                                                    Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB,
 integrityResult?,
 aM_message uL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: car_RRC_SecModeFail(
                   p_CellId: INTEGER;
                   p_RB: INTEGER;
                   p_Pdu: UL_DCCH_Message)
Group
ASP Type
                : RLC_AM_DATA_IND
Derivation Path
Comments
                                              Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB,
 integrityResult?,
 aM_message uL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: car_RRC_Status(
                   p_CellId: INTEGER;
                   p_RBId:INTEGER;
                   p_Pdu: UL_DCCH_Message)
Group
ASP Type
               : RLC_AM_DATA_IND
Derivation Path :
Comments
                :
                                             Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RBId,
 integrityResult?,
 aM_message uL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : car_SuspendRB ( p_CellId: INTEGER; p_RB_Id: INTEGER )

Group :
ASP Type : CRLC_Suspend_CNF

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    vt ?
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_CRLC_RRC_MessageSN_REQ(p_CellId, p_RBID : INTEGER )

Group :
ASP Type : CRLC_RRC_MessageSN_REQ
Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity : p_RBID
}
Detailed Comments :
```

ASN.1 ASP Constraint Declaration Constraint Name: cas_GetFrameNum (p_CellId: INTEGER; p_PhysicalChannelIdentity: PhysicalChannelIdentity) Group **ASP Type** : CPHY_Frame_Number_REQ Derivation Path : Comments **Constraint Value** cellid p_Cellid, $routing Info\ physical Channell dentity:\ p_Physical Channell dentity$

Detailed Comments:

ASN.1 ASP Constraint Declaration Constraint Name: cas_GetRLC_SeqNum(p_CellId: INTEGER; p_RB_Id: INTEGER) Group **ASP Type** : CRLC_SequenceNumber_REQ Derivation Path : Comments **Constraint Value** cellId p_CellId,

routingInfo rB_Identity: p_RB_Id

Detailed Comments:

ASN.1 ASP Constraint Declaration

Constraint Name: cas_InitReqDef

Group

ASP Type : CPHY_Ini_REQ

Derivation Path :

Comments : Request to initialise the test

Constraint Value

defaultRadioEnvironment

ASN.1 ASP Constraint Declaration Constraint Name : cas_InitReqNonDef Group : ASP Type : CPHY_Ini_REQ Derivation Path : Comments : Request to initialise the test Constraint Value

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_MAC_Rel (p_CellId: INTEGER; p_PhyChld: INTEGER)

Group :
ASP Type : CMAC_Config_REQ

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo physicalChannelIdentity: p_PhyChld,
    ratType fdd,
    configMessage release : NULL
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration
Constraint Name : cas_PagingType1(
                 p_CellId: INTEGER;
                 p_RB_ld: SS_RB_ldentity;
                 p_Pdu: PCCH_Message
Group
ASP Type
                : RLC_TR_DATA_REQ
Derivation Path
               :
Comments
                                              Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB_Id,
 tM_message pCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: cas_RB_SetUpAM(
                 p_CellId: INTEGER;
                 p_RB_Id: INTEGER;
                 p_Pdu: DL_DCCH_Message
Group
ASP Type
                : RLC_AM_DATA_REQ
Derivation Path
Comments
                                              Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB_Id,
 confirmationRequest noConfirmationRequest : NULL,
 aM_message dL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration
Constraint Name: cas_RB_SetUpAM_WithCnf(
                 p_CellId: INTEGER;
                 p_RB_ld: INTEGER;
                 p_Mui : Mui;
                 p_Pdu: DL_DCCH_Message
Group
ASP Type
                : RLC_AM_DATA_REQ
Derivation Path
Comments
                                              Constraint Value
 cellId p_CellId,
 routingInfo rB_Identity: p_RB_Id,
 confirmationRequest confirmationRequested: p_Mui,
 aM_message dL_DCCH_Message : p_Pdu
Detailed Comments:
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_ResumeRB(p_CellId: INTEGER; p_RB_Id: INTEGER)

Group :

ASP Type : CRLC_Resume_REQ

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_RLC_SuspendRB(p_CellId: INTEGER; p_RB_Id: INTEGER; p_RLC_SeqNum: RLC_SequenceNumber)

Group :
ASP Type : CRLC_Suspend_REQ
Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId, routingInfo rB_Identity: p_RB_Id, n p_RLC_SeqNum
}
Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_ConnRelCCCH(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: DL_CCCH_Message)

Group :

ASP Type : RLC_UM_DATA_REQ

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    uM_message dL_CCCH_Message : p_Pdu,
    specialLI TRUE
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_ConnRelDCCH(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu : DL_DCCH_Message)

Group :
ASP Type : RLC_UM_DATA_REQ

Derivation Path :
Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    uM_message dL_DCCH_Message : p_Pdu,
    specialILI FALSE
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_ConnSetup(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: DL_CCCH_Message)

Group :

ASP Type : RLC_UM_DATA_REQ

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    uM_message dL_CCCH_Message : p_Pdu,
    specialLI TRUE
}

Detailed Comments :
```

```
ASN.1 ASP Constraint Declaration

Constraint Name : cas_RRC_SecModeCmd(p_CellId: INTEGER; p_RB_Id: INTEGER; p_Pdu: DL_DCCH_Message)

Group :

ASP Type : RLC_AM_DATA_REQ

Derivation Path :

Comments :

Constraint Value

{
    cellId p_CellId,
    routingInfo rB_Identity: p_RB_Id,
    confirmationRequest noConfirmationRequest : NULL,
    aM_message dL_DCCH_Message : p_Pdu
}

Detailed Comments :
```

Constraint Name : cd_CM_ServReqShortMsg(p_KeySeq : KeySeq)

Group :

PDU Type : CMSERVICEREQUEST

Derivation Path : cb_CM_ServReqAny.

Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
cMServType	tsc_CM_ServTypeShortMsg		Short Message Activation

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cr_DeactPDP_ContextReqMO_AnyTD(p_SM_Cause: SM_Cause_v)

Group :

PDU Type : DEACTIVATEPDPCONTEXTREQUEST

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Deactivate PDP Context Request

n <=> ue 24.008, 9.5.14

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any IF_PRESENT		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000110'B		
sM_Cause	p_SM_Cause		
tearDwnInd	cr_TearDwnIndAny IF_PRESENT		
protocolConfOpts	*		
Detailed Comments :			

Constraint Name : cs_CP_ERROR(p_TI: TI)

Group :

PDU Type : CPERROR

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
sMSProtocolDiscriminator	'1001'B		
msgType	'00010000'B		
cP_Cause	'11'O		Network Failure

Detailed Comments:

PDU Constraint Declaration

 $\textbf{Constraint Name} \qquad : \ \text{cr_ActPDP_ContextReqRspMO(p_PDP_Address: PktDataProtoAddr_lv)}$

Group :

PDU Type : ACTIVATEPDPCONTEXTREQUESTul

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : This will be sent from UE as a response to the REQUEST PDP CONTEXT message from the

network

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000001'B		
requestedNSAPI	cr_NSAPI_v		
requestedLLC_SAPI	cr_LLC_SAPI_v		
requestedQoS	cr_QualityOfService_lv_Any		
pDP_Address	p_PDP_Address		
accessPtName	cr_AccessPtNameAny IF_PRESENT		
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		
Detailed Comments:			

Constraint Name : cr_CP_DATA_02(p_TI: TI; p_CP_UserData: CP_UserData)

Group :

PDU Type : CPDATA

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Value	Field Encoding	Comments
p_TI		
'1001'B		
'00000001'B		
p_CP_UserData		
	p_TI '1001'B '00000001'B	p_TI '1001'B '00000001'B

PDU Constraint Declaration

Constraint Name : cs_DeactPDP_ContextAcpMT(p_ti: Tl)

Group :

PDU Type : DEACTIVATEPDPCONTEXTACCEPT

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Deactivate PDP Context Accept

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3GPP 24.008, 9.5.15

Field Name	Field Value	Field Encoding	Comments
ti	p_ti		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000111'B		
protocolConfOpts	_		
Detailed Comments :			

Constraint Name : cs_DeactPDP_ContextReqMT(p_ti: TI;

p_smcause: SM_Cause_v)

Group :

PDU Type : DEACTIVATEPDPCONTEXTREQUEST

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Deactivate PDP Context Request

n <=> ue 24.008, 9.5.14

Field Name	Field Value	Field Encoding	Comments
ti	p_ti		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000110'B		
sM_Cause	p_smcause		
tearDwnInd	cs_TearDwnInd_tv		
protocolConfOpts	_		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : c_CM_ServAcp

Group :

PDU Type : CMSERVICEACCEPT

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00100001'B		

Constraint Name : c_CM_ServRej (p_RejCau:RejCau)

Group :

PDU Type : CMSERVICEREJECT

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00100010'B		
rejCau	p_RejCau		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cb_CM_ServReqAny (p_KeySeq : KeySeq)

Group :

PDU Type : CMSERVICEREQUEST

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??100100'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
cMServType	?		
mSClsmk2	c_MS_Clsmk2_Any_lv		
mobileId	c_MobileIdAny_lv		
priorityLvl	c_PriorityLvlAny IF_PRESENT		

 $\textbf{Constraint Name} \qquad : \ \text{cr_ActPDP_ContextReqMO(} \ p_QosReq : QualityOfService_lv)$

Group :

PDU Type : ACTIVATEPDPCONTEXTREQUESTul

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Activate PDP Context Request

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3GPP 24.008, 9.5.1

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000001'B		
requestedNSAPI	cr_NSAPI_v		
requestedLLC_SAPI	cr_LLC_SAPI_v		This has to be set to Not Assigned by UE in UMTS domain.
requestedQoS	p_QosReq		The AT command interface will be used to set the QoS to this value.
pDP_Address	cr_StaticPDP_AddressAny		
accessPtName	cr_AccessPtNameAny IF_PRESENT		The GGSN logical name or the external packet data network logical name
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		

	_		
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FDU	COUSIL	nnı Dec	ialalion

Constraint Name : cr_Alert (p_TI : TI)

Group :

PDU Type : ALERTINGul

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : ALERTING - receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000001'B		
facility	cr_FacAny IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
Detailed Comments :			

Constraint Name : cr_CallConf (p_TI:TI; p_StreamId: StreamId)

Group

PDU Type : CALLCONFIRMED

Derivation Path Encoding Rule Name: Encoding Variation:

: CALL CONFIRMED - receive constraint Comments

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??001000'B		
repeatInd	c_RepeatIndAny IF_PRESENT		
bcap1	cr_BcapAnyMO IF_PRESENT		
bcap2	cr_BcapAnyMO IF_PRESENT		
cau	cr_CauAny IF_PRESENT		
cC_Capabilities	cr_CC_CapabilitiesAny IF_PRESENT		
streamId	p_StreamId		
supportedCodecs	cr_CodecListAny IF_PRESENT		
Detailed Comments :	•		

PDU Constraint Declaration

Constraint Name : cr_CC_StatusAny (p_TI : TI)

Group

PDU Type : STATUS

Derivation Path Encoding Rule Name: Encoding Variation:

Comments : STATUS - receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??111101'B		
cau	cr_CauAny_lv		
callState	cr_CallStateAny_v		
auxilliaryState	_		
Detailed Comments :			

Constraint Name : cr_Connect (p_TI : TI)

Group

PDU Type : CONNECTul

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : CONNECT – receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??000111'B		
facility	cr_FacAny IF_PRESENT		
connectedSubAdrs	cr_ConnectedSubAdrs_Any IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
streamld	cr_StreamIdAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_CP_ACK(p_TI: TI)

Group :

PDU Type : CPACK

Derivation Path : Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
sMSProtocolDiscriminator	'1001'B		
msgType	'00000100'B		

Constraint Name : cr_CP_DATA_03(p_CP_UserData: CP_UserData)

Group :

PDU Type : CPDATA

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any IF_PRESENT		
sMSProtocolDiscriminator	'1001'B		
msgType	'00000001'B		
cP_UserData	p_CP_UserData		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_DeactPDP_ContextAcpMO

Group :

PDU Type : DEACTIVATEPDPCONTEXTACCEPT

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Deactivate PDP Context Accept

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3GPP 24.008, 9.5.15

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000111'B		
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		
Detailed Comments :			

Constraint Name : cr_DetachAcc

Group :

PDU Type : DETACHACCEPTMT

Derivation Path : Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000110'B		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cr_Disc (p_TI : TI)

Group :

PDU Type : DISCONNECTUI

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : DISCONNECT – receive constraint

Field Value	Field Encoding	Comments
p_TI		
'0011'B		
'??100101'B		
cr_CauAny_lv		
-		
-		
_		
	p_TI '0011'B '??100101'B cr_CauAny_lv -	p_TI '0011'B '??100101'B cr_CauAny_lv -

Constraint Name : cr_Rel (p_TI : TI)

Group :

PDU Type : RELEASEul

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : RELEASE – receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??101101'B		
cau	cr_CauAny IF_PRESENT		
cau2	cr_CauAny IF_PRESENT		
facility	cr_FacAny IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cr_RelCmpl (p_Tl : Tl)

Group :

PDU Type : RELEASECOMPLETEul

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : RELEASE COMPLETE – receive constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??101010'B		
cau	cr_CauAny IF_PRESENT		
facility	cr_Facility_Any IF_PRESENT		
userUser	cr_UserUserAny IF_PRESENT		
sS_VersionInd	cr_SS_VersionIndAny IF_PRESENT		

 $\textbf{Constraint Name} \qquad \textbf{:} \ \, \text{cr_Status} \ \, (\ p_\text{TI} : \text{TI} \ \, ; \ \, p_\text{State} : \text{B6}; \ \, p_\text{Cau} : \text{INTEGER} \,)$

Group :

PDU Type : STATUS

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : STATUS - receive constraint - Cause value: Response to STATUS ENQUIRY

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'??111101'B		
cau	cr_Cau_lv (p_Cau)		
callState	cr_Cau_lv (p_Cau) cr_CallState_v (p_State)		
auxilliaryState	_		
5 . "	_		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cs_ActPDP_ContextAcpMT

(p_ti: TI;

p_LLC_SAPI_v: LLC_SAPI_v; p_qos_lv: QualityOfService_lv; p_pdp_addr_tlv: PktDataProtoAddr)

Group

PDU Type : ACTIVATEPDPCONTEXTACCEPTdl

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Activate PDP Context Accept

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Reference 3G PP 24.008, 9.5.2

Field Name	Field Value	Field Encoding	Comments
ti	p_ti		This will be overwritten in the test case with the received ti
sM_ProtocolDiscriminator	tsc_SMPD		PD for SM
msgType	'01000010'B		Msg type for PDP Context Accept
negiotiatedLLC_SAPI	p_LLC_SAPI_v		Mobile in UMTS should neglect this IE. If in GSM domain, will use this SAPI.
negiotiatedQoS	p_qos_lv		
spare	'0000'B		
radioPriority	cs_RadioPriorityHigh_v		
pDP_Address	p_pdp_addr_tlv		
protocolConfOpts	_		
pktFlowID	cs_PktFlowId		
Detailed Comments :			

Constraint Name : cs_ConnAck (p_TI : TI)

Group :

PDU Type : CONNECTACKNOWLEDGE

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : CONNECT ACKNOWLEDGE – send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00001111'B		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cs_CP_ACK(p_TI: TI)

Group :

PDU Type : CPACK

Derivation Path : Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
sMSProtocolDiscriminator	'1001'B		
msgType	'00000100'B		
Data la LO ammanda			

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cs_CP_DATA_01(p_TI: TI; p_CP_UserData: CP_UserData)

Group :

PDU Type : CPDATA

Derivation Path : Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
sMSProtocolDiscriminator	'1001'B		
msgType	'00000001'B		
cP_UserData	p_CP_UserData		
	_	•	_

Constraint Name : cs_DetachAcc

Group :

PDU Type : DETACHACCEPTMO

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000110'B		
spare	'0000'B		
forceToStandby	c_ForceToStandby('000'B)		Force to standy not indicated

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cs_DetachReqMT (p_DetType : DetachType)

Group

PDU Type : DETACHREQUESTMT

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Network initiated detach

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000101'B		
forceToStandby	c_ForceToStandby0		Not indicated
detachType	p_DetType		
gmmCause	_		Omit cause
Data il a LO ammenta			

Constraint Name : cs_Disc (p_TI : TI)

Group :

PDU Type : DISCONNECTdl

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : DISCONNECT – send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00100101'B		
cau	cs_CauNormCallClear_lv		cause
facility	_		
proglnd	_		
userUser	_		
allowedAction	-		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cs_Rel (p_Tl : Tl)

Group :

PDU Type : RELEASEdI

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : RELEASE – send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00101101'B		
cau	_		
cau2	_		
facility	_		
userUser	_		

Constraint Name : cs_RelCmpl (p_Tl : Tl)

Group :

PDU Type : RELEASECOMPLETEdl

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : RELEASE COMPLETE – send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00101010'B		
cau	_		
facility	_		
userUser	-		
_			•

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cs_ReqPDP_ContextReqMT(p_ti: TI; p_len: Length; p_LenAccessPtName: Length; p_addr:

IA5String; p_APN : IA5String)

Group :

PDU Type : REQUESTPDPCONTEXTACTIVATIONAL

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Request PDP Context Activation

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3GPP 24.008, clause, 9.5.7

Field Value	Field Encoding	Comments
p_ti		
tsc_SMPD		
'01000100'B		
cs_PktDataProtoAddrMT_lv (p_len , p_addr)		
cs_AccessPtNameMT(p_LenAccessPtName, p_APN)		
-		
	p_ti tsc_SMPD '01000100'B cs_PktDataProtoAddrMT_lv (p_len , p_addr) cs_AccessPtNameMT(p_LenAccessPtName,	p_ti tsc_SMPD '01000100'B cs_PktDataProtoAddrMT_lv (p_len , p_addr) cs_AccessPtNameMT(p_LenAccessPtName,

Constraint Name : cs_ServiceReject (p_gmmCause : RejCau)

Group :

PDU Type : SERVICEREJECT

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001110'B		
gmmCause	p_gmmCause		

Constraint Name : cs_SetupMT(p_Bcap : Bcap)

Group :

PDU Type : SETUPdl
Derivation Path :

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : CC SETUP – sent constraint

Field Name	Field Value	Field Encoding	Comments
ti	cs_TI_MT		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00000101'B		
repeatInd	_		
bcap1	p_Bcap		
bcap2	_		
facility	_		
progInd	_		
signal	_		
cgpn	_		
cgps	_		
cdpn	_		
cdps	_		
redirectingPN	_		
redirectingPSubadrs	_		
llcRepeatInd	-		
IIc1	_		
Ilc2	_		
hlcRepeatInd	-		
hlc1	-		
hlc2	_		
userUser	_		
priority	-		
alert	-		
ntwCCCapabilities	-		
cauNoCLI	-		
buBcap	_		
Detailed Comments :			

 $\textbf{Constraint Name} \qquad \textbf{:} \ \, \text{cs_SetupMT_2_Bcap} \ \, (\ \, \text{p_Bcap1}, \, \text{p_Bcap2} : \text{Bcap} \,)$

Group :

PDU Type : SETUPdl

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : CC SETUP – sent constraint

Field Name	Field Value	Field Encoding	Comments
ti	cs_TI_MT		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00000101'B		
repeatInd	c_RepeatInd1		Bcap repeat indicator for alternate (circular selection)
bcap1	p_Bcap1		
bcap2	p_Bcap2		
facility	-		
proglnd	-		
signal	_		
cgpn	-		
cgps	-		
cdpn	-		
cdps	-		
redirectingPN	_		
redirectingPSubadrs	_		
IlcRepeatInd	_		
IIc1	_		
Ilc2	_		
hlcRepeatInd	_		
hlc1	_		
hlc2	_		
userUser	_		
priority	_		
alert	_		
ntwCCCapabilities	_		
cauNoCLI	_		
buBcap	_		
Detailed Comments :			

 $\textbf{Constraint Name} \qquad \textbf{:} \ \, \text{cs_StatusEnq} \ \, (\ p_\text{TI} : \text{TI} \,)$

Group :

PDU Type : STATUSENQUIRY

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : STATUS ENQUIRY – send constraint

Field Name	Field Value	Field Encoding	Comments
ti	p_TI		
cC_ProtocolDiscriminator	'0011'B		
msgType	'00110100'B		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : c_AuthFailAny

Group :

PDU Type : AUTHENTICATIONFAILURE

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??011100'B		
rejCau	?		
authFailParam	c_AuthFailParamAny IF_PRESENT		

Constraint Name : c_AuthReq(p_KeySeq: KeySeq; p_RAND: MM_RAND; p_AUTN: AUTN)

Group

PDU Type : AUTHENTICATIONREQUEST

Derivation Path Encoding Rule Name: Encoding Variation: Comments

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00010010'B		
spare4	'0000'B		
ciphKeySeqNum	c_CiphKeySeqNum(p_KeyS eq)		
rAND	p_RAND		
aUTN	p_AUTN		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : c_AuthRspAnyExt

Group

PDU Type : AUTHENTICATIONRESPONSE

Derivation Path Encoding Rule Name: Encoding Variation:

Comments : Any Authentication Response containing the Authentication Response Extension IE

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??010100'B		
authRsp	?		
authRspExt	c_AuthRspExtAny		
Detailed Comments:			

Constraint Name : c_AuthRspAnyNoExt

Group :

PDU Type : AUTHENTICATIONRESPONSE

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Any Authentication Response NOT containing the Authentication Response Extension IE

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??010100'B		
authRsp	?		
authRspExt	_		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : c_LocUpdAcpTMSI (p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING)

Group :

PDU Type : LOCATIONUPDATINGACCEPT

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00000010'B		
locAreald	c_LocAreald_v(p_MCC, p_MNC, p_LAC)		
mobileId	c_MobileIdTMSI_Def		
followOnProceed	'10100001'B		
cTSPerm	'10100010'B		
equivalentPLMN	_		
emergNumList	_		

: c_LocUpdAcpTMSI_E_PLMN (p_MCC: HEXSTRING; p_MNC: HEXSTRING; p_LAC: OCTETSTRING; p_ePLMN : PLMN_List) **Constraint Name**

Group

PDU Type : LOCATIONUPDATINGACCEPT

Derivation Path Encoding Rule Name: Encoding Variation: Comments

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'00000010'B		
locAreald	c_LocAreald_v(p_MCC, p_MNC, p_LAC)		
mobileId	c_MobileIdTMSI_Def		
followOnProceed	'10100001'B		
cTSPerm	'10100010'B		
equivalentPLMN	p_ePLMN		
emergNumList	_		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : c_PagRsp (p_KeySeq: KeySeq; p_MobileId: MS_Identity_lv)

Group

PDU Type : PAGINGRESPONSE

Derivation Path Encoding Rule Name: Encoding Variation: Comments

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
rRProtocolDiscriminator	'0110'B		
msgType	'??100111'B		
spare4	'0000'B		
ciphKeySeqNum	c_CiphKeySeqNum(p_KeyS eq)		
mSClsmk2	c_MS_Clsmk2_Any_lv		
mobileId	p_MobileId		
Detailed Comments :			

Constraint Name : c_TMSI_ReallocCmpl

Group :

PDU Type : TMSIREALLOCATIONCOMPLETE

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		Skip Indicator
mMProtocolDiscriminator	'0101'B		MM Protocol Discriminator
msgType	'??011011'B		Message Type
Detailed Comments :			

PDU Constraint Declaration

Constraint Name : cb_LocUpdReqAny (p_KeySeq : KeySeq)

Group :

PDU Type : LOCATIONUPDATINGREQUEST

Derivation Path : Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
mMProtocolDiscriminator	'0101'B		
msgType	'??001000'B		
ciphKeySeqNum	c_CiphKeySeqNum (p_KeySeq)		
locUpdType	c_LocUpdTypeAny		
locAreald	c_LocArealdAny_v		
mSClsmk1	c_MS_Clsmk1_Any		
mobileId	c_MobileIdAny_lv		
mSClsmk2	c_MS_Clsmk2_Any IF_PRESENT		

Constraint Name : cbr_Deact_PDP_ContextReq_MO(p_SM_Cause: SM_Cause_v)

Group :

PDU Type : DEACTIVATEPDPCONTEXTREQUEST

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : Deactivate PDP Context Request

n <=> ue 24.008, 9.5.14

Field Name	Field Value	Field Encoding	Comments
ti	cr_TI_Any		
sM_ProtocolDiscriminator	tsc_SMPD		
msgType	'01000110'B		
sM_Cause	p_SM_Cause		
tearDwnInd	cr_TearDwnInd_tv IF_PRESENT		
protocolConfOpts	cr_ProtoCfgOptAny IF_PRESENT		
Dotailed Comments:	•		

Constraint Name

Group

: ROUTINGAREAUPDATEREQUEST PDU Type

Derivation Path Encoding Rule Name: Encoding Variation: Comments

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001000'B		
gprsCiphKeySeqNo	c_CiphKeySeqNum(p_KeyS eq)		
updateType	p_UpdateType		
oldRAI	p_RAI		
msRadioAccessCap	c_MS_RadioAccessCapAny _lv		
oldPTMSI_Signature	c_PTMSI_SignatureAny IF_PRESENT		
readyTimer	cr_GPRS_TimerAny IF_PRESENT		
drxParameter	cr_DRXparamter_tv_Any IF_PRESENT		
tmsiStatus	c_TMSI_StatusAny IF_PRESENT		
ptmsi	c_MobileIdPTMSI_Any IF_PRESENT		
msnetworkcap	cr_MS_NetworkCap_tlv_An y IF_PRESENT		
pDP_ContextStatus	cr_PDP_ContextStatusAny IF_PRESENT		
pS_LCS_Capability	cr_PS_LCS_CapabilityAny IF_PRESENT		

Constraint Name : cr_AttachComplete

Group :

PDU Type : ATTACHCOMPLETE

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000011'B		

Detailed Comments:

PDU Constraint Declaration

 $\textbf{Constraint Name} \qquad \textbf{:} \ \, \text{cr_AttachReq (p_AttachType : AttachType; p_MobId : MS_Identity_lv; p_RAI : RAI_v;} \\$

p_KeySeq : KeySeq)

Group :

PDU Type : ATTACHREQUEST

Derivation Path : Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000001'B		
msNetworkCap	cr_MS_NetworkCapAss_lv		
gprsCiphKeySeqNo	c_CiphKeySeqNum(p_KeyS eq)		
attachType	p_AttachType		
drxParameter	c_DRX_ParamterAny		
ptmsiORimsi	p_MobId		
oldRAI	p_RAI		
msRadioAccessCap	c_MS_RadioAccessCapAny _lv		
oldPTMSI_Signature	c_PTMSI_SignatureAny IF_PRESENT		
readyTimer	c_GPRS_TimerAny IF_PRESENT		
tmsiStatus	c_TMSI_StatusAny IF_PRESENT		
pS_LCS_Capability	cr_PS_LCS_CapabilityAny IF_PRESENT		
Detailed Comments :			

Constraint Name : cr_AuthAndCiphFailureAny

Group :

PDU Type : AUTHENTICATION_AND_CIPHERING_FAILURE

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00011100'B		
gmmCause	?		
authFailurePar	c_AuthFailParamGmmAny IF_PRESENT		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cr_AuthAndCiphRsp(p_authRsp : AuthRsp_tv; p_authRspExt : AuthRspExt)

Group :

PDU Type : AUTHENTICATIONANDCIPHERINGRESPONSE

Derivation Path : Encoding Rule Name : Encoding Variation : Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00010011'B		
spare4	'0000'B		
acRefNo	?		Should be the one sent in the auth request
authRsp	p_authRsp		Authentication RES
imeisv	_		No IMEISV requested
authRspExt	p_authRspExt		Authentication paramter AUTN, a UMTS challenge is requested

Constraint Name : cr_DetachRequest_MO

Group :

PDU Type : DETACHREQUESTMO

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : 3GPP 24.008 V3.6.0 clause 9.4.5.2 (Mobile originating detach, GMM message)

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		Skip Indicator
gMMProtocolDiscriminator	tsc_GMM_PD		GMM Protocol Discriminator
msgType	'00000101'B		Message Type
spare4	'0000'B		М
detachType	c_DetachTypeReAttNotRequ iredGPRS		М
ptmsi	c_MobileIdPTMSI_Any IF_PRESENT		0
ptmsiSignature	c_PTMSI_Signature_tlv(?) IF_PRESENT		0

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cr_ServiceRequest (p_sType : ServiceType_v; p_PTMSI : MS_Identity_lv; p_KeySeq : KeySeq)

Group :

PDU Type : SERVICEREQUEST

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00001100'B		
serviceType	p_sType		
ciphKeySeqNo	c_CiphKeySeqNum(p_KeyS eq)		
ptmsi	p_PTMSI		
pDP_ContextStatus	cr_PDP_ContextStatusAny IF_PRESENT		

Constraint Name : cr_StatusAny

Group

PDU Type : STATUS_PDU

Derivation Path Encoding Rule Name: Encoding Variation:

: This constraint is used to receive an AM STATUS PDU containing the given SUFI list. Any padding included is ignored. Comments

Field Name	Field Value	Field Encoding	Comments
dC_Field	tsc_DC_ControlPDU		
type	tsc_PDU_TypeStatus		
superFieldsTx	ОМІТ		
superFieldsAndPadRx	?		
paddingTx	OMIT		

: cs_AttachAcc (p_attachRes : AttachResult; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature; p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity) **Constraint Name**

Group

PDU Type : ATTACHACCEPT

Derivation Path Encoding Rule Name: Encoding Variation: Comments

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000010'B		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
attachResult	p_attachRes		
periodicRAupdateTimer	c_GPRS_Timer_v('111'B, '00000'B)		Timer deactivated
radioPrioTOM8	c_RadioPriority2('000'B)		Lowest
radioPrioSMS	c_RadioPriority('100'B)		Lowest
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
negReadyTimer	-		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		Only required in PS/CS combined procedures
gmmCause	-		
t3302Value	-		
cellNotification	-		
equivalentPLMN	-		
ntwFeatureSupport	-		
emergNumList	_		
Detailed Comments :			

: cs_AttachAccE_PLMN (p_attachRes : AttachResult; p_RAI : RAI_v; p_PTMSIsig : PTMSI_Signature; p_PTMSI : GMM_MS_IdentityPTMSI; p_TMSI : GMM_MS_Identity; p_ePLMN : PLMN_List) **Constraint Name**

Group

PDU Type : ATTACHACCEPT

Derivation Path Encoding Rule Name: Encoding Variation: Comments

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000010'B		
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
attachResult	p_attachRes		
periodicRAupdateTimer	c_GPRS_Timer_v('111'B, '00000'B)		Timer deactivated
radioPrioTOM8	c_RadioPriority2('000'B)		Lowest
radioPrioSMS	c_RadioPriority('100'B)		Lowest
rai	p_RAI		
ptmsiSignature	p_PTMSIsig		
negReadyTimer	_		
allocatedPTMSI	p_PTMSI		
msIdentity	p_TMSI		Only required in PS/CS combined procedures
gmmCause	_		
t3302Value	_		
cellNotification	_		
equivalentPLMN	p_ePLMN		
ntwFeatureSupport	_		
emergNumList	_		
Detailed Comments :			

Constraint Name : cs_AttachRej(p_cause : RejCau)

Group :

PDU Type : ATTACHREJECT

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00000100'B		
gmmCause	p_cause		
t3302Value	-		

Detailed Comments:

PDU Constraint Declaration

Constraint Name : cs_AuthAndCiphReq(p_rand : AuthenticationParamterRAND; p_ckNo : CiphKeySeqNum_tv;

p_autn : GMM_AUTN)

Group

PDU Type : AUTHENTICATIONANDCIPHERINGREQUEST

Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Field Name	Field Value	Field Encoding	Comments
skipIndicator	'0000'B		
gMMProtocolDiscriminator	tsc_GMM_PD		
msgType	'00010010'B		
imeisvReq	cb_IMEISV_Request('000'B)		IMEISV not requested
ciphAlgorithm	c_CiphAlgorithm(px_Cipher Alg)		GPRS encryption algorithm GEA/1
acRefNo	c_AC_RefNum3		Use any reference value
forceToStandby	c_ForceToStandby('000'B)		Force to standby not indicated
authRand	p_rand		Authentication paramter RAND
gprsCiphKeySeqNo	p_ckNo		GPRS ciphering key sequence number
aUTN	p_autn		Authentication paramter AUTN, an UMTS challenge is requested
Detailed Comments :	1		Toquosiou

```
ASN.1 PDU Constraint Declaration
Constraint Name
                    : cbs_108_RB_SetUp57_6k_CS (
                        p_Integrityinfo :
                                         IntegrityCheckInfo;
                        p_RRC_Ti:
                                          RRC_TransactionIdentifier;
                        p_Activetime:
                                          ActivationTime;
                        p_FreqInfo:
                                          FrequencyInfo;
                                          BITSTRING:
                        p RAB ld:
                        p_PrimScramblingCode: PrimaryScramblingCode;
                        p_UL_ScramblingCode : UL_ScramblingCode
Group
PDU Type
                    : DL_DCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation
Comments
                    : Defined in TS 34.123-1 annex A condition A.1
                                                 Constraint Value
 integrityCheckInfo p_Integrityinfo,
 message radioBearerSetup: r3: {
  radioBearerSetup_r3 {
   rrc_TransactionIdentifier p_RRC_Ti,
   integrityProtectionModeInfo OMIT,
   cipheringModeInfo OMIT,
   activationTime p_Activetime,
   new_U_RNTI OMIT,
   new_C_RNTI OMIT,
   rrc_StateIndicator cell_DCH,
   utran_DRX_CycleLengthCoeff OMIT,
   cn_InformationInfo OMIT,
   srb_InformationSetupList OMIT,
   rab\_InformationSetupList\ c\_RAB\_InfoListTM\_57\_6k\ (\ useT314,\ p\_RAB\_Id,\ c\_RLC\_InfoTM\_Def\ ),
   rb InformationAffectedList OMIT.
   ul_CommonTransChInfo c_UL_CommTrChInfoTM_57_6k,
   ul_deletedTransChInfoList OMIT,
   ul AddReconfTransChInfoList c UL AddReconfTransChInfoListTM 57 6k,
   modeSpecificTransChInfo fdd:{
    cpch SetID OMIT.
    addReconfTransChDRAC_Info OMIT
   dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL,
   dl_DeletedTransChInfoList OMIT,
   dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListTM_57_6k,
   frequencyInfo p_FreqInfo,
   maxAllowedUL_TX_Power tsc_MaxAllowPwr,
   ul_ChannelRequirement ul_DPCH_Info: cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_Streaming, pl0_96,
p_UL_ScramblingCode),
   modeSpecificPhysChInfo fdd:{
    dl PDSCH Information OMIT
   dl_CommonInformation c_DL_CommonInformationRB_SetUp ( tsc_DL_DPCH1_SFP_Streaming )
   dl_InformationPerRL_List c_DL_InformationPerRL ( p_PrimScramblingCode , tsc_DL_DPCH1_ChC_Streaming,
tsc_DL_DPCH1_2ndScrC)
  v3a0NonCriticalExtensions {
   radioBearerSetup_v3a0ext { new_DSCH_RNTI OMIT },
   laterNonCriticalExtensions OMIT
  }
```

```
ASN.1 PDU Constraint Declaration
                    Constraint Name
                       p_RRC_Ti : RRC_TransactionIdentifier;
                       p_Activetime:
                                        ActivationTime;
                       p_FreqInfo:
                                         FrequencyInfo;
                       p RAB Id: BITSTRING;
                       p_PrimScramblingCode: PrimaryScramblingCode;
                       p_UL_ScramblingCode : UL_ScramblingCode
Group
PDU Type
                    : DL_DCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation
Comments
                    : Defined in TS 34.123-1 annex A condition A.1
                                                Constraint Value
 integrityCheckInfo p_Integrityinfo,
 message radioBearerSetup: r3: {
  radioBearerSetup_r3 {
   rrc_TransactionIdentifier p_RRC_Ti,
   integrityProtectionModeInfo OMIT,
   cipheringModeInfo OMIT,
   activationTime p_Activetime,
   new_U_RNTI OMIT,
   new_C_RNTI OMIT,
   rrc_StateIndicator cell_DCH,
   utran_DRX_CycleLengthCoeff OMIT,
   cn_InformationInfo OMIT,
   srb_InformationSetupList OMIT,
   rab_InformationSetupList c_RAB_InfoListTM_64k ( useT314, p_RAB_Id, c_RLC_InfoTM_Def),
   rb InformationAffectedList OMIT.
   ul_CommonTransChInfo c_UL_CommTrChInfoTM_64k,
   ul_deletedTransChInfoList OMIT,
   ul AddReconfTransChInfoList c UL AddReconfTransChInfoListTM 64k,
   modeSpecificTransChInfo fdd:{
    cpch SetID OMIT.
    addReconfTransChDRAC_Info OMIT
   dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL,
   dl_DeletedTransChInfoList OMIT,
   dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListTM_64k,
   frequencyInfo p_FreqInfo,
   maxAllowedUL_TX_Power tsc_MaxAllowPwr,
   ul_ChannelRequirement ul_DPCH_Info: cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_64k_CS, pl0_88,
p_UL_ScramblingCode),
   modeSpecificPhysChInfo fdd:{
    dl_PDSCH_Information OMIT
   dl_CommonInformation c_DL_CommonInformationRB_SetUp ( tsc_DL_DPCH1_SFP_64k_CS ),
   dl_InformationPerRL_List c_DL_InformationPerRL( p_PrimScramblingCode , tsc_DL_DPCH1_ChC_64k_CS,
tsc_DL_DPCH1_2ndScrC)
  v3a0NonCriticalExtensions {
   radioBearerSetup_v3a0ext { new_DSCH_RNTI OMIT },
   laterNonCriticalExtensions OMIT
  }
```

ASN.1 PDU Constraint Declaration Constraint Name : cbs_108_RB_SetUp64k_PS (p_Integrityinfo: IntegrityCheckInfo; p_RRC_Ti : RRC_TransactionIdentifier; p_Activetime: ActivationTime; p_RAB_Id: BITSTRING; p_PrimScramblingCode: PrimaryScramblingCode; p_UL_ScramblingCode: UL_ScramblingCode Group **PDU Type** : DL_DCCH_Message **Derivation Path Encoding Rule Name: Encoding Variation**: Comments : Defined in TS 34.108 clause 9. **Constraint Value** integrityCheckInfo p_Integrityinfo, message radioBearerSetup: r3: { radioBearerSetup r3 { rrc_TransactionIdentifier p_RRC_Ti, integrityProtectionModeInfo OMIT, cipheringModeInfo OMIT, activationTime p_Activetime, new_U_RNTI OMIT, new_C_RNTI OMIT, rrc_StateIndicator cell_DCH, utran_DRX_CycleLengthCoeff OMIT, cn_InformationInfo OMIT, srb_InformationSetupList OMIT, rab_InformationSetupList {c_RAB_InfoSetupDCH_PS_64k (useT315, p_RAB_Id, c_RLC_InfoAM_Def)}, rb_InformationAffectedList OMIT, ul_CommonTransChInfo c_UL_CommTrChInfoDCH_PS_64k, ul_deletedTransChInfoList OMIT, $ul_AddReconfTransChInfoList\ c_UL_AddReconfTransChInfoListDCH_PS_64k,$ modeSpecificTransChInfo fdd:{ cpch_SetID OMIT, addReconfTransChDRAC_Info OMIT dl_CommonTransChInfo c_DL_CommonTransChInfoDCH (c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx), dl_DeletedTransChInfoList OMIT, dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListDCH_PS_64k, frequencyInfo OMIT, maxAllowedUL_TX_Power tsc_MaxAllowPwr, ul_ChannelRequirement ul_DPCH_Info: cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_64k_PS, pl0_96, p_UL_ScramblingCode), modeSpecificPhysChInfo fdd:{ dl_PDSCH_Information OMIT dl_CommonInformation c_DL_CommonInformationRB_SetUp (tsc_DL_DPCH1_SFP_64k_PS), dl_InformationPerRL_List c_DL_InformationPerRL (p_PrimScramblingCode , tsc_DL_DPCH1_ChC_64k_PS, tsc_DL_DPCH1_2ndScrC) v3a0NonCriticalExtensions { radioBearerSetup_v3a0ext { new_DSCH_RNTI OMIT }, laterNonCriticalExtensions OMIT } }

ASN.1 PDU Constraint Declaration Constraint Name : cbs_108_RB_SetUpSpeech (p_Integrityinfo: IntegrityCheckInfo; p_RRC_Ti : RRC_TransactionIdentifier; p_Activetime: ActivationTime; p_RAB_Id: BITSTRING; p_PrimScramblingCode: PrimaryScramblingCode; p_UL_ScramblingCode: UL_ScramblingCode Group **PDU Type** : DL_DCCH_Message **Derivation Path Encoding Rule Name: Encoding Variation**: Comments : Defined in TS 34.108 clause 9 This constraint is to be used as derived constraints

Constraint Value

```
integrityCheckInfo p_Integrityinfo,
 message radioBearerSetup: r3: {
  radioBearerSetup_r3 {
   rrc_TransactionIdentifier p_RRC_Ti,
   integrityProtectionModeInfo OMIT,
   cipheringModeInfo OMIT,
   activationTime p_Activetime,
   new_U_RNTI OMIT,
   new_C_RNTI OMIT,
   rrc_StateIndicator cell_DCH,
   utran_DRX_CycleLengthCoeff OMIT,
   cn_InformationInfo OMIT,
   srb_InformationSetupList OMIT,
   rab\_InformationSetupList \{ c\_RAB\_InfoSetupTM\_12\_2k \ ( c\_ReEstTimerT314, p\_RAB\_Id) \}, \\
   rb InformationAffectedList OMIT.
   ul_CommonTransChInfo c_UL_CommTrChInfoTM_12_2k,
   ul_deletedTransChInfoList OMIT,
   ul AddReconfTransChInfoList c UL AddReconfTransChInfoListTM 12 2k,
   modeSpecificTransChInfo fdd:{
    cpch SetID OMIT.
    addReconfTransChDRAC_Info OMIT
   dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL,
   dl_DeletedTransChInfoList OMIT,
   dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListTM_12_2k,
   frequencyInfo OMIT,
   maxAllowedUL_TX_Power tsc_MaxAllowPwr,
   ul_ChannelRequirement ul_DPCH_Info : cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_Speech, pl0_84,
p_UL_ScramblingCode),
   modeSpecificPhysChInfo fdd:{
    dl_PDSCH_Information OMIT
   dl_CommonInformation c_DL_CommonInformationRB_SetUpSpeech (tsc_DL_DPCH1_SFP_Speech),
   dl_InformationPerRL_List c_DL_InformationPerRL (p_PrimScramblingCode, tsc_DL_DPCH1_ChC_Speech,
tsc_DL_DPCH1_2ndScrC)
  v3a0NonCriticalExtensions {
   radioBearerSetup_v3a0ext { new_DSCH_RNTI OMIT },
   laterNonCriticalExtensions OMIT
  }
```

ASN.1 PDU Constraint Declaration Constraint Name : cbr_108_RB_SetUpCmpl p_RRC_Ti: RRC_TransactionIdentifier; p_Count_C_ActivationTime : ActivationTime; $p_RB_ActivationTimeInfoList: RB_ActivationTimeInfoList$ Group **PDU Type** : UL_DCCH_Message **Derivation Path Encoding Rule Name: Encoding Variation**: Comments : Defined in TS 34.108 clause 9. p_Count_C_ActivationTime : The presence of this IE depends on the following 2 factors: (a) There exists RB(s) mapped to RLC-TM and (b) UE is transiting to CELL_DCH state after the RB establishment procedure. Else, this IE is absent p_RB_ActivationTimeInfoList: If ciphering is not activated in RADIO BEARER SETUP message, this IE must be absent. Else, SS checks this IE for the presence of activation times of all ciphered uplink RLC-UM and RLC-AM RBs **Constraint Value** integrityCheckInfo *,

rb_UL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList, ul_CounterSynchronisationInfo *, laterNonCriticalExtensions *

count_C_ActivationTime p_Count_C_ActivationTime,

message radioBearerSetupComplete : {
 rrc_TransactionIdentifier p_RRC_Ti,
 ul_IntegProtActivationInfo *,
 ul_TimingAdvance *,
 start_Value ?,

Detailed Comments :

```
ASN.1 PDU Constraint Declaration

Constraint Name : cbr_108_RRC_ConnRelCmpl ( p_RRC_Ti: RRC_TransactionIdentifier)

Group :
PDU Type : UL_DCCH_Message

Derivation Path :
```

Encoding Rule Name :
Encoding Variation :

Comments: Defined in TS 34.108 clause 9.

```
{ integrityCheckInfo *,
    message rrcConnectionReleaseComplete : {
    rrc_TransactionIdentifier p_RRC_Ti,
    errorIndication *,
    laterNonCriticalExtensions *
    }
}
Detailed Comments :
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                    : cbr_108_RRC_ConnReq (p_EstCause: EstablishmentCause)
Group
PDU Type
                    : UL_CCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation
Comments
                    : Defined in TS 34.108 clause 9.
                                                Constraint Value
{ integrityCheckInfo OMIT,
 message rrcConnectionRequest:
  initialUE_Identity (imsi:?, tmsi_and_LAI:?, p_TMSI_and_RAI:?, imei:?),
  establishmentCause p_EstCause,
  protocolErrorIndicator noError,
  measuredResultsOnRACH *,
  v3d0NonCriticalExtensions *
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                    : cbr_108_RRC_SecModeCmpl
                      (p_RRC_Ti: RRC_TransactionIdentifier;
                       p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList
Group
PDU Type
                    : UL_DCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                    : Defined in TS 34.108 clause 9.
                                                 Constraint Value
{ integrityCheckInfo *,
 message securityModeComplete : {
  rrc_TransactionIdentifier p_RRC_Ti,
  ul_IntegProtActivationInfo *
  rb_UL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList,
  laterNonCriticalExtensions *
Detailed Comments:
```

ASN.1 PDU Constraint Declaration Constraint Name : cbs_108_RB_SetUpFACH_PS (p_Integrityinfo: IntegrityCheckInfo; p_RRC_Ti : RRC_TransactionIdentifier; p_RAB_Id: BITSTRING; p_NewC_RNTI: C_RNTI Group **PDU Type** : DL_DCCH_Message **Derivation Path Encoding Rule Name: Encoding Variation**: Comments : Defined in TS 34.123-1 annex A condition A.6 **Constraint Value** integrityCheckInfo p_Integrityinfo, message radioBearerSetup: r3: { radioBearerSetup_r3 { rrc_TransactionIdentifier p_RRC_Ti, integrityProtectionModeInfo OMIT. cipheringModeInfo OMIT, activationTime OMIT, new_U_RNTI OMIT, $new_C_RNTI p_NewC_RNTI$, rrc_StateIndicator cell_FACH, utran_DRX_CycleLengthCoeff OMIT, cn_InformationInfo OMIT, srb_InformationSetupList OMIT, rab_InformationSetupList c_RAB_InfoListFACH_PS (useT315, p_RAB_Id, c_RLC_InfoAM_Def), rb_InformationAffectedList OMIT , ul_CommonTransChInfo c_UL_CommTrChInfoDCH_PS_64k, ul_deletedTransChInfoList OMIT, ul_AddReconfTransChInfoList c_UL_AddReconfTransChInfoListDCH_PS_64k, modeSpecificTransChInfo fdd:{ cpch_SetID OMIT, addReconfTransChDRAC Info OMIT $\label{localization} \mbox{dl_CommonTransChInfo} \mbox{ c_DL_CommonTransChInfo} \mbox{DCH (c_TFCS_Cmpl0_1_2_3_4_5_6_7_8_9_Rx), } \\ \mbox{dl_CommonTransChInfo} \mbox$ dl_DeletedTransChInfoList OMIT, dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListDCH_PS_64k, frequencyInfo OMIT, maxAllowedUL_TX_Power OMIT, ul_ChannelRequirement OMIT, modeSpecificPhysChInfo fdd:{ dl_PDSCH_Information OMIT dl_CommonInformation OMIT, dl_InformationPerRL_List OMIT v3a0NonCriticalExtensions { radioBearerSetup_v3a0ext { new_DSCH_RNTI OMIT },

Detailed Comments:

}

laterNonCriticalExtensions OMIT

ASN.1 PDU Constraint Declaration Constraint Name : cbs_108_RRC_ConnSetupDCH p_InitUEId: InitialUE_Identity; RRC_TransactionIdentifier; p_RRC_Ti: p_PrmbScrmCode: PrimaryScramblingCode; p_U_RNTI_New: U_RNTI; p_UL_ScramblingCode: UL_ScramblingCode Group **PDU Type** : DL_CCCH_Message **Derivation Path Encoding Rule Name: Encoding Variation** Comments : Defined in TS 34.108 clause 9. **Constraint Value** integrityCheckInfo OMIT, message rrcConnectionSetup: r3: rrcConnectionSetup_r3 -- RRCConnectionSetup_r3_IEs initialUE_Identity p_InitUEId, rrc_TransactionIdentifier p_RRC_Ti, activationTime OMIT new_U_RNTI p_U_RNTI_New, new_c_RNTI OMIT, rrc_StateIndicator cell_DCH, utran_DRX_CycleLengthCoeff 9, capabilityUpdateRequirement { ue_RadioCapabilityFDDUpdateRequirement TRUE, ue RadioCapabilityTDDUpdateRequirement FALSE, systemSpecificCapUpdateReqList {gsm} srb InformationSetupList { c_SRB_InfoSetupUM_DCH (tsc_UL_DCCH1, tsc_UL_MAC_Prt1, tsc_UL_MAC_Prt1, tsc_DL_DCCH1), c_SRB_InfoSetupAM_DCH (tsc_UL_DCCH2, tsc_UL_MAC_Prt2, tsc_UL_MAC_Prt2, tsc_DL_DCCH2), c_SRB_InfoSetupAM_DCH (tsc_UL_DCCH3, tsc_UL_MAC_Prt3, tsc_UL_MAC_Prt3, tsc_DL_DCCH3), c_SRB_InfoSetupAM_DCH (tsc_UL_DCCH4, tsc_UL_MAC_Prt4, tsc_UL_MAC_Prt4, tsc_DL_DCCH4) ul_CommonTransChInfo c_UL_CommTrChInfoDCCH_13_6k, ul_AddReconfTransChInfoList c_UL_AddReconfTransChInfoListDCCH_13_6k, dl_CommonTransChInfo c_DL_CommonTransChInfoSameAsUL dl_AddReconfTransChInfoList c_DL_AddReconfTransChInfoListDCCH_SRB, frequencyInfo OMIT. maxAllowedUL_TX_Power OMIT, $ul_Channel Requirement \ ul_DPCH_Info: c_UL_DPCH_13_6_Stand Alone \ (\ p_UL_Scrambling Code\), \\$ dl_CommonInformation cd_DL_CommonInformationDCH_DPCH_Offset (tsc_DL_DPCH1_SFP_SRB). dl_InformationPerRL_List c_DL_InfoPerRL_DPCH_Offset (p_PrmbScrmCode, tsc_DL_DPCH1_2ndScrC, tsc_DL_DPCH1_ChC_SRB)

Detailed Comments:

}

laterNonCriticalExtensions OMIT

ASN.1 PDU Constraint Declaration Constraint Name : cbs_108_RRC_ConnSetupFACH p_InitUEId: InitialUE_Identity; p_RRC_Ti: RRC_TransactionIdentifier; p_PrmbScrmCode: PrimaryScramblingCode; p_U_RNTI_New : U_RNTI; p_CRNTI_New: C_RNTI; p_UL_ScramblingCode : UL_ScramblingCode Group **PDU Type** : DL_CCCH_Message **Derivation Path Encoding Rule Name: Encoding Variation** Comments : Defined in TS 34.123-1 annex A **Constraint Value** integrityCheckInfo OMIT, message rrcConnectionSetup: rrcConnectionSetup_r3 -- RRCConnectionSetup_r3_IEs initialUE_Identity p_InitUEId, rrc_TransactionIdentifier p_RRC_Ti, activationTime OMIT, new_U_RNTI p_U_RNTI_New, new_c_RNTI p_CRNTI_New, rrc_StateIndicator cell_FACH utran_DRX_CycleLengthCoeff 9, capabilityUpdateRequirement { ue_RadioCapabilityFDDUpdateRequirement TRUE, ue_RadioCapabilityTDDUpdateRequirement FALSE, systemSpecificCapUpdateReqList {gsm} srb_InformationSetupList { c_SRB_InfoSetupUM_FACH (tsc_RB1, tsc_UL_DCCH1, tsc_UL_MAC_Prt1, tsc_UL_MAC_Prt1, tsc_DL_DCCH1), c_SRB_InfoSetupAM_FACH (tsc_RB2,tsc_UL_DCCH2, tsc_UL_MAC_Prt2, tsc_UL_MAC_Prt2, tsc_DL_DCCH2), c_SRB_InfoSetupAM_FACH (tsc_RB3, tsc_UL_DCCH3, tsc_UL_MAC_Prt3, tsc_UL_MAC_Prt3, tsc_DL_DCCH3), c_SRB_InfoSetupAM_FACH (tsc_RB4, tsc_UL_DCCH4, tsc_UL_MAC_Prt4, tsc_UL_MAC_Prt4, tsc_DL_DCCH4) ul_CommonTransChInfo c_UL_CommTrChInfoDCCH_13_6k, $ul_AddReconfTransChInfoList\ c_UL_AddReconfTransChInfoListDCCH_3_4k,$ dl CommonTransChInfo c DL CommonTransChInfoSameAsUL. $dl_AddReconfTransChInfoList\,c_DL_AddReconfTransChInfoListDCCH_SRB,$ frequencyInfo OMIT, maxAllowedUL_TX_Power OMIT, ul_ChannelRequirement OMIT, dl CommonInformation OMIT, dl_InformationPerRL_List OMIT laterNonCriticalExtensions OMIT

Detailed Comments:

}

```
ASN.1 PDU Constraint Declaration
Constraint Name
                                                                                                    : cr\_108\_RRC\_ConnSetupCmpl \ ( \ p\_RRC\_Ti : \ RRC\_TransactionIdentifier; p\_STARTList : \ RRC\_TransactionIdent
                                                                                                             STARTList)
Group
PDU Type
                                                                                                     : UL_DCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                                                                                                     : Defined in TS 34.108 clause 9.
                                                                                                                                                                                                                                                  Constraint Value
{ integrityCheckInfo OMIT,
     message rrcConnectionSetupComplete : {
           rrc_TransactionIdentifier p_RRC_Ti,
           startList p_STARTList,
           ue_RadioAccessCapability *,
           ue_RATSpecificCapability *
          v370NonCriticalExtensions *
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                    : cr_108_SecModeFail (p_RRC_Ti : RRC_TransactionIdentifier; p_FailureCauseWithProtErr :
                     FailureCauseWithProtErr)
Group
PDU Type
                    : UL_DCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                                                Constraint Value
{ integrityCheckInfo * ,
 message securityModeFailure :
  rrc_TransactionIdentifier p_RRC_Ti,
  failureCause p_FailureCauseWithProtErr,
  laterNonCriticalExtensions *
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_MeasRep
Group :
PDU Type : UL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

{ integrityCheckInfo *, message measurementReport : ? }

Detailed Comments :
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                     : cr_RRC_RB_SetUpCmplNoStartVal
                        p_RRC_Ti: RRC_TransactionIdentifier;
                        p_Count_C_ActivationTime : ActivationTime;
                        p_RB_ActivationTimeInfoList : RB_ActivationTimeInfoList
Group
PDU Type
                     : UL_DCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                     : START value is omitted
                       p_Count_C_ActivationTime: The presence of this IE depends on the following 2 factors: (a)
                       There exists RB(s) mapped to RLC-TM and (b) UE is transiting to CELL_DCH state after the
                       RB establishment procedure. Else, this IE is absent
                       p_RB_ActivationTimeInfoList: If ciphering is not activated in RADIO BEARER SETUP message,
                       this IE must be absent. Else, SS checks this IE for the presence of activation times of all ciphered
                       uplink RLC-UM and RLC-AM RBs
                                                  Constraint Value
 integrityCheckInfo *,
 message radioBearerSetupComplete : {
  rrc_TransactionIdentifier p_RRC_Ti,
  ul_IntegProtActivationInfo *,
  ul_TimingAdvance *,
  start_Value OMIT,
  count_C_ActivationTime p_Count_C_ActivationTime,
  rb_UL_CiphActivationTimeInfo p_RB_ActivationTimeInfoList,
  laterNonCriticalExtensions *
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                    : cr_RRC_RrcConnReqAny
Group
PDU Type
                    : UL_CCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                                                  Constraint Value
{ integrityCheckInfo OMIT,
 message rrcConnectionRequest :
  initialUE_Identity?,
  establishmentCause ?,
  protocolErrorIndicator noError,
  measuredResultsOnRACH *, v3d0NonCriticalExtensions *
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration

Constraint Name : cr_RRC_RrcStatus
Group :
PDU Type : UL_DCCH_Message
Derivation Path :
Encoding Rule Name :
Encoding Variation :
Comments :

Constraint Value

{ integrityCheckInfo *, message rrcStatus : ? }
Detailed Comments :
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                    : cs_108_RRC_ConnRelCCCH (
                     p_U_rnti: U_RNTI;
                     p_RRC_Ti: RRC_TransactionIdentifier)
Group
PDU Type
                    : DL_CCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                    : Defined in TS 34.108 clause 9.
                                                Constraint Value
{ integrityCheckInfo OMIT,
 message rrcConnectionRelease : r3 :
  rrcConnectionRelease_CCCH_r3
   u_RNTI p_U_rnti,
   rrcConnectionRelease
    rrc_TransactionIdentifier p_RRC_Ti,
    n_308 OMIT,
    releaseCause normalEvent
  laterNonCriticalExtensions OMIT
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                    : cs_108_RRC_ConnRelDCCH (
                        p_IntegrityCheckInfo: IntegrityCheckInfo;
                        p\_RRC\_Ti: RRC\_TransactionIdentifier;
                        p_N308: INTEGER)
Group
PDU Type
                    : DL_DCCH_Message
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                    : Defined in TS 34.108 clause 9.
                                                 Constraint Value
{ integrityCheckInfo p_IntegrityCheckInfo,
 message rrcConnectionRelease : r3 :
  rrcConnectionRelease_r3
   rrc_TransactionIdentifier p_RRC_Ti,
   n_308 p_N308,
   releaseCause normalEvent,
   rplmn_information OMIT
  laterNonCriticalExtensions OMIT
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration
Constraint Name
                   : cs_108_RRC_SecModeCmd ( p_IntegrityCheckInfo : IntegrityCheckInfo; p_SecModeCmd:
                     SecurityModeCommand)
Group
                   : DL_DCCH_Message
PDU Type
Derivation Path
Encoding Rule Name:
Encoding Variation:
Comments
                   : Defined in TS 34.108 clause 9.
                                              Constraint Value
{ integrityCheckInfo p_IntegrityCheckInfo,
 message securityModeCommand: p_SecModeCmd
Detailed Comments:
```

```
ASN.1 PDU Constraint Declaration

Constraint Name : cs_RRC_PagingType1_TMSI(p_PagCause: PagingCause; p_Tmsi:TMSI_GSM_MAP; p_Domain : CN_DomainIdentity)

Group : PDU Type : PCCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation : Comments : 

Constraint Value

{
    message pagingType1: c_PagingType1_TMSI(p_PagCause, p_Tmsi, p_Domain )
}

Detailed Comments :
```

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgCmpl(p_SIBType : SIB_Type; p_SIBData: SIB_Data_fixed)

Group :

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : System information message contains complete SIB/SB/MIB. The actual value of sfn_Prime shall

be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload completeSIB : {
    sib_Type p_SIBType,
    sib_Data_fixed p_SIBData }
}
```

Detailed Comments:

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgCmplList1(p_SIBType : SIB_Type; p_SIBData: SIB_Data_variable)

Group :

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : System information message contains complete SIB/SB/MIB. The actual value of sfn_Prime shall

be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload completeSIB_List : {{
       sib_Type p_SIBType,
       sib_Data_variable p_SIBData }}
}
```

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgCmplList2(p_SIBType1 : SIB_Type; p_SIBData1:SIB_Data_variable; p_SIBType2

:SIB_Type; p_SIBData2: SIB_Data_variable)

Group :

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments : System information message contains two complete SIB's. The actual value of sfn_Prime shall be

filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload completeSIB_List : {{
       sib_Type p_SIBType1,
       sib_Data_variable p_SIBData1 },
    {
       sib_Type p_SIBType2,
       sib_Data_variable p_SIBData2 }}
}
```

Detailed Comments:

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgFirst(p_SIBType : SIB_Type; p_SegCount: INTEGER; p_SIBData: SIB_Data_fixed)

Group

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments: The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{
  message {
    sfn_Prime 0, -- place holder
    payload firstSegment : {
        sib_Type p_SIBType,
        seg_Count p_SegCount,
        sib_Data_fixed p_SIBData }
  }
}
```

Detailed Comments:

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgLast(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData: SIB_Data_fixed)

Group

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments: The actual value of sfn_Prime shall be filled in by lower layer before sent on air. this message

contains last segment which is 222 bits long.

Constraint Value

```
{
  message {
    sfn_Prime 0,
    payload lastSegment : {
    sib_Type p_SIBType,
    segmentIndex p_SegIndex,
    sib_Data_fixed p_SIBData }
  }
}
```

Detailed Comments:

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgLastShort(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData:

SIB_Data_variable)

Group

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments: The actual value of sfn_Prime shall be filled in by lower layer before sent on air. this message

contains last segment which is short than 215 bits.

Constraint Value

```
message {
    sfn_Prime 0,
    payload lastSegmentShort : {
    sib_Type p_SIBType,
    segmentIndex p_SegIndex,
    sib_Data_variable p_SIBData }
}
```

Detailed Comments:

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgNoSegment

Group :

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments: System information message contains no SIB, sent on the frame which there is no any

SIB/SB/MIB scheduled on. The actual value of sfn_Prime shall be filled in by lower layer before

sent on air.

Constraint Value

```
{
    message {
        sfn_Prime 0,
        payload noSegment : NULL
    }
```

Detailed Comments:

ASN.1 PDU Constraint Declaration

Constraint Name : cs_SIB_MsgSubsequent(p_SIBType : SIB_Type; p_SegIndex : INTEGER; p_SIBData:

SIB_Data_fixed)

Group :

PDU Type : BCCH_BCH_Message

Derivation Path : Encoding Rule Name : Encoding Variation :

Comments: The actual value of sfn_Prime shall be filled in by lower layer before sent on air.

Constraint Value

```
{
    message {
        sfn_Prime 0,
        payload subsequentSegment : {
        sib_Type p_SIBType,
        segmentIndex p_SegIndex,
        sib_Data_fixed p_SIBData }
    }
```

Detailed Comments:

IV Dynamic Part

Test Case Dynamic Behaviour

Test Case Name : tc_16_1_1

Group : SMS/CS_Mode/

Purpose : To verify the ability of a UE to receive and decode the SMS where provided for the point to point

service.

Configuration :

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in MM-state "Idle, updated";-the SMS message storage shall be empty.

Selection Ref : SMS_SelExp01

Description : SMS Mobile terminated

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(1200)			35
2		(tcv_RP_OrigAddrMT:='11111111111'O, tcv_TP_OrigAddr01:='333333333'O, tcv_RP_MsgRef := '00'O)			
3		+ts_InitVariables			
4		(tcv_CN_Domain :=cs_domain)			
5		+ts_MM_StartCellA			Start cell A
6		+ts_IdleUpdated(tsc_CellA)			Idle Updated on Cell A
7		+ts_CC_BasicServMT_Def			6. Prepares TI for MT CC
8		(tcv_TI_1_S.tiVal := '001'B, tcv_TI_1_R.tiVal := tcv_TI_1_S.tiVal,			6. Prepare TI1 for
		tcv_TI_1_S.tiFlag := '0'B, tcv_TI_1_R.tiFlag := '1'B)			MT SMS
9		+lt_AT_Init			
10		+lt_Body			
11		+po_ConnectionAndSS_Rel(tsc_ CellA)			
		lt_Body			
12	TBS	(tcv_TestBody := TRUE)		(P)	
13		+lt_Part1			Steps 1–48 (1)
14		+lt_Part2			Steps 49–91 (2)
15		+lt_Part3			Steps 92–103 (3)
16		+lt_Part4			Steps 104–11 6 (4)
		lt_Part1			
17		+ts_SMSCS_SetupMT			Steps 1–6

	Test Case Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
18		+lt_SMS_1			Steps 7–13		
19		+lt_ChkMsg(FALSE)			Step 14		
20		+ts_SMSCS_SetupMT			Steps 15–20		
21		+lt_SMS_3			Steps 21-29		
22		+lt_ChkMsg(FALSE)			Step 30		
23		+ts_SMSCS_SetupMT			Steps 31–36		
24		+lt_SMS_4(tsc_TWait5Sec)			Steps 37–45		
25		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 46–47		
26		+lt_ChkMsg(TRUE)			Steps 48		
		lt_Part2					
27		+ts_SMSCS_SetupMT_U10			Steps 49		
28		+lt_SMS_1_U10			Steps 51–58b		
29		+lt_ChkMsg(TRUE)			Steps 59–60		
30		+ts_SMSCS_SetupMT_U10			Steps 61		
31		+lt_SMS_3_U10			Steps 63-74		
32		+lt_ChkMsg(TRUE)			Steps 75–76		
33		+ts_SMSCS_SetupMT_U10			Steps 77		
34		+lt_SMS_4(tsc_TWait15Sec)			Steps 79–87		
35		+lt_ClearU10_SS			Step 87a-87c		
36		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 88–89		
37		+lt_ChkMsg(TRUE)			Steps 90–91		
		lt_Part3					
38		+ts_SMSCS_SetupMT_U10			Steps 92		
39		+lt_SMS_6			Steps 94–101		
40		+lt_ChkMsg(TRUE)			Steps 102–10 3		
		It_Part4					
41		+ts_SMSCS_SetupMT_U10			Steps 104		

		Test Case Dyna	ımic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
42		+lt_ClearU10_UE +lt_ChkMsg(TRUE)			Steps 106–11 4 Steps 115–11
44		It_ClearU10_SS Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated,		6
45	TBP1	Dc ? RRC_DataInd	tsc_RB3, cs_Disc(tcv_TI_S)) car_UplinkDirectTransfer ((P)	
46		Dc ! RRC_DataReq	tsc_CellDedicated, tsc_RB3, cr_Rel (tcv_TI_R)) ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_RelCmpl (tcv_TI_S))		
		lt_ClearU10_UE			
47		+ts_AT_TerminateCall			
48	TBP2	Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Disc (tcv_TI_R))	(P)	Step 106
49		Dc!RRC_DataReq START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_Tl_1_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone0)))		Step 107 CPDAT A/ RP_DAT A/ SMS_ DELIVE R (n->ue)
50		Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3 , cs_Rel (tcv_TI_S))		Step 108
51		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_RelCmpl (tcv_TI_R))		Step 109
52	TBF1	?TIMEOUT t_Dly		(F)	

		Test Case Dynami	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
53		Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_Tl_1_R))		Steps 110–11 1 CPACK (ue->n)
54 55	TBF2	?TIMEOUT t_Dly Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))	(F)	Step 112 CPDAT A / RP_AC K (ue->n)
56		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 113 CPACK (n->ue)
57		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 114
58		It_SMS_1 +It_SMS_2			Steps 7–11
59		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 12 CPACK (n->ue)
60		+ts_RRC_ConnRel(tsc_CellA, cell_Dch) It_SMS_2			Step 13
61		Dc!RRC_DataReq (tcv_CP_Data := RRC_DataReq.msg, tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_UserDat a_lv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone0)))		CPDAT A / RP_DAT A / SMS_ DELIVE R (n->ue)
62 63 64	TBF3	?TIMEOUT t_Dly Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec) ?TIMEOUT t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_1_R))	(F) (F)	CPACK (ue->n)

		Test Case Dynam	ic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
65		Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_Tl_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (ue->n)
		lt_SMS_3			
66		+lt_SMS_2			Steps 21–25
67		START t_UpperBound(tcv_TTwiceTC1Mmax)			Step 26 (timer conditio n)
68	TBF5	?TIMEOUT t_UpperBound		(F)	First CPDAT A / RP_AC K (ue->n) not acknowl edged
69		Dc?RRC_DataInd CANCEL t_UpperBound	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		Step 27 CPDAT A / RP_AC K (ue->n) retransm itted
70		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 28 CPACK (n->ue) 2nd CPDAT A / RP_AC K (ue->n) is acknowl edged
71		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 29
72		lt_SMS_4(p_Time: INTEGER) +lt_SMS_2			Steps 37–41 / 79–83
73		(tcv_CP_DataRetx := 0)			

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
74		REPEAT It_SMS_5 UNTIL [tcv_CP_DataRetx = px_MaxCP_DataRetx]			CPDAT A / RP_AC K (ue->n) retransm
75		START t_LowerBound(tcv_TTC1Mmin +			itted
76	TBF6	p_Time) Dc?RRC_DataInd CANCEL t_LowerBound	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))	(F)	CPDAT A / RP_AC K (ue->n) retransm itted, but must not be sent more than px_Max CP_Dat Retx times
77	ТВР3	?TIMEOUT t_LowerBound		(P)	times
78 79 80	TBF7	START t_UpperBound(tcv_TTwiceTC1Mmax) ?TIMEOUT t_UpperBound Dc?RRC_DataInd CANCEL t_UpperBound	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_Tl_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))	(F)	CPDAT A / RP_AC K (ue->n) retransm itted
81		(tcv_CP_DataRetx := tcv_CP_DataRetx + 1) lt_SMS_6			
82		Dc! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_Disc(tcv_TI_S))		Step 94
83		Dc!RRC_DataReq (tcv_CP_Data := RRC_DataReq.msg, tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_UserD ata_lv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone0)))		Step 95 CPDAT A / RP_DAT A / SMS_ DELIVE R (n->ue)

		Test Case Dy	namic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
84		+lt_Steps96And97			Steps 96 and 97
85		Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(Step 99
		_ ,	tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (ue->n)
86		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 100 CPACK (n->ue)
87		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 101
88	TBF8	?TIMEOUT t_Dly		(F)	timer for CP-DA TA
		lt_Steps96And97			
89	TBP4	Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Rel (tcv_TI_R))	(P)	Step 96a
90		Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_RelCmpl (tcv_TI_S))		Step 96b T1-040 969
91		Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_UplinkDirectTransfer(Step 97
			tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_1_R))		CPACK (ue->n) T1-040 969
92	TBF9	?TIMEOUT t_Dly		(F)	timer for CP-AC K
93		Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_UplinkDirectTransfer(Step 97
			tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_1_R))		CPACK (ue->n) T1-040 969
94	TBP5	Dc ? RRC_DataInd	car_UplinkDirectTransfer ((P)	Step 96a
			tsc_CellDedicated, tsc_RB3, cr_Rel (tcv_TI_R))		

		Test Case Dynam	ic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
95		Dc!RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_RelCmpl (tcv_TI_S))		Step 96b T1-040 969
96	TBF12	?TIMEOUT t_Dly		(F)	timer for CP-AC K
		lt_ChkMsg(p_Emptying : BOOLEAN)			
97		+ts_MMI_ChkMsgIndicated			
98		+lt_EmptyStorage(p_Emptying)			
		lt_SMS_1_U10			
99		+lt_SMS_2			Steps
400		DUDDO DUADA	Data Base /		51–55
100		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated,		Step 56
			tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		CPACK (n->ue)
101		START t_Dly(120)			
102		?TIMEOUT t_Dly			
103		+lt_ClearU10_SS			Step 57-58a
104		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 58b
		lt_SMS_3_U10			
105		+lt_SMS_2			Steps 63–67
106		START t_UpperBound(tcv_TTwiceTC1Mmax)			Step 68 (timer conditio n)
107	TBF11	?TIMEOUT t_UpperBound		(F)	First CPDAT A(RP_AC K) not acknowl edged
108		Dc?RRC_DataInd CANCEL t_UpperBound	car_UplinkDirectTransfer(Step 69
		CANCEL (_OpperBound	tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (ue->n)
					retransm itted
109		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated,		Step 70 CPACK
			tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		(n->ue)
110		START t_Dly(120)			

	Test Case Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
111		?TIMEOUT t_Dly						
112		+lt_ClearU10_SS			Step 71–73			
113		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 74			
		It_EmptyStorage(p_Emptying : BOOLEAN)						
114		[p_Emptying]						
115		+ts_AT_EmptyMsgStorage			5.			
116		[NOT p_Emptying]						
		lt_AT_Init						
117		+ts_AT_CSMS(px_SMS_Service)			Set SMS mode			
118		+ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2, px_SMS_PrefMem3)			Set Preferrr ed memory toprefer red memorie s as indicated in the PIXIT			
119		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text Mode			
120		+ts_AT_CSCS("""GSM""")			Set Charact er Set "GSM"			
121		+ts_AT_CGSMS_CS			Set MO SMS mode to Circuit Switche d			
122		+ts_AT_CMGD_All			Delete message storages			

- Detailed Comments: 1. Parts a) to f) of the test procedure as described in 3G TS 34.123-1, cl. 16.1.1
 - 2. Parts g) to j) of the test procedure as described in 3G TS 34.123-1, cl. 16.1.1
 - 3. Part k) of the test procedure as described in 3G TS 34.123-1, cl. 16.1.1
 - 4. Part I) of the test procedure as described in 3G TS 34.123–1, cl. 16.1.15. The message store is cleared by using the CGMD AT command

 - 6. TI usage: tcv_TIS, tcv_TIR are in UE direction (SMS MT). tcv_TI1S, tcv_TI1R are used in network direction (SMS MO)

Test Case Dynamic Behaviour

Test Case Name : tc_16_1_2
Group : SMS/CS_Mode/

Purpose : To verify that the UE is able to correctly send a short message where the SMS is provided for the

point to point service.

Configuration:

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in MM-state "Idle, updated";-the SMS message storage shall be empty.

Selection Ref : SMS_SelExp02

Description : SMS Mobile originated

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(1200)			
2		(tcv_RP_OrigAddrMT:='11111111111'O, tcv_TP_OrigAddr01:='555555555'O)			
3		+ts_InitVariables			
4		(tcv_CN_Domain :=cs_domain)			
5		+ts_MM_StartCellA			Start cell A
6		+ts_IdleUpdated(tsc_CellA)			Idle Updated on Cell A
7		+ts_CC_BasicServMT_Def			6. Prepares TI for MT CC
8		(tcv_TI_1_S.tiVal := '000'B, tcv_TI_1_R.tiVal := '000'B, tcv_TI_1_S.tiFlag := '1'B, tcv_TI_1_R.tiFlag := '0'B)			6. Prepare TI1 for MO SMS
9		+lt_AT_Init			
10		+lt_Body			
11		+po_ConnectionAndSS_Rel(tsc_ CellA)			
		lt_Body			
12	TBS	(tcv_TestBody := TRUE)		(P)	
13		+lt_Part1			Steps 2-45 (1)
14		+lt_Part2			Steps 46–65 (2)
15		+lt_Part4			Steps 79–86 (4)
		lt_Part1			
16		+ts_SMSCS_SetupMO(tsc_SMS_OneMsg)			Steps 2-9
17		+lt_SMS_1			Steps 10-14

	Test Case Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
18		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 15–16			
19		+ts_SMSCS_SetupMO(tsc_SMS_OneMsg)			Steps 18–26			
20		+lt_SMS_3(tsc_TWait5Sec)			Steps 27–32			
21		+ts_SMSCS_SetupMO(tsc_SMS_OneMs g)			Steps 34–41			
22		+lt_SMS_4			Steps 42–43			
23		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 44–45			
		lt_Part2						
24		+lt_TwiceSMS			Steps 46–49			
25		+lt_SMS_1			Steps 50–53			
26		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 55–56			
27		+lt_TwiceSMS			Steps 57–59			
28		+lt_SMS_3(tsc_TWait15Sec)			Steps 60–65			
29		lt_Part4 +ts_SMSCS_SetupMO_Part1(tsc_SMS_OneMsg)			Steps 79–82			
30		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated,		Step 83			
			tsc_RB3, c_CM_ServRej(tsc_RejCauServNotSupp))		Service Reject			
31		START t_Dly(5000)						
32	TBP1	?TIMEOUT t_Dly		(P)	(5)			
33		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 85–86			
		It_TwiceSMS						
34		+ts_NAS_Delay(tsc_TWait1Sec)						
35		+ts_SMSCS_SetupMT_U10			Step 46			
36		+ts_AT_InitSMS_MO			Step 47			
37		Dc?RRC_DataInd	car_UplinkDirectTransfer(Step 48			
			tsc_CellDedicated, tsc_RB3, cd_CM_ServReqShortMsg		CM Service Request			
			(tcv_CS_KeySeq))					

		Test Case Dynamic	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
38		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_CM_ServAcp)		Step 49 CM Service Accept
39		It_SMS_1 Dc?RRC_DataInd (tcv_CP_Data := RRC_DataInd.msg, tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		Steps 10 / 50 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
40		+lt_SMS_2			Steps 11–13 / 51–53 Terminat
					MO-SM
41		lt_SMS_2 Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Steps 11 / 51 CPACK (n->ue)
42		Dc!RRC_DataReq (tcv_TI_1_R.tiVal := tcv_TI_1_S.tiVal) START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData04(tcv_RP_MsgRef)))		Steps 12 / 52 CPDAT A / RP_AC K (n->ue)
43	TBF1	?TIMEOUT t_Dly		(F)	(II->ue)
44		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
45	TBP2	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_Tl_1_R))	(P)	Steps 13 / 53 CPACK (ue->n)
	<u> </u>	It_SMS_3(p_Time: INTEGER)			

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
46		Dc?RRC_DataInd	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_CP_UserDatA_04)))		Steps 27 / 60 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
47 48		(tcv_CP_DataRetx := 0) REPEAT It_SMS_6 UNTIL [tcv_CP_DataRetx = px_MaxCP_DataRetx]			Steps 28–30 / 61–63 MO–SM is retransm itted
49		START t_LowerBound(tcv_TTC1Mmin +			Mod
50	TBF2	p_Time) Dc?RRC_DataInd	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))	(F)	CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n) shall NOT be sent more than px_Max CP_Dat aRetx times
51 52		+ts_RRC_ConnRel(tsc_CellA, cell_Dch) ?TIMEOUT t_LowerBound			
53		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 31–32 / 64–65
54		It_SMS_4 Dc?RRC_DataInd (tcv_CP_Data := RRC_DataInd.msg, tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		Step 42 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
55		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ERROR(tcv_TI_1_S))		Step 43 CPERR OR (n->ue) "Networ k Failure"
56		lt_SMS_5 Dc?RRC_DataInd(tcv_CP_Data := RRC_DataInd.msg,	car_UplinkDirectTransfer(Step 75
		tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
57 58		+lt_TI1 Dc!RRC_DataReq(tcv_CP_Data := RRC_DataReq.msg,	ca_DataReq(tsc_CellDedicated,		Steps 76–77
		tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_User Data_lv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	tsc_RB4, cs_CP_DATA_01(tcv_TI_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone4)))		CPDAT A / RP_DAT A / SMS_D ELIVER (n->ue)
59	TBF3	?TIMEOUT t_Dly		(F)	
60		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
61	TBP3	Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_UplinkDirectTransfer((P)	Step 78
		OTAIN LEBY (SC_TWARGOCC)	tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R))		CPACK (ue->n)
62	TBF4	?TIMEOUT t_Dly	,,	(F)	
63		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
64	TBP4	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer((P)	Step 78
			tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_R, cr_CP_UserData02(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (ue->n)
65		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_S))		CPACK (n->ue)
		lt_SMS_6			

		Test Case Dynam	ic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
66		START t_UpperBound(tcv_TTwiceTC1Mmax)			
67	TBF5	?TIMEOUT t_UpperBound		(F)	
68		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
69		Dc?RRC_DataInd CANCEL t_UpperBound	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
70		(tcv_CP_DataRetx := tcv_CP_DataRetx + 1) It_TI1			
71		[tcv_TI_1_S.tiVal = '000'B]			if the received TI1 value was 0
72		(tcv_TI_S.tiVal := '001'B, tcv_TI_R.tiVal := '001'B)			use TI value 1 n->ue
73		[NOT (tcv_Tl_1_S.tiVal = '000'B)]			if the received TI1 value was NOT 0
74		(tcv_TI_S.tiVal := '000'B, tcv_TI_R.tiVal := '000'B)			use TI value 0 n->ue
		lt_AT_Init			
75		+ts_AT_CSMS(px_SMS_Service)			Set SMS mode
76		+ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2, px_SMS_PrefMem3)			Set Preferrr ed memory toprefer red memorie s as indicated in the PIXIT
77		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text Mode
78		+ts_AT_CSCS("""GSM""")			Set Charact er Set "GSM"

	Test Case Dynamic Behaviour									
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments					
79		+ts_AT_CGSMS_CS			Set MO SMS mode to Circuit Switche d					
80		+ts_AT_CMGD_All			Delete message storages					
81		+ts_AT_CSCA("""222222222""", 129)			Set service center address					
82		+ts_AT_CMGW("""111111111"", 129)			Write message with index 1 to memory					

- Detailed Comments: 1. Parts a) to f) of the test procedure as described in 3G TS 34.123–1 cl. 16.1.2
 - 2. Parts g) to i) of the test procedure as described in 3G TS 34.123-1 cl. 16.1.2
 - 3. Part j) of the test procedure:redefined as $tc_16_1_1$
 - 4. Part k) of the test procedure as described in 3G TS 34.123-1 cl. 16.1.2
 - 5. anything will FAIL the test case via the default behaviour
 - 6. TI usage: tcv_TIS, tcv_TIR are in UE direction (SMS MT). tcv_TI1S, tcv_TI1R are used in network direction (SMS MO)

Test Case Dynamic Behaviour

Test Case Name : tc_16_1_9_1
Group : SMS/CS_Mode/

Purpose : To verify that the UE is able to correctly send multiple short messages on the same RRC connection

when using a DCCH

Configuration :

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in MM-state "Idle, updated";-the SMS message storage shall be empty.

Selection Ref : SMS_SelExp10

Description: Multiple SMS mobile originated / UE in idle mode

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(1200)			
2		(tcv_RP_OrigAddrMT:='1111111111'O, tcv_TP_OrigAddr01:='5555555555'O)			
3		+ts_InitVariables			
4		(tcv_CN_Domain :=cs_domain)			
5		+ts_MM_StartCellA			Start cell A
6		+ts_IdleUpdated(tsc_CellA)			Idle Updated on Cell A
7		+lt_AT_Init			
8		+lt_Body			
9		+po_ConnectionAndSS_Rel(tsc_Cell A)			
		lt_Body			
10	TBS	(tcv_TestBody := TRUE)		(P)	
11		+lt_Part1			Steps 2–14
12		+lt_Part2			Steps 15–20
13		+lt_Part3			Steps 21–27
		lt_Part1			
14		+ts_SMSCS_SetupMO(tsc_SMS_ThreeMsgs)			Steps 2–9
15		+lt_SMS_1			Steps 10-12
16		+lt_Part1a_And2a			Steps 13–15
		lt_Part1a_And2a			

		Test Case Dynami	ic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
17		Dc?RRC_DataInd START t_Dly(5000)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, cd_CM_ServReqShortMsg (tcv_CS_KeySeq))	(P)	Step 13 / 19 CM Service Request / 2nd short message / 3rd short message
18	TBP1	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R))	(P)	Step A14 / A20 CPACK (ue->n)
19		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_CM_ServAcp)		Step A15 / A21 CM Service Accept
20		?TIMEOUT t_Dly			
21		Dc!RRC_DataReq START t_Dly(5000)	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_CM_ServAcp)		Step B15a / B21a CM Service Accept
22	TBP4	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R))	(P)	Step B15b / B21b CPACK (ue->n)
23	TBF1	?TIMEOUT t_Dly [pc_Rel99 = TRUE]	161_11_11	(F)	(40 7 1.)
24	TBP3	?TIMEOUT t_Dly [(pc_Rel4 = TRUE) OR (pc_Rel5 = TRUE)] It Part2		(P)	
25		(tcv_TI_1_S.tiVal := tcv_TI_S.tiVal)			4. Save TI value in TI1 value
26		+lt_SMS_1			Steps 16–18
27	TBF3	[tcv_Tl_1_S.tiVal]		(F)	New TI value = TI1 value
28		+lt_Part1a_And2a			Steps 20–21

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
29 30	TBP6	[tcv_TI_1_S.tiVal <> tcv_TI_S.tiVal] +lt_Part1a_And2a		(P)	New TI value <> TI1 value Steps 20–21
31		It_Part3 (tcv_TI_1_S.tiVal := tcv_TI_S.tiVal)			Save TI value in
32		+lt_SMS_1			TI1 value Steps 22–24
33	TBF4	[tcv_TI_1_S.tiVal = tcv_TI_S.tiVal]		(F)	New TI value = TI1 value
34		+lt_Part3a			Steps 20–21
35	TBP7	[tcv_TI_1_S.tiVal <> tcv_TI_S.tiVal]		(P)	New TI value <> TI1 value
36		+lt_Part3a			Steps 20–21
		It_Part3a			
37 38	TBP8	START t_Dly(5000) Dc?RRC_DataInd	car_UplinkDirectTransfer((P)	Step 25
30	IBFO	CANCEL t_Dly	tsc_CellDedicated, tsc_RB4, cr_CP_ACK((F)	CPACK (ue->n)
			tcv_TI_R))		
39		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 26–27
40	TBF5	?TIMEOUT t_Dly		(F)	
41		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
		lt_SMS_1			
42		Dc?RRC_DataInd (tcv_CP_Data := RRC_DataInd.msg, tcv_TI_S := tcv_CP_Data.ti, tcv_TI_S.tiFlag := '1'B, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_03)))		Steps 10 / 16 / 22 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
43		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_S))		Steps 11 / 17 / 23 CPACK (n->ue)

		Test Case Dyn	amic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		Dc!RRC_DataReq (tcv_Tl_R.tiVal := tcv_Tl_S.tiVal, tcv_Tl_R.tiFlag := '0'B) START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_S, cs_CP_UserData04(tcv_RP_MsgRef)))		Steps 12 / 18 / 24 CPDAT A / RP_AC K (n->ue)
		lt_AT_Init			
45		+ts_AT_CSMS(px_SMS_Service) +ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2,			Set SMS mode Set Preferrr
		px_SMS_PrefMem3)			memory toprefer red memorie s as indicated in the PIXIT
47		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text Mode
48		+ts_AT_CSCS("""GSM""")			Set Charact er Set "GSM"
49		+ts_AT_CGSMS_CS			Set MO SMS mode to Circuit Switche d
50		+ts_AT_CMGD_All			Delete message storages
51		+ts_AT_CSCA("""222222222""", 129)			Set service center address
52		+ts_AT_CMGW("""111111111""", 129)			Write message with index 0 to memory

	Test Case Dynamic Behaviour									
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments					
53		+ts_AT_CMGW("""111111111""", 129)			Write message with index 1 to memory					
54		+ts_AT_CMGW("""111111111""", 129)			Write message with index 2 to memory					

- Detailed Comments: 1. Parts a) to e) of the test procedure as described in 3G TS 34.123-1 cl. 16.1.9.1
 - 2. Parts f) to h) of the test procedure as described in 3G TS 34.123–1 cl. 16.1.9.1 3. Parts j) to k) of the test procedure as described in 3G TS 34.123–1 cl. 16.1.9.1

 - 4. TI usage: tcv_TI_S, tcv_TI_R are used to memorize the currently used TI values first for confirmation purposes in subsequent CP messages, and then for comparison to the previously used TI values. The previously used TI value is stored in tcv_TI_1S.tiVal.

Test Case Dynamic Behaviour

Test Case Name : tc_16_1_9_2
Group : SMS/CS_Mode/

Purpose : To verify that the UE is able to correctly concatenate multiple short messages on the same RRC

connection when sent parallel to a call.

Configuration :

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in MM-state "Idle, updated";-the SMS message storage shall be empty.

Selection Ref : SMS_SelExp11

Description: Multiple SMS mobile originated / UE in active mode

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(1200)			
2		(tcv_RP_OrigAddrMT:='11111111111'O, tcv_TP_OrigAddr01:='555555555'O)			
3		+ts_InitVariables			
4		(tcv_CN_Domain :=cs_domain)			
5		+ts_MM_StartCellA			Start cell A
6		+ts_IdleUpdated(tsc_CellA)			Idle Updated on Cell A
7		+ts_CC_BasicServMT_Def			4. Prepares TI for MT CC
8		+lt_AT_Init			
9		+lt_Body			
10		+po_ConnectionAndSS_Rel(tsc_C ellA)			
		lt_Body			
11 7	TBS	(tcv_TestBody := TRUE)		(P)	
12		+lt_Part1			Steps 1–11
13		+lt_Part2			Steps 12–17
14		+lt_Part3			Steps 18–24
		lt_Part1			
15		+ts_SMSCS_SetupMT_U10			Step 1
16		+ts_AT_InitSMS_ThreeMsgs			Step 2
					Initiate the sending of 3 MO short message s as multiple
					s

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
17		Dc?RRC_DataInd	car_UplinkDirectTransfer(Step 3
18		Dc!RRC_DataReq	tsc_CellDedicated, tsc_RB3, cd_CM_ServReqShortMsg (tcv_CS_KeySeq)) ca_DataReq(tsc_CellDedicated,		CM Service Request
			tsc_RB3, c_CM_ServAcp)		CM Service Accept
19		+lt_SMS_1			Steps 7–9
20		+lt_Part1a_And2a			Steps 10-12
		lt_Part1a_And2a			
21		Dc?RRC_DataInd START t_Dly(5000)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB3, cd_CM_ServReqShortMsg (tcv_CS_KeySeq))		Step 10 / 16 CM Service Request / 2nd short message / 3rd short message
22	TBP1	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R))	(P)	Step A11 / A17 CPACK (ue->n)
23		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_CM_ServAcp)		Step A12 / A18 CM Service Accept
24 25		?TIMEOUT t_Dly Dc!RRC_DataReq	ca_DataReq(Step
		START t_Dly(5000)	tsc_CellDedicated, tsc_RB3, c_CM_ServAcp)		B11 / B17 CM Service Accept
26	TBP2	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R))	(P)	Step B12 / B18 CPACK (ue->n)

TBF1			Test Case Dynamic	Behaviour		
28 TBP3	Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
(pc_Rai5 = TRUE) it_Part2	27	TBF1	?TIMEOUT t_Dly [pc_Rel99 = TRUE]		(F)	
29	28	TBP3			(P)	
Ti value In Tit v			lt_Part2			
31 TBF3 [tcv_Tl_1_S.tiVal = tcv_Tl_S.tiVal]	29		(tcv_TI_1_S.tiVal := tcv_TI_S.tiVal)			TI value in TI1
value = Tit value Value = Tit value Value = Tit value Steps 16-18	30		+lt_SMS_1			
16-18 16-18 16-18 16-18 16-18 18-1	31	TBF3	[tcv_TI_1_S.tiVal = tcv_TI_S.tiVal]		(F)	
34	32		+lt_Part1a_And2a			
16-18 16-18 16-18 16-18 16-18 16-18	33	ТВР6	[tcv_TI_1_S.tiVal <> tcv_TI_S.tiVal]		(P)	New TI value <> TI1 value
35	34		+lt_Part1a_And2a			
36			lt_Part3			
TBF4 [tcv_Tl_1_S.tiVal = tcv_Tl_S.tiVal] TBF4 [tcv_Tl_1_S.tiVal] TBF4 [tcv_Tl_1_S.tiVal] TBF5 TIMEOUT t_Dly	35		(tcv_TI_1_S.tiVal := tcv_TI_S.tiVal)			
Value = T11 value T11 valu	36		+lt_SMS_1			
TBP7	37	TBF4	[tcv_TI_1_S.tiVal = tcv_TI_S.tiVal]		(F)	
Value <	38		+lt_Part3a			
16-18	39	TBP7	[tcv_TI_1_S.tiVal <> tcv_TI_S.tiVal]		(P)	New TI value <> TI1 value
41 TBP8 START t_Dly(5000) car_UplinkDirectTransfer((P) Step 22 42 TBP8 Dc?RRC_DataInd CANCEL t_Dly car_UplinkDirectTransfer((P) Step 22 CPACK tsc_RB4, cr_CP_ACK(tcv_TI_R)) cr_CP_ACK(tcv_TI_R)) Steps 23-24 43 +ts_RRC_ConnRel(tsc_CellA, cell_Dch) (F) 44 TBF5 ?TIMEOUT t_Dly (tsc_CellA, cell_Dch) (F)	40		+lt_Part3a			Steps 16–18
TBP8 Dc?RRC_DataInd CANCEL t_Dly car_UplinkDirectTransfer(CANCEL t_Dly tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R)) Step 22 TBP8 Dc?RRC_DataInd Car_UplinkDirectTransfer(CPACK tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R)) Step 22 TBP8 CPACK (ue->n) Step 22 TBP8 CPACK (lt_Part3a			
CANCEL t_Dly tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R)) Steps 23-24 TBF5	41		START t_Dly(5000)			
tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R)) Steps 23-24 TBF5	42	TBP8			(P)	Step 22
43				tsc_RB4, cr_CP_ACK(CPACK (ue->n)
+ts_RRC_ConnRel(tsc_CellA, cell_Dch)	43		tsc_CellA,			
tsc_CellA, cell_Dch)		TBF5			(F)	
I It SMS 1	45		tsc_CellA,			
			lt_SMS_1			<u> </u>

	Test Case Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
46		Dc?RRC_DataInd (tcv_CP_Data := RRC_DataInd.msg, tcv_TI_S := tcv_CP_Data.ti, tcv_TI_S.tiFlag := '1'B, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_03)))		Steps 7 /13/19 CPDAT A/ RP_DAT A/ SMS_S UBMIT (ue->n)		
47		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_S))		Steps 8 / 14 / 20 CPACK (n->ue)		
48		Dc!RRC_DataReq (tcv_TI_R.tiVal := tcv_TI_S.tiVal, tcv_TI_R.tiFlag := '0'B) START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_S, cs_CP_UserData04(tcv_RP_MsgRef)))		Steps 9 / 15 / 21 CPDAT A / RP_AC K (n->ue)		
49		lt_AT_Init +ts_AT_CSMS(px_SMS_Service)			Set		
50		+ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2, px_SMS_PrefMem3)			SMS mode Set Preferrr ed memory toprefer red memorie s as indicated in the PIXIT		
51		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text		
52		+ts_AT_CSCS("""GSM""")			Mode Set Charact er Set "GSM"		
53		+ts_AT_CGSMS_CS			Set MO SMS mode to Circuit Switche d		
54		+ts_AT_CMGD_AII			Delete message storages		

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
55		+ts_AT_CSCA("""222222222""", 129)			Set service center address
56		+ts_AT_CMGW("""111111111""", 129)			Write message with index 0 to memory
57		+ts_AT_CMGW("""111111111""", 129)			Write message with index 1 to memory
58		+ts_AT_CMGW("""111111111""", 129)			Write message with index 2 to memory

- Detailed Comments: 1. Parts a) to e) of the test procedure as described in 3G TS 34.123-1 cl. 16.1.9.2
 - 2. Parts f) to h) of the test procedure as described in 3G TS 34.123-1 cl. 16.1.9.2
 - 3. Parts j) to k) of the test procedure as described in 3G TS 34.123-1 cl. 16.1.9.2
 - 4. TI usage: tcv_TI_S, tcv_TI_R are used to memorize the currently used TI values first for confirmation purposes in subsequent CP messages, and then for comparison to the previously used TI values. The previously used TI value is stored in tcv_TI_1_S.tiVal.

Test Case Dynamic Behaviour

Test Case Name : tc_16_1_10
Group : SMS/CS_Mode/

Purpose : To verify that the UE is capable of simultaneously receiving a network originated SM whilst sending a

mobile originated SM.

Configuration :

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in MM-state "Idle, updated";-the SMS message storage shall be empty.

Selection Ref: SMS_SelExp12

Description: Test of capabilities of simultaneously receiving a short message whilst sending a mobile originated

short message

1 2 3 4 5 6	START t_Guard(1200) (tcv_RP_OrigAddrMT:='1111111111'O,		
3 4 5 6	/toy_PD_OrigAddrMT:='1111111111'O		
4 5 6	tcv_TP_OrigAddr01:='555555555'O)		
5 6 7	+ts_InitVariables		
7	(tcv_CN_Domain :=cs_domain)		
7	+ts_MM_StartCellA		Start cell A
	+ts_IdleUpdated(tsc_CellA)		Idle Updated on Cell A
8	+ts_CC_BasicServMT_Def		4. Prepares TI for MT CC
	(tcv_TI_1_S.tiVal := '000'B, tcv_TI_1_R.tiVal := '000'B, tcv_TI_1_S.tiFlag := '1'B, tcv_TI_1_R.tiFlag := '0'B)		2. Prepare TI1 for MO SMS
9	+lt_AT_Init		
10	+lt_Body		
11	+po_ConnectionAndSS_Rel(tsc_ CellA)		
	It_Body		
12 TBS	(tcv_TestBody := TRUE)	(P)	1.
13	+ts_SMSCS_SetupMO(tsc_SMS_OneMsg)		Steps 2–9
14	+lt_SMS_5		Steps 10-13 (MT-SM)
15	+lt_SMS_2		Step 13 cc. (Termina te MO-SM
16	+ts_RRC_ConnRel(
	tsc_CellA, cell_Dch)		

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
17		+ts_MMI_ChkMsgDisplayed(160, tsc_Fox)			Step 13 cc. (Check MT-SM)
		lt_SMS_2			
18		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		CPACK (n->ue)
19		Dc!RRC_DataReq (tcv_TI_1_R.tiVal := tcv_TI_1_S.tiVal) START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_Tl_1_S, cs_CP_UserData04(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (n->ue)
20	TBF1	?TIMEOUT t_Dly		(F)	
21		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
22	TBP1	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_1_R))	(P)	CPACK (ue->n)
		lt_SMS_5			
23		Dc?RRC_DataInd(tcv_CP_Data := RRC_DataInd.msg, tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
24		+lt_Tl1			
25		Dc!RRC_DataReq(tcv_CP_Data := RRC_DataReq.msg, tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_User Data_lv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone4)))		CPDAT A / RP_DAT A / SMS_D ELIVER (n->ue)
26 27	TBF2	?TIMEOUT t_Dly +ts_RRC_ConnRel(tsc_CellA, cell_Dch)		(F)	

		Test Case Dyn	amic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
28	TBP2	Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_Tl_R))	(P)	CPACK (ue->n)
29	TBF3	?TIMEOUT t_Dly	101_11_11	(F)	
30		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
31	TBP3	Dc?RRC_DataInd CANCEL t_Dly	car_UplinkDirectTransfer(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_R, cr_CP_UserData02(tcv_RP_MsgRef)))	(P)	CPDAT A / RP_AC K (ue->n)
32		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_S))		CPACK (n->ue)
		lt_TI1			
33		[tcv_TI_1_S.tiVal = '000'B]			if the received TI1 value was 0
34		(tcv_TI_S.tiVal := '001'B, tcv_TI_R.tiVal := '001'B)			use TI value 1 n->ue
35		[NOT (tcv_TI_1_S.tiVal = '000'B)]			if the received TI1 value was NOT 0
36		(tcv_TI_S.tiVal := '000'B, tcv_TI_R.tiVal := '000'B)			use TI value 0 n->ue
37		lt_AT_Init +ts_AT_CSMS(px_SMS_Service)			Set SMS
38		+ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2, px_SMS_PrefMem3)			mode Set Preferrr ed memory toprefer red memorie s as indicated in the PIXIT
39		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text Mode

	Test Case Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
40		+ts_AT_CSCS("""GSM""")			Set Charact er Set "GSM"	
41		+ts_AT_CGSMS_CS			Set MO SMS mode to Circuit Switche d	
42		+ts_AT_CMGD_All			Delete message storages	
43		+ts_AT_CSCA("""222222222""", 129)			Set service center address	
44		+ts_AT_CMGW("""111111111""", 129)			Write message with index 0 to memory	

Detailed Comments : 1. Part a) of the test procedure as described in 3G TS 34.123–1 cl. 16.1.10
2. TI usage: tcv_TI_S, tcv_TI_R are in UE direction (SMS MT). tcv_TI1s, tcv_TI1r are used in network direction (SMS MO)

Test Case Dynamic Behaviour

Test Case Name : tc_16_2_1
Group : SMS/PS_Mode/

Purpose : To verify the ability of a UE to receive and decode the SMS where provided for the point to point

service.

Configuration :

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in GMM-state "GMM-Registered"; -the SMS message storage shall be empty.

Selection Ref : SMS_SelExp21

Description : SMS Mobile terminated

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(1200)			
2		(tcv_RP_OrigAddrMT:='11111111111'O, tcv_TP_OrigAddr01:='333333333'O, tcv_RP_MsgRef := '00'O)			
3		+ts_RRC_InitVariablesPS(cell_DCH)			
4		(tcv_CN_Domain :=ps_domain)			
5		+ts_MM_StartCellA			Start cell A
6		+ts_IdleUpdated(tsc_CellA)			Idle Updated on Cell A
7		(tcv_TI_1_S.tiVal := '001'B, tcv_TI_1_R.tiVal := tcv_TI_1_S.tiVal, tcv_TI_1_S.tiFlag := '0'B,			6. Prepare TI1 for MT SMS
		tcv_TI_1_S.til lag .= '0'B, tcv_TI_1_R.tiFlag := '1'B)			IVIT SIVIS
8		+lt_AT_Init			
9		+lt_Body			
10		+po_ConnectionAndSS_Rel(tsc_C ellA)			
		lt_Body			
11	TBS	(tcv_TestBody := TRUE)		(P)	
12		+lt_Part1			Steps 1–48 (1)
13		+lt_Part2			Steps 49–90 (2)
14		+lt_Part3			Steps 91–102 (3)
15		+lt_Part4			Steps 103–11 4 (4)
		lt_Part1			
16		+ts_SMSPS_SetupMT			Steps 1–6
17		+lt_SMS_1			Steps 7–13
18		+lt_ChkMsg(FALSE)			Step 14

	Test Case Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
19		+ts_SMSPS_SetupMT			Steps 15–20		
20		+lt_SMS_3			Steps 21–29		
21		+lt_ChkMsg(FALSE)			Step 30		
22		+ts_SMSPS_SetupMT			Steps 31-36		
23		+lt_SMS_4(tsc_TWait5Sec)			Steps 37–45		
24		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 46–47		
25		+lt_ChkMsg(TRUE)			Steps 48		
		lt_Part2					
26		+ts_SM_ActCtxt			Steps 49		
27		+lt_SMS_1_U10			Steps 51–58		
28		+lt_ChkMsg(TRUE)			Steps 59–60		
29		+ts_SM_ActCtxt			Steps 61		
30		+lt_SMS_3_U10			Steps 63-73		
31		+lt_ChkMsg(TRUE)			Steps 74-75		
32		+ts_SM_ActCtxt			Steps 76		
33		+lt_SMS_4(tsc_TWait15Sec)			Steps 78–86		
34		+ts_SM_DeactCtxt_MT(tsc_CellA, tcv_TI_S)			Step 86a-86 b		
35		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 87–88		
36		+lt_ChkMsg(TRUE)			Steps 89–90		
		It_Part3					
37		+ts_SM_ActCtxt			Steps 91		
38		Dc!RRC_DataReq (tcv_CP_Data := RRC_DataReq.msg, tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_UserD ata_Iv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone0)))		Step 94 CPDAT A / RP_DAT A / SMS_ DELIVE R (n->ue)		

		Test Case Dynamic	: Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
39		Dc ! RRC_DataReq START t_3395	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_DeactPDP_ContextReq MT(tcv_TI_S, cbs_SM_Cause_v(tsc_RejC auPDP_CtxtDeact)))		Step 94A
40		+lt_SMS_6			Steps 94B–99
41		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 100
42		+lt_ChkMsg(TRUE)			Steps 101–10 2
43		It_Part4 +ts_SM_ActCtxt			Steps
44		+lt_ClearU10_UE			103 Steps 105–11
45		+lt_ChkMsg(TRUE)			2 Steps 113–11 4
		lt_ClearU10_UE			
46		+ts_AT_DeactPDP_Context			Step 105
47	TBP2	Dc ? RRC_DataInd (tcv_DeactPDP_ContextReq := RRC_DataInd.msg, tcv_TI_S:= tcv_DeactPDP_ContextReq.ti)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB3, cr_DeactPDP_ContextReq MO_AnyTD(cbs_SM_Cause_v(tsc_RejC auPDP_CtxtDeact)))	(P)	Step 105
48		Dc!RRC_DataReq START t_Dly(tsc_TWait25Sec)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone0)))		Step 106 CPDAT A/ RP_DAT A/ SMS_ DELIVE R (n->ue)
49		+ts_SetTI_Rsp(tcv_TI_S)			
50		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_DeactPDP_ContextAcp MT(tcv_TI_S))		Step 107
51		Ut ? AT_CmdCnf	ca_AT_CmdCnf		

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
52		[pc_AutomaticAttachSwitchON = FALSE]			Manual Attach UE
53		Dc ? RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)	(P)	Receive Detach Request
54		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated , tsc_RB3, cs_DetachAcc)		DETAC H ACCEP T
55		(tcv_AttachFlag := FALSE)			Note that UE is not
					GMM attached
56		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 112
57		[pc_AutomaticAttachSwitchON = TRUE]			Automati c Attach UE
58	TBF1	?TIMEOUT t_Dly		(F)	timer for CP-AC K
59		Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_1_R))		Steps 108 CPACK (ue->n)
60	TBF2	?TIMEOUT t_Dly		(F)	timer for CP-DA TA
61		Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		Step 110 CPDAT A / RP_AC K (ue->n)
62		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 111 CPACK (n->ue)
63		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 112
64		lt_SMS_1 +lt_SMS_2			Steps 7–11

		Test Case Dynami	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
65		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 12 CPACK (n->ue)
66		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 13
		lt_SMS_2			
67		Dc!RRC_DataReq (tcv_CP_Data := RRC_DataReq.msg, tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_UserDat a_lv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone0)))		CPDAT A / RP_DAT A / SMS_ DELIVE R (n->ue)
68	TBF3	?TIMEOUT t_Dly		(F)	
69		Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_1_R))		CPACK (ue->n)
70	TBF4	?TIMEOUT t_Dly		(F)	
71		Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (ue->n)
		lt_SMS_3			
72		+lt_SMS_2			Steps
73		START t_UpperBound(tcv_TTwiceTC1Mmax)			21–25 Step 26 (timer conditio n)
74	TBF5	?TIMEOUT t_UpperBound		(F)	First CPDAT A / RP_AC K (ue->n) not acknowl edged

		Test Case Dynami	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
75		Dc?RRC_DataInd CANCEL t_UpperBound	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		Step 27 CPDAT A / RP_AC K (ue->n) retransm itted
76		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 28 CPACK (n->ue) 2nd CPDAT A / RP_AC K (ue->n) is acknowl edged
77		+ts_RRC_ConnRel(tsc_CellA, cell_Dch) It_SMS_4(p_Time: INTEGER)			Step 29
78		+lt_SMS_2			Steps 37–41 / 78–82
79 80		(tcv_CP_DataRetx := 0) REPEAT It_SMS_5 UNTIL [tcv_CP_DataRetx == px_MaxCP_DataRetx]			CPDAT A / RP_AC K (ue->n) retransm itted
81		START t_LowerBound(tcv_TTC1Mmin + p_Time)			

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
82	TBF6	Dc?RRC_DataInd CANCEL t_LowerBound	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))	(F)	CPDAT A / RP_AC K (ue->n) retransm itted, but must not be sent more than px_Max CP_Dat Retx times
83	ТВР3	?TIMEOUT t_LowerBound		(P)	
84		START t_UpperBound(tcv_TTwiceTC1Mmax)			
85	TBF7	?TIMEOUT t_UpperBound		(F)	
86		Dc?RRC_DataInd CANCEL t_UpperBound	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (ue->n) retransm itted
87		(tcv_CP_DataRetx := tcv_CP_DataRetx + 1)			
88	TBP4	It_SMS_6 Dc? RRC_DataInd CANCEL t_3395	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_DeactPDP_ContextAcp MO)	(P)	Step 94B 7. Send Deactiva te PDP Context with tear down flag set to 1
89		[pc_AutomaticAttachSwitchON = FALSE]			Manual Attach UE
90		Dc ? RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)	(P)	Step 94C Receive Detach Request

		Test Case Dyna	mic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
91		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated , tsc_RB3, cs_DetachAcc)		Step 94D DETAC H ACCEP T
92		(tcv_AttachFlag := FALSE)			Note that UE is not
					attached
93		[pc_AutomaticAttachSwitchON = TRUE]			Automati c Attach UE
94		Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_Tl_1_R))		Step 96 CPACK (ue->n)
95		Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		Step 98 CPDAT A / RP_AC K (ue->n)
96		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 99 CPACK (n->ue)
97	TBF9	?TIMEOUT t_Dly		(F)	timer for CP-DA TA
98	TBF10	?TIMEOUT t_Dly		(F)	timer for CP-AC K
99	TBF11	? TIMEOUT t_3395		(F)	On expiry of T3395, FAIL
		It_ChkMsg(p_Emptying : BOOLEAN)			
100		+ts_MMI_ChkMsgIndicated			
101		+lt_EmptyStorage(p_Emptying)			
		lt_SMS_1_U10			
102		+lt_SMS_2			Steps 51–55

		Test Case Dynam	ic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
103		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 56 CPACK (n->ue)
104		+ts_SM_DeactCtxt_MT(tsc_CellA, tcv_TI_S)			Step 57–58
105		+ts_RRC_ConnRel(tsc_CellA, cell_Dch) It_SMS_3_U10			Step 58a
106		+lt_SMS_2			Steps
107		START t_UpperBound(tcv_TTwiceTC1Mmax)			63–67 Step 68 (timer conditio
108	TBF8	?TIMEOUT t_UpperBound		(F)	n) First CPDAT A(RP_AC K) not acknowl edged
109		Dc?RRC_DataInd CANCEL t_UpperBound	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_1_R, cr_CP_UserData02(tcv_RP_MsgRef)))		Step 69 CPDAT A / RP_AC K (ue->n) retransm itted
110		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		Step 70 CPACK (n->ue)
111		+ts_SM_DeactCtxt_MT(tsc_CellA, tcv_TI_S)			Step 71–72
112		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Step 73
		lt_EmptyStorage(p_Emptying : BOOLEAN)			
113		[p_Emptying]			
114 115		+ts_AT_EmptyMsgStorage			5.
115		[NOT p_Emptying] It_AT_Init			
116		+ts_AT_CSMS(px_SMS_Service)			Set SMS mode

	Test Case Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
117		+ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2, px_SMS_PrefMem3)			Set Preferrr ed memory toprefer red memories as indicated in the PIXIT		
118		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text Mode		
119		+ts_AT_CSCS("""GSM""")			Set Charact er Set "GSM"		
120		+ts_AT_CGSMS_PS			Set MO SMS mode to Packet Domain		
121		+ts_AT_CMGD_AII			Delete message storages		

- Detailed Comments: 1. Parts a) to f) of the test procedure as described in 3G TS 34.123-1, cl. 16.2.1
 - 2. Parts g) to j) of the test procedure as described in 3G TS 34.123-1, cl. 16.2.1
 - 3. Part k) of the test procedure as described in 3G TS 34.123-1, cl. 16.2.1 4. Part I) of the test procedure as described in 3G TS 34.123-1, cl. 16.2.1
 - 5. The message store is cleared by using the CGMD AT command
 - $6. \ TI \ usage: tcv_TIS, tcv_TIR \ are \ in \ UE \ direction \ (SM \ MT). \ tcv_TI1S, tcv_TI1R \ are \ used \ in \ network$ direction (SMS MO).
 - 7. Receive DEACTIVATE PDP CONTEXT, and CP ACK and CP DATA subsequently.
 - 8. Receive CP ACK first.
 - 9. Receive DEACTIVATE PDP CONTEXT after CP ACK, and then CP DATA
 - 10. Receive CP DATA after CP ACK, and then DEACTIVATE PDP CONTEXT

Test Case Dynamic Behaviour

Test Case Name : tc_16_2_2
Group : SMS/PS_Mode/

Purpose : To verify that the UE is able to correctly send a short message where the SMS is provided for the

point to point service.

Configuration :

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in GMM-state "GMM-Registered"; -the SMS message storage shall be empty.

Selection Ref : SMS_SelExp22

Description : SMS Mobile originated

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(1200)			
2		(tcv_RP_OrigAddrMT:='1111111111'O, tcv_TP_OrigAddr01:='555555555'O)			
3		+ts_RRC_InitVariablesPS(cell_DCH)			
4		(tcv_CN_Domain :=ps_domain)			
5		+ts_MM_StartCellA			Start cell A
6		+ts_IdleUpdated(tsc_CellA)			Idle Updated on Cell A
7		+ts_SMS_InitTI			6. Initialize TIs to be used
8		+lt_AT_Init			
9		+lt_Body			
10		+po_ConnectionAndSS_Rel(tsc_C ellA)			
		lt_Body			
11	TBS	(tcv_TestBody := TRUE)		(P)	
12		+lt_Part1			Steps 2–45 (1)
13		+lt_Part2			Steps 46–65 (2)
14		+lt_Part4			Steps 79–86 (4)
		lt_Part1			
15		+ts_SMSPS_SetupMO(tsc_SMS_OneMsg)			Steps 2-9
16		+lt_SMS_1			Steps 10-14
17		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 15–16
18		+ts_SMSPS_SetupMO(tsc_SMS_OneMsg)			Steps 18–25

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		+lt_SMS_3(tsc_TWait5Sec)			Steps 26–31
20		+ts_SMSPS_SetupMO(tsc_SMS_OneMs g)			Steps 33–40
21		+lt_SMS_4			Steps 41–42
22		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 43–44
		lt_Part2			
23		+lt_TwiceSMS			Steps 45–48
24		+lt_SMS_1			Steps 49–53
25		+ts_SM_DeactCtxt_MT(tsc_CellA, tcv_TI_S)			
26		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 54–55
27		+lt_TwiceSMS			Steps 56–58
28		+lt_SMS_3(tsc_TWait15Sec)			Steps 59–64
		lt_Part4			
29		+ts_SMSPS_SetupMO_Part1(tsc_SMS_OneMsg)			Steps 78–81
30		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_ServiceReject(tsc_RejCauGPRS_NotAllow ed))		Step 82 Service Reject
31		START t_Dly(5000)			
32	TBP1	?TIMEOUT t_Dly		(P)	Step 83 (5)
33		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			Steps 83–84
		lt_TwiceSMS			
34		+ts_NAS_Delay(tsc_TWait1Sec)			
35		+ts_SM_ActCtxt			Step 45 / 56

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
36		+ts_AT_InitSMS_MO			Step 46 / 56a
		lt_SMS_1			Steps 47 / 57 and 48 / 58 of the prose not needed as per 24.008 clause 4.7.13 (a)
37		Dc?RRC_DataInd (tcv_CP_Data := RRC_DataInd.msg, tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		Steps 10 / 49 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
38		+lt_SMS_2			Steps 11–13 / 50–52 Terminat e MO–SM
		lt_SMS_2			
39		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4,		Steps 11 / 50
			cs_CP_ACK(tcv_TI_1_S))		CPACK (n->ue)
40		Dc!RRC_DataReq (tcv_TI_1_R.tiVal := tcv_TI_1_S.tiVal) START t_Dly(tsc_TWait25Sec)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData04(tcv_RP_MsgRef)))		Steps 12/51 CPDAT A/ RP_AC K (n->ue)
41 42	TBF1	?TIMEOUT t_Dly +ts_RRC_ConnRel(tsc_CellA, cell_Dch)		(F)	

		Test Case Dynami	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
43	TBP2	Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_1_R))	(P)	Steps 13 / 52 CPACK (ue->n)
44		It_SMS_3(p_Time: INTEGER) Dc?RRC_DataInd	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		Steps 27 / 59 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
45 46		(tcv_CP_DataRetx := 0) REPEAT It_SMS_6 UNTIL [tcv_CP_DataRetx = px_MaxCP_DataRetx]			Steps 28–30 / 60–62 MO–SM is retransm itted
47	TBF2	START t_LowerBound(tcv_TTC1Mmin + p_Time) Dc?RRC_DataInd	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))	(F)	CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n) shall NOT be sent more than px_Max CP_Dat aRetx times
49 50 51		+ts_RRC_ConnRel(tsc_CellA, cell_Dch) ?TIMEOUT t_LowerBound +ts_RRC_ConnRel(tsc_CellA, cell_Dch) It_SMS_4			Steps 31–32 / 63–64

		Test Case Dynamic	: Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
52		Dc?RRC_DataInd (tcv_CP_Data := RRC_DataInd.msg, tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_CP_UserDATA_04)))		Step 41 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
53		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ERROR(tcv_TI_1_S))		Step 42 CPERR OR (n->ue) "Networ k Failure"
54		It_SMS_5 Dc?RRC_DataInd(tcv_CP_Data := RRC_DataInd.msg, tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		Step 75 CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
55 56		+lt_TI1 Dc!RRC_DataReq(tcv_CP_Data := RRC_DataReq.msg, tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_User Data_lv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone4)))		Steps 76-77 CPDAT A / RP_DAT A / SMS_D ELIVER (n->ue)
57 58	TBF3	?TIMEOUT t_Dly +ts_RRC_ConnRel(tsc_CellA, cell_Dch)		(F)	
59	TBP3	Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_TI_R))	(P)	Step 78 CPACK (ue->n)
60 61	TBF4	?TIMEOUT t_Dly +ts_RRC_ConnRel(tsc_CellA, cell_Dch)		(F)	

		Test Case Dynami	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
62	TBP4	Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_R, cr_CP_UserData02(tcv_RP_MsgRef)))	(P)	Step 78 cc CPDAT A / RP_AC K (ue->n)
63		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_S))		CPACK (n->ue)
		lt_SMS_6			
64		START t_UpperBound(tcv_TTwiceTC1Mmax)			
65 66	TBF5	?TIMEOUT t_UpperBound +ts_RRC_ConnRel(tsc_CellA, cell_Dch)		(F)	
67		Dc?RRC_DataInd CANCEL t_UpperBound	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
68		(tcv_CP_DataRetx := tcv_CP_DataRetx + 1)			
		lt_TI1			
69		[tcv_TI_1_S.tiVal = '000'B]			if the received TI1 value was 0
70		(tcv_TI_S.tiVal := '001'B, tcv_TI_R.tiVal := '001'B)			use TI value 1 n->ue
71		[NOT (tcv_TI_1_S.tiVal = '000'B)]			if the received TI1 value was NOT 0
72		(tcv_TI_S.tiVal := '000'B, tcv_TI_R.tiVal := '000'B)			use TI value 0 n->ue
73		lt_AT_Init +ts_AT_CSMS(px_SMS_Service)			Set SMS mode

	Test Case Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
74		+ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2, px_SMS_PrefMem3)			Set Preferrr ed memory toprefer red memorie s as indicated in the PIXIT			
75		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text Mode			
76		+ts_AT_CSCS("""GSM""")			Set Charact er Set "GSM"			
77		+ts_AT_CGSMS_PS			Set MO SMS mode to Packet Domain			
78		+ts_AT_CMGD_All			Delete message storages			
79		+ts_AT_CSCA("""222222222""", 129)			Set service center address			
80		+ts_AT_CMGW("""111111111""", 129)			Write message with index 0 to memory			

- Detailed Comments: 1. Parts a) to f) of the test procedure as described in 3G TS 34.123-1 cl. 16.2.2
 - 2. Parts g) to i) of the test procedure as described in 3G TS 34.123-1 cl. 16.2.2
 - 3. Part j) of the test procedure:redefined as tc_16_2_10
 - 4. Part k) of the test procedure as described in 3G TS 34.123-1 cl. 16.2.2
 - 5. anything will FAIL the test case via the default behaviour
 - 6. TI usage: tcv_TIS, tcv_TIR are in UE direction (SMS MT). tcv_TI1S, tcv_TI1R are used in network direction (SMS MO)

Test Case Dynamic Behaviour

Test Case Name : tc_16_2_10
Group : SMS/PS_Mode/

Purpose : To verify that the UE is capable of simultaneously receiving a network originated SM whilst sending a

mobile originated SM.

Configuration :

Default : NAS_OtherwiseFail
Comments : Initial Conditions of UE:

-the UE shall be in GMM-state "GMM-Registered"; -the SMS message storage shall be empty.

Selection Ref: SMS_SelExp32

Description: Test of capabilities of simultaneously receiving a short message whilst sending a mobile originated

short message

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Guard(1200)			
2		(tcv_RP_OrigAddrMT:='11111111111'O, tcv_TP_OrigAddr01:='555555555'O)			
3		+ts_RRC_InitVariablesPS(cell_DCH)			
4		(tcv_CN_Domain :=ps_domain)			
5		+ts_MM_StartCellA			Start cell A
6		+ts_IdleUpdated(tsc_CellA)			Idle Updated on Cell A
7		+ts_SMS_InitTI			2. Initialize TIs to be used
8		+lt_AT_Init			
9		+lt_Body			
10		+po_ConnectionAndSS_Rel(tsc_C ellA)			
		lt_Body			
11	TBS	(tcv_TestBody := TRUE)		(P)	1.
12		+ts_SMSPS_SetupMO(tsc_SMS_OneMsg)			Steps 2–9
13		+lt_SMS_5			Steps 10-13 (MT-SM
14		+lt_SMS_2			Step 13 cc. (Termina te MO-SM)
15		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
16		+ts_MMI_ChkMsgDisplayed(160, tsc_Fox)			Step 13 cc. (Check MT-SM)

		Test Case Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
17		lt_SMS_2 Dc!RRC_DataReq	ca_PS_DataReg(CPACK
''		Do:NNO_DataNoq	tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_1_S))		(n->ue)
18		Dc!RRC_DataReq (tcv_TI_1_R.tiVal := tcv_TI_1_S.tiVal) START t_Dly(tsc_TWait25Sec)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_1_S, cs_CP_UserData04(tcv_RP_MsgRef)))		CPDAT A / RP_AC K (n->ue)
19	TBF1	?TIMEOUT t_Dly		(F)	
20		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
21	TBP1	Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_Tl_1_R))	(P)	CPACK (ue->n)
		lt_SMS_5			
22		Dc?RRC_DataInd(tcv_CP_Data := RRC_DataInd.msg, tcv_TI_1_S.tiVal := tcv_CP_Data.ti.tiVal, tcv_RP_MsgRef := tcv_CP_Data.cP_UserData.rP_DATA.rP_MsgRef)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_03(cr_CP_UserData03(cr_RP_DATA_04)))		CPDAT A / RP_DAT A / SMS_S UBMIT (ue->n)
23		+lt_Tl1			
24		Dc!RRC_DataReq(tcv_CP_Data := RRC_DataReq.msg, tcv_SM_Contents := tcv_CP_Data.cP_UserData.rP_DATA.rP_User Data_lv.tP_DELIVER.tP_UserData) START t_Dly(tsc_TWait25Sec)	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_DATA_01(tcv_TI_S, cs_CP_UserData01(tcv_TP_OrigAddr01, tcv_RP_OrigAddrMT, tcv_RP_MsgRef, tsc_Tzone4)))		CPDAT A / RP_DAT A / SMS_D ELIVER (n->ue)
25	TBF2	?TIMEOUT t_Dly		(F)	
26		+ts_RRC_ConnRel(tsc_CellA, cell_Dch)			
27	TBP2	Dc?RRC_DataInd START t_Dly(tsc_TWait60Sec)	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_ACK(tcv_Tl_R))	(P)	CPACK (ue->n)
28 29	TBF3	?TIMEOUT t_Dly +ts_RRC_ConnRel(tsc_CellA, cell_Dch)		(F)	

		Test Case Dyn	amic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
30	TBP3	Dc?RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB4, cr_CP_DATA_02(tcv_TI_R, cr_CP_UserData02(tcv_RP_MsgRef)))	(P)	CPDAT A / RP_AC K (ue->n)
31		Dc!RRC_DataReq	ca_PS_DataReq(tsc_CellDedicated, tsc_RB4, cs_CP_ACK(tcv_TI_S))		CPACK (n->ue)
		lt_TI1			
32		[tcv_Tl_1_S.tiVal = '000'B]			if the received TI1 value was 0
33		(tcv_TI_S.tiVal := '001'B, tcv_TI_R.tiVal := '001'B)			use TI value 1 n->ue
34		[NOT (tcv_TI_1_S.tiVal = '000'B)]			if the received TI1 value was NOT 0
35		(tcv_TI_S.tiVal := '000'B, tcv_TI_R.tiVal := '000'B)			use TI value 0 n->ue
		lt_AT_Init			
36		+ts_AT_CSMS(px_SMS_Service)			Set SMS mode
37		+ts_AT_CPMS(px_SMS_PrefMem1, px_SMS_PrefMem2, px_SMS_PrefMem3)			Set Preferrr ed memory toprefer red memorie s as indicated in the PIXIT
38		+ts_AT_CMGF(px_SMS_MsgFrmt)			Set Text Mode
39		+ts_AT_CSCS("""GSM""")			Set Charact er Set "GSM"
40		+ts_AT_CGSMS_PS			Set MO SMS mode to Packet Domain

	Test Case Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
41		+ts_AT_CMGD_All			Delete message storages				
42		+ts_AT_CSCA("""222222222""", 129)			Set service center address				
43		+ts_AT_CMGW("""111111111""", 129)			Write message with index 0 to memory				

Detailed Comments: 1. Part a) of the test procedure as described in 3G TS 34.123-1 cl. 16.2.10

^{2.} TI usage: tcv_TI_S, tcv_TI_R are in UE direction (SMS MT). tcv_TI1S, tcv_TI1R are used in network direction (SMS MO)

Test Step Name: ts_SMSCS_SetupMO(p_Mode: INTEGER)

Group : SMS_Steps/

Objective : To set up a mobile originated SMS-CS connection incl. authentication and ciphering

Default : NAS_OtherwiseFail

Comments : The p_mode indicates the type of MO SMS-CS connection to be established. Default authentication

and ciphering are being used.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SMSCS_SetupMO_Part1(p_Mode)			1.
2		+ts_MM_Authentication(tsc_CellA)			2.
3		+ts_RRC_Security(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			3.

Detailed Comments: 1. Set up a mobile originated SMS connection till receipt of CM Service Request

2. Authentication

3. Start Ciphering if applicable

Test Step Dynamic Behaviour

Test Step Name : ts_SMSCS_SetupMO_Part1(p_Mode: INTEGER)

Group : SMS_Steps/

Objective : To set up a mobile originated SMS-CS connection till receipt of CM Service Request

Default : NAS_OtherwiseFail

Comments : MO SMS-CS connections are requested to be established via AT or MMI command. The mode

indicates the type of SMS activity to be performed. An MO RRC connection results.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SMS_SetupMO_Mode(p_Mode)			1.
2		+ts_RRC_ConnEst(tsc_CellA, est_MO, originatingLowPrioritySignalling)			2.
3		Dc?RRC_DataInd	car_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cd_CM_ServReqShortMsg(?))		3.

 $\textbf{Detailed Comments} \ : \ 1. \ Initiate \ a \ mobile \ originated \ SMS \ connection \ (mode \ determined \ by \ p_Mode)$

2. MO Connection Establishment, establishment cause SMS

3. CM Service Request

Test Step Name : ts_SMSCS_SetupMT

Group : SMS_Steps/

Objective : To set up a mobile terminated SMS-CS connection

Default : NAS_OtherwiseFail

Comments : To set up a mobile terminated SMS-CS connection, incl. authentication and cipher mode setting

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_ConnEst_DCH_MT_TMSI(tsc_CellA, terminatingLowPrioritySignalling, px_TMSI_Def, terminatingLowPrioritySignalling)			1.
2		Dc?RRC_DataInd	car_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, c_PagRsp(?, c_MobileIdTMSI_Iv))		2.
3		+ts_MM_Authentication(tsc_CellA)			3.
4		+ts_RRC_Security(tsc_CellA, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			4.

Detailed Comments: 1. MT Connection Establishment, paging cause SMS

2. Paging Response3. Authentication

4. Start Ciphering if applicable

Test Step Dynamic Behaviour

Test Step Name : ts_SMSCS_SetupMT_U10

Group : SMS_Steps/

Objective: To bring the UE into state U10.

Default : NAS_OtherwiseFail

Comments : To bring the UE into state U10 to set up a mobile terminated SMS connection

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_CellInfoA.cellConfig := cell_DCH_StandAloneSRB_NoConn)			1.
2		+ts_CC_EnterU10_MT_Def(tsc_CellA)			2.

Detailed Comments: 1. set CellConfig appropriately

2. Bring the UE into state U10

Test Step Name: ts_SMSPS_SetupMO(p_Mode: INTEGER)

Group : SMS_Steps/

Objective: To set up a mobile originated SMS-PS connection incl. authentication and ciphering

Default : NAS_OtherwiseFail

Comments: The p_mode indicates the type of MO SMS-PS connection to be established. Default authentication

and ciphering are being used.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SMSPS_SetupMO_Part1(p_Mode)			1.
2		+ts_GMM_Authentication (tsc_CellA)			2.
3		+ts_RRC_Security (tsc_CellA, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			3.

Detailed Comments: 1. Set up a mobile originated SMS-PS connection till receipt of Service Request

2. Authentication

3. Start Ciphering if applicable

Test Step Dynamic Behaviour

Test Step Name : ts_SMSPS_SetupMO_Part1(p_Mode: INTEGER)

Group : SMS_Steps/

Objective : To set up a mobile originated SMS-PS connection till receipt of Service Request

Default: NAS_OtherwiseFail

Comments : MO SMS-PS connections are requested to be established via AT or MMI command. The mode

indicates the type of SMS-PS activity to be performed. An MO RRC connection results.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_CellInfoA.cellConfig := cell_DCH_StandAloneSRB_NoConn)			4.
2		+ts_SMS_SetupMO_Mode(p_Mode)			1.
3		+ts_RRC_ConnEst(tsc_CellA, est_MO, originatingLowPrioritySignalling)			2.
4		Dc ? RRC_DataInd	car_PS_InitDirectTransfer(tsc_CellDedicated, tsc_RB3, cr_ServiceRequest(c_ServiceType_v(3.
			'000'B), c_MobileIdPTMSI_lv (tcv_AssignedPTMSI), tcv_PS_KeySeq))		

Detailed Comments: 1. Initiate a mobile originated SMS connection (mode determined by p_Mode)

2. MO Connection Establishment, establishment cause SMS

3. Service Request

4. set CellConfig appropriately

Test Step Name : ts_SMSPS_SetupMT

Group : SMS_Steps/

Objective : To set up a mobile terminated SMS-PS connection

Default : NAS_OtherwiseFail

Comments : To set up a mobile terminated SMS-PS connection, incl. authentication and cipher mode setting

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_ConnEst_DCH_MT_PTMSI(tsc_CellA, terminatingLowPrioritySignalling, o_ConvertPTMSI(tcv_AssignedPTMSI), terminatingLowPrioritySignalling)			1.
2		+ts_GMM_ServiceRequestWithoutAccept (tsc_CellA, '010'B)			2.

Detailed Comments: 1. MT Connection Establishment, paging cause SMS

2. Service Request + Authentication + Start Ciphering if applicable

Test Step Dynamic Behaviour

Test Step Name : ts_SMS_InitTl
Group : SMS_Steps/

Objective : To initialize TIs for use by SMS

Default : NAS_OtherwiseFail

Comments: General step used to initialize Transaction Identifiers

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_TI_S := cs_TI_MT, tcv_TI_R := cs_TI_MT, tcv_TI_R.tiFlag := '1'B)			1.
2		(tcv_TI_1_S.tiVal := '000'B, tcv_TI_1_R.tiVal := '000'B, tcv_TI_1_S.tiFlag := '1'B, tcv_TI_1_R.tiFlag := '0'B)			2.

Detailed Comments: 1. TIS, TIR are used for SMS MT. The TI value is defaulted to 0. Has to be overwritten eventually if

SMS MO has been done before, using TI value 0.

These variables are also used by CC (see cases when state U10 is entered). In these cases this

step needs not be called.

2. TI1S, TI1R are used for SMS MO. Must be copied when received.

Test Step Name: ts_SMS_SetupMO_Mode(p_Mode: INTEGER)

Group : SMS_Steps/

Objective : To instruct the operator about the mode how to set up a mobile originated SMS connection

Default : NAS_OtherwiseFail

Comments : MO SMS connections are requested to be established via AT or MMI command. The mode indicates

the type of SMS activity to be performed

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_Mode = tsc_SMS_OneMsg]			
2		+ts_AT_InitSMS_MO			1.
3		[p_Mode = tsc_SMS_ThreeMsgs]			
4		+ts_AT_InitSMS_ThreeMsgs			2.
5		[p_Mode = tsc_SMS_CmdEnq]			
6		+ts_MMI_InitSMS_CmdEnq			3.
7		[p_Mode = tsc_SMS_CmdDel]			
8		+ts_MMI_InitSMS_CmdDel			4.

Detailed Comments: 1. Send one MO message

2. Send 3 MO messages3. Send one Command Enquiry4. Send one Command Deletion

Test Step Dynamic Behaviour

Test Step Name : ts_AT_CGSMS_CS

Group : AT_Steps/

Objective : To set the UE to send MO SMS in CS mode

Default : UT_OtherwiseFail

Comments : MO SMS in CS mode is selected by using the AT command '+CGSMS=1'

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
1		Ut! AT_CmdReq	ca_AT_CmdReq ("AT+CGSMS=1 <cr>")</cr>		1.	
2		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnf			

Detailed Comments: 1. see TS 27.007 cl. 10.1.20

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

Test Step Name : ts_AT_CGSMS_PS

Group : AT_Steps/

Objective : To set the UE to send MO SMS in PS mode

Default : UT_OtherwiseFail

Comments: MO SMS in PS mode is selected by using the AT command '+CGSMS=0'

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut!AT_CmdReq	ca_AT_CmdReq ("AT+CGSMS=0 <cr>")</cr>		1.
2		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnf		

Detailed Comments : 1. see TS 27.007 cl. 10.1.20

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

Test Step Dynamic Behaviour

Test Step Name : ts_AT_CMGD_All

Group : AT_Steps/

Objective : To set the UE to delete all messages from Preferred message store

Default : UT_OtherwiseFail

Comments : All messages from Preferred message store are deleted using the AT command '+CMGD=1,4'

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut!AT_CmdReq	ca_AT_CmdReq ("AT+CMGD=1,4 <cr>")</cr>		1.
2		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnf		

Detailed Comments: 1. see TS 27.005 cl. 3.5.4

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

Test Step Name : ts_AT_CMGF(p_Str: IA5String)

Group : AT_Steps/

Objective: To set the UE for Text mode

Default : UT_OtherwiseFail

Comments : Text mode is selected by using the AT command '+CMGF=p_Str'

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_IA5_String1 := o_ConcatStrg("AT+CMGF=", p_Str))			
2		<pre>(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, "<cr>"))</cr></pre>			
3		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
4		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnf		

Detailed Comments: 1. see TS 27.005 cl. 3.2.3

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

Test Step Name : ts_AT_CMGW(p_DA: IA5String; p_TODA: INTEGER)

Group : AT_Steps/

Objective : To write message to Preferred message store

Default : UT_OtherwiseFail

Comments : The TP Destination Address is set to p_DA by using the AT command '+CMGW'

The string to be sent as the message to be stored by the UE is determined the canned message

tsc_Fox if we are in text mode.

The string to be sent as the message to be stored by the UE is determined the canned message tsc_Fox_PDU if we are in PDU mode.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_BuildAT_Cmd			
2		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
3		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnfWithString		
4		(tcv_Res := o_CheckStringStartWith (tcv_AT_Cmd, " <cr><lf>+CMGW:"))</lf></cr>			2.
5	TSP	[tcv_Res]		(P)	
6	TSF	[NOT tcv_Res]		(F)	
		It_BuildAT_Cmd			
7		[px_SMS_MsgFrmt = "1"]			text
					mode
8		(tcv_IA5_String1 := o_ConcatStrg("AT+CMGW=", p_DA))			3.
9		(tcv_IA5_String2 := o_ConcatStrg(4.
		",", o_IntToIA5(
		p_TODA, 3)))			
10		(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, tcv_IA5_String2))			5.
11		<pre>(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, "<cr>"))</cr></pre>			6.
12		(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, tsc_Fox))			7.
13		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, " _{<cr>"))</cr>}			8.
14		[px_SMS_MsgFrmt = "0"]			PDU mode
15		(tcv_IA5_String1 := o_ConcatStrg("AT+CMGW=153 <cr>", tsc_Fox_PDU))</cr>			9.
16		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, " _{<cr>"))</cr>}			10.
17	ERR1	[TRUE]		1	

 $\textbf{Detailed Comments} \ : \ 1. \ \ \text{see TS } 27.005 \ \text{cl.} \ 3.5.3 \ \ \ \text{resp. cl.} \ 4.4 \ \text{and} \ 3.1$

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

3. AT+CMGW=<DA>

4. ,<TODA>

5. AT+CMGW=<DA>,<TODA>
6. AT+CMGW=<DA>,<TODA><CR>

7. AT+CMGW=<DA>,<TODA><CR>tsc_Fox

8. AT+CMGW=<DA>,<TODA><CR>tsc_Fox<ESC><CR>

9. AT+CMGW=153<CR>tsc_Fox_PDU

153 is the length of the TP-PDU

10. AT+CMGW=153<CR>tsc_Fox_PDU<ESC><CR>

Test Step Name : ts_AT_CPMS(p_MEM1, p_MEM2, p_MEM3: IA5String)

Group : AT_Steps/

Objective: To set the UE for the preferred message storage

Default : UT_OtherwiseFail

Comments : Using the AT command '+CPMS' the memories in the UE are selected

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_BuildAT_Cmd			
2		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
3		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnfWithString		
4		(tcv_Res := o_CheckStringStartWith (2.
		tcv_AT_Cmd, " <cr><lf>+CPMS:"))</lf></cr>			
5	TSP	[tcv_Res]		(P)	
6	TSF	[NOT tcv_Res]		(F)	
		lt_BuildAT_Cmd			
7		(tcv_IA5_String1 := o_ConcatStrg("AT+CPMS=""", p_MEM1))			3.
8		(tcv_IA5_String2 := o_ConcatStrg(""",""", p_MEM2))			4.
9		(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, tcv_IA5_String2))			5.
10		(tcv_IA5_String2 := o_ConcatStrg(""",""", p_MEM3))			6.
11		(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, tcv_IA5_String2))			7.
12		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, """ <cr>"))</cr>			8.

Detailed Comments: 1. see TS 27.005 cl. 3.2.2.

1.1 Sets mem1(read memory) to p_MEM1.

1.2 Sets mem2(write memory) to p_MEM2.

1.3 Sets mem3(preferred write memory) to p_MEM3.

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful.

3. AT+CPMS="<p_MEM1>"

4. ,"<p_MEM2>"

5. AT+CPMS="<p_MEM1>","<p_MEM2>"

6. ,"<p_MEM3>"

7. AT+CPMS="<p_MEM1>","<p_MEM2>","<p_MEM3>"
8. AT+CPMS="<p_MEM1>","<p_MEM2>","<p_MEM3>"<CR>
The dimensioning of the memories is sufficient for testing.

Memories are defined in TS 27.005 cl. 3.1 ("ME", "SM", "BM" etc.)

Test Step Name: ts_AT_CSCA(p_SCA: IA5String; p_TOSCA: INTEGER)

Group : AT_Steps/

Objective: To set the Service Center Address

Default : UT_OtherwiseFail

Comments : The Service Center Address is set to p_SCA by using the AT command '+CSCA'

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_BuildAT_Cmd			
2		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
3		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnf		
		lt_BuildAT_Cmd			
4		(tcv_IA5_String1 := o_ConcatStrg("AT+CSCA=", p_SCA))			3.
5		(tcv_IA5_String2 := o_ConcatStrg(",", o_IntToIA5(p_TOSCA, 3)))			4.
6		(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, tcv_IA5_String2))			5.
7		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, " <cr>"))</cr>			6.

Detailed Comments: 1. see TS 27.005 cl. 3.3.1

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

3. AT+CSCA=<SCA>

4. ,<TOSCA>

5. AT+CSCA=<SCA>,<TOSCA>
6. AT+CSCA=<SCA>,<TOSCA><CR>

Test Step Name : ts_AT_CSCS(p_CharSet: IA5String)

Group : AT_Steps/

Objective: To set the Character Set to be used

Default : UT_OtherwiseFail

Comments: Using the AT command '+CSCS' the Character Set to be used is set as indicated by p_CharSet.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_BuildAT_Cmd			
2		Ut! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
3		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnf		
		It_BuildAT_Cmd			
4		(tcv_IA5_String1 := o_ConcatStrg("AT+CSCS=", p_CharSet))			3.
5		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, " <cr>"))</cr>			4.

Detailed Comments: 1. see TS 27.007 cl. 3.3.1

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

3. AT+CSCS=<p_CharSet>4. AT+CSCS=<p_CharSet><CR>

Test Step Name : ts_AT_CSMS(p_Str: IA5String)

Group : AT_Steps/

Objective : To set the UE for SMS mode

Default : UT_OtherwiseFail

Comments : Using the AT command '+CSMS' the message service defined by p_Str is selected

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_IA5_String1 := o_ConcatStrg("AT+CSMS=", p_Str))			
2		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, " <cr>"))</cr>			
3		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
4		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnfWithString		
5		(tcv_Res := o_CheckStringStartWith (2.
		tcv_AT_Cmd , " <cr><lf>+CSMS:"))</lf></cr>			
6	TSP	[tcv_Res]		(P)	
7	TSF	[NOT tcv_Res]		(F)	

Detailed Comments: 1. see TS 27.005 cl. 3.2.1

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

Test Step Dynamic Behaviour

Test Step Name : ts_AT_EmptyMsgStorage

Group : AT_Steps/

Objective: To make the operator empty the Message Storage

Default : NAS_OtherwiseFail

Comments: To make the operator empty the Message Storage

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_AT_CMGD_All			1.

Detailed Comments: 1. MMI_CmdReq (" Please empty the Message Storage ")

Test Step Name : ts_AT_InitSMS_ThreeMsgs

Group : AT_Steps/

Objective: To attempt sending three MO short messages by the UE under test.

Default : NAS_OtherwiseFail

Comments: To attempt sending three MO short messages by the UE under test.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_IA5_String1 := o_ConcatStrg("AT+CMMS=1;+CMSS=", o_IntToIA5((0 + px_SMS_IndexOffset), 1)))			1. 3.
2		(tcv_IA5_String2 := o_ConcatStrg(";+CMSS=", o_IntToIA5((1 + px_SMS_IndexOffset), 1)))			4.
3		(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, tcv_IA5_String2))			5.
4		(tcv_IA5_String2 := o_ConcatStrg(";+CMSS=", o_IntToIA5((2 + px_SMS_IndexOffset), 1)))			6.
5		(tcv_IA5_String1 := o_ConcatStrg(tcv_IA5_String1, tcv_IA5_String2))			5.
6		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, " <cr>"))</cr>			6.
7		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
8		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnfWithString		
9		(tcv_Res := o_CheckStringStartWith (tcv_AT_Cmd , " <cr><lf>+CMSS:"))</lf></cr>			2.
10	TSP	[tcv_Res]		(P)	
11	TSF	[NOT tcv_Res]		(F)	

Detailed Comments: 1. MMI_CmdReq (" Please initiate sending of THREE mobile originated short message from the UE ")

- 2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful
- 3. AT+CMMS=1;+CMSS=<0>
- 4. ;+CMSS=<1>
- 5. AT+CMMS=1;+CMSS=<0>;+CMSS=<1>
- 6. ;+CMSS=<2>
- 7. AT+CMMS=1;+CMSS=<0>;+CMSS=<1>;+CMSS=<2>
- 8. AT+CMMS=1;+CMSS=<0>;+CMSS=<1>;+CMSS=<2><CR>

Test Step Name: ts_MMI_ChkMsgDisplayed(p_NumOfIA5_Chars:INTEGER; p_Msg:IA5String)

Group : UT_Steps/

Objective : To make the operator check an MT Short Message received

Default : NAS_OtherwiseFail

Comments : To make the operator check an MT Short Message received. The expected contents is indicated by

p_Msg, the length is indicated by p_NumOfIA5_Chars.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_IA5_String1 := o_ConcatStrg("Please check the length of the received Short Message: ", o_IntToIA5(p_NumOfIA5_Chars, 3)))			
2		(tcv_IA5_String2 := o_ConcatStrg(", and the contents of the received Short Message: ", p_Msg))			
3		Ut!MMI_CmdReq	ca_MMI_CmdReq (o_ConcatStrg(tcv_IA5_String1, tcv_IA5_String2))		
4	TSP1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnf	(P)	
5	TSF1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnfNeg	(F)	

Detailed Comments: This command requests (e.g. from the control console of the test system) the test operator to

check if the UE under test indicates that an SM has arrived, and that the message contents represented by 'p_Msg' is correctly displayed. Then the operation returns the result

TRUE: if the UE indicates SM reception and displays correct message,

FALSE: if the UE does not indicate SM reception or displays incorrect message.

Test Step Dynamic Behaviour

Test Step Name: ts_MMI_ChkMsgIndicated

Group : UT_Steps/

Objective : To make the operator check an MT Short Message indicated

Default : NAS_OtherwiseFail

Comments : To make the operator check an MT Short Message indicated. For use when Short Message cannot be

displayed.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please check that the reception of a received Short Message is indicated")		
2	TSP1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnf	(P)	
3	TSF1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnfNeg	(F)	

Detailed Comments: This command requests (e.g. from the control console of the test system) the test operator to

check if the UE under test indicates that an SM has arrived.

TRUE: if the UE indicates SM reception, FALSE: if the UE does not indicate SM reception

Test Step Name: ts_MMI_InitSMS_CmdDel

Group : UT_Steps/

Objective : To send an SMS COMMAND message from the UE under test containing a request to delete the

previously submitted Short Message.

Default : NAS OtherwiseFail

Comments : To send an SMS COMMAND message from the UE under test containing a request to delete the

previously submitted Short Message

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please send an SMS COMMAND message containing a request to delete the previously submitted Short Message")		
2	TSP1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnf	(P)	
3	TSF1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnfNeg	(F)	

Detailed Comments: This operation requests (e.g. from the control console of the test system) the test operator to

send an SMS COMMAND message from the UE under test containing a request to delete the

previously submitted Short Message and then to inform the test system.

Test Step Dynamic Behaviour

Test Step Name: ts_MMI_InitSMS_CmdEnq

Group : UT_Steps/

Objective : To send an SMS COMMAND message from the UE under test containing an enquiry about the

previously submitted Short Message.

Default : NAS_OtherwiseFail

Comments : To send an SMS COMMAND message from the UE under test containing an enquiry about the

previously submitted Short Message

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please send an SMS COMMAND message containing an enquiry about the previously submitted Short Message")		
2	TSP1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnf	(P)	
3	TSF1	Ut ? MMI_CmdCnf	ca_MMI_CmdCnfNeg	(F)	

Detailed Comments: This operation requests (e.g. from the control console of the test system) the test operator to

send an SMS COMMAND message from the UE under test containing an enquiry about the

previously submitted Short Message and then to inform the test system.

Test Step Name : ts_SM_ActCtxt Group : SM_Steps/

Objective : To activate a PDP context. Default : NAS_OtherwiseFail

Comments : 3G TS 24.008 sub-clauses 6.1.3.

If network originated PDP context activation is supported then the network is the initiator, otherwise the UE is the initiator.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[px_NwOrgPDP_Support = TRUE]			Network originate d PDP Context activatio n supporte d
2		+ts_SM_ActCtxt_MT			
3		[px_NwOrgPDP_Support = FALSE]			Network originate d PDP Context activatio n NOT supporte d
4		+ts_SM_ActCtxt_MO			

Detailed Comments:

Test Step Name : ts_SM_ActCtxt_MO

Group : SM_Steps/

Objective : To activate a PDP context from the UE side.

Default : NAS_OtherwiseFail

Comments : 3G TS 24.008 sub-clauses 6.1.3.1 and 6.1.3.1.1.

SS responds to the PDP context activation request with the requested QoS. Unexpected behaviour is handled by the Default.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_AttachFlag = TRUE]			UE GMM attached
2		+lt_Detach			Detach UE if manual attach
3		+lt_PDP_CtxtEst			
4		[tcv_AttachFlag = FALSE]			UE not
5		+lt_PDP_CtxtEst lt_PDP_CtxtEst			attached
6		+ts_AT_OrgPS_Call (tsc_CellA)			Originat e a PDP Context Request using AT comman ds
7		[pc_AutomaticAttachSwitchON = TRUE]			Auto Attach UE
8		+ ts_RRC_ConnEst (tsc_CellA, est_MO, originatingInteractiveCall)			Establis h RRC Connect ion
9		+ts_GMM_ServiceRequestWithoutAccept(tsc_CellA, '000'B)			Wait for GMM Service Request from the UE.
10		+ts_ActivatePDP_AcceptMO(tsc_CellA)			Activate PDP Context Req and Accept
11		[pc_AutomaticAttachSwitchON = FALSE]			Manual Attach UE
12		+ ts_RRC_ConnEst (tsc_CellA, est_Reg, ?)			Establis h RRC Connect ion

		Test Step Dynamic B	ehaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		+ts_GMM_PS_RegistrationForSMS(tsc_Cell A)			Wait for GMM Attach from the UE. and authenti cation and cipherin g
14		+ts_ActivatePDP_AcceptMO(tsc_CellA)			Activate PDP Context Req and Accept
		It_Detach			
15		[pc_AutomaticAttachSwitchON = TRUE]			Auto Attach UE
16		[pc_AutomaticAttachSwitchON = FALSE]			Manual Attach UE
17		+ts_GMM_DetachMT(tsc_CellA)			Detach UE
Deta	iled Com	nments: Derived from tc_11_1_1_1.		•	•

Test Step Name : ts_SM_ActCtxt_MT

Group : SM_Steps/

Objective: To activate a PDP context from the UTRAN side.

Default : NAS_OtherwiseFail

Comments : 3G TS 24.008, sub clause 6.1.3.1.2 . Unexpected behaviour is handled by the Default. Applies only if

network initiated PDP context is supported!

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_ConnEst_DCH_MT_PTMSI(tsc_CellA, terminatingBackgroundCall,			Use default
		o_ConvertPTMSI(px_PTMSI_Def), terminatingBackgroundCall)			value of P_TMSI
2		+ts_GMM_PagingResp(tsc_CellA)			
3		(tcv_Len := LENGTH_OF(o_IA5_ToOct(tsc_AccessPtNameDCH)))			Calculate the length for Access Pt Name
4		(tcv_LenBit := o_IntToOct(tcv_Len, 1))			
5		(tcv_Len1 := LENGTH_OF(o_IA5_IP_ToOct(px_PDP_IP_AddrInfoDCH, TRUE)) + 2)			Calc. the length for Address Info
6		(tcv_Len1_Oct := o_IntToOct(tcv_Len1, 1))			
7		(tcv_TI_S.tiFlag := '0'B, tcv_TI_S.tiVal := '000'B)			
8		Dc ! RRC_DataReq (tcv_ReqPDP_ContextAct := RRC_DataReq.msg,	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_ReqPDP_ContextReqMT		step 1 of prose
		tcv_PktDataProtoAddr := tcv_ReqPDP_ContextAct.offeredPDP _Addr)	tcv_TI_S, tcv_Len1_Oct, tcv_LenBit, px_PDP_IP_AddrInfoDCH, tsc_AccessPtNameDCH))		Send Request PDP Context
9		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r(tsc_CellDedicated, tsc_RB3, cr_ActPDP_ContextReqRs pMO(tcv_PktDataProtoAddr))	(P)	Receive Activate PDP Context Request from UE.
10		+lt_PDP_CtxtAccept			
		lt_PDP_CtxtAccept			
11		(tcv_Len:= LENGTH_OF((o_IA5_IP_ToOct(px_PDP_IP_AddrInfoDCH, TRUE))) + 2)			Calculate the length field

Test Step Dynamic Behaviour					
Nr Label	Behaviour Description	Constraints Ref	Verdict	Comments	
12	(tcv_LenBit:= o_IntToOct(tcv_Len, 1))			Convert length in INTEGE R into bits	
13	+ ts_InitialiseDlyAndTrafficClass				
14	[pc_UMTS_GSM = TRUE]				
15	Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_R, cs_LLC_SAPI_UMTS_GSM _v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), cs_PktDataProtoAddrMT(tcv_LenBit, px_PDP_IP_AddrInfoDCH)		Send PDP Context Activatio n Accept, with LLC SAPI set as 3	
16	[pc_UMTS_GSM = FALSE]))			
17	Dc! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_R, cs_LLC_SAPI_UMTS_v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), cs_PktDataProtoAddrMT (tcv_LenBit, px_PDP_IP_AddrInfoDCH)))		Send PDP Context Activation Accept, with LLC SAPI set as 0 (not assigned)	

 $\textbf{Test Step Name} \quad \textbf{:} \ \, ts_SM_DeactCtxt_MT(p_CellId: INTEGER \ ; \ p_ti: TI)$

Group : SM_Steps/

Objective: To deactivate a PDP Context from the UTRAN Side

Default : NAS_OtherwiseFail

Comments: This will be used to deactivate a PDP Context from the UTRAN Side.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc!RRC_DataReq START t_3395	ca_PS_DataReq(tsc_CellDedicated, tsc_RB3, cs_DeactPDP_ContextReq MT(p_ti, cbs_SM_Cause_v(tsc_RejC auPDP_CtxtDeact)))		Send Deactiva te PDP Context with tear down flag set to 1
2		Dc? RRC_DataInd CANCEL t_3395	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_DeactPDP_ContextAcp MO)	(P)	Receive Deactiva te PDP Context Accept
3		[pc_AutomaticAttachSwitchON = FALSE]			Manual Attach UE
4		START t_Dly(5000)			
5		Dc ? RRC_DataInd CANCEL t_Dly	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)	(P)	Receive Detach Request
6		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated , tsc_RB3, cs_DetachAcc)		DETAC H ACCEP T
7		(tcv_AttachFlag := FALSE)			Note that UE is not
					GMM attached
8		? TIMEOUT t_Dly		(F)	
9		[pc_AutomaticAttachSwitchON = TRUE]			Automati c Attach UE
10		? TIMEOUT t_3395		(F)	On expiry of T3395, FAIL

Detailed Comments: Derived from tc_11_3_2.

Test Step Name : ts_GMM_DetachMT (p_CellId : INTEGER)

Group : GMM_Steps/

Objective: Network originated GMM Detach.

Default : NAS_OtherwiseFail

Comments: This Step will be used to detach the UE from the network (MT detach).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GMM_PagingType1_PTMSI (p_CellId , terminatingInteractiveCall, tcv_AssignedPTMSI)			
2		+ts_RRC_ConnEst (p_CellId , est_MT, terminatingInteractiveCall)			
3		+ts_GMM_PagingResp(p_CellId)			
4		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated , tsc_RB3, cs_DetachReqMT (c_DetachTypeReAttNotRequ ired))		DETAC H REQUE ST
5		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_DetachAcc)		DETAC H ACCEP T
6		+ts_RRC_ConnRel (p_CellId, cell_Dch)			

Detailed Comments:

Test Step Name: ts_GMM_PS_RegistrationForSMS (p_CellId : INTEGER)

Group : GMM_Steps/

Objective : Contains the core GMM signalling for PS registration (see ts_GMM_IdleUpdated for detailed

comments)

Default : NAS_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_Start := RRC_DataInd.start)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, tcv_PS_KeySeq))		ATTACH REQUE ST - Extract Attach type requeste d
3		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
4		+lt_GetOpMode			
5		+ts_GMM_Authentication (p_CellId)			AUTHE NTICATI ON AND CIPHER ING REQUE ST AUTHE NTICATI ON AND CIPHER ING RESPO NSE
6		+ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE
7		[tcv_UE_OpMode = opModeC]			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
8		Dc!RRC_DataReq (tcv_AssignedPTMSI := px_PTMSI_Def)	ca_PS_DataReq(tsc_CellDe dicated, tsc_RB3, cs_AttachAcc(c_GMM_AttachResult('001' B), c_RAI_v (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.rac), c_PTMSI_SignatureDef, c_MobileIdPTMSI (px_PTMSI_Def),))		ATTACH ACCEP T for PS only - Attach result 'GPRS attached,' - RAI default (RAI-1) - P-TMSI -1 signatur e - MobileId P-TMSI -1 - omit TMSI
9		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPL ETE
10 11		[tcv_UE_OpMode = opModeA] Dc!RRC_DataReq (tcv_AssignedPTMSI := px_PTMSI_Def, tcv_AssignedTMSI := px_TMSI_Def)	ca_PS_DataReq(tsc_CellDe dicated, tsc_RB3, cs_AttachAcc(c_GMM_AttachResult('011' B), c_RAI_v (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_SignatureDef, c_MobileIdPTMSI (px_PTMSI_Def), c_GMM_MobileIdTMSI (px_TMSI_Def)))		ATTACH ACCEP T for combine d CS/PS - Attach result 'GPRS/I MSI attached , - RAI default - P-TMSI signatur e - MobileId P-TMSI - defaut TMSI
12		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPL ETE

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	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
		lt_GetOpMode						
13		[tcv_TmpB3 = '011'B]			Set global variable accordin g to the type of attach requeste d by UE			
14		(tcv_UE_OpMode := opModeA)						
15		[TRUE]						
16		(tcv_UE_OpMode := opModeC)						
Deta	retailed Comments:							

Test Step Name : ts_GMM_ServiceRequestWithoutAccept (p_CellId : INTEGER; p_Type : B3)

Group : GMM_Steps/

Objective : To establish a GMM signalling connection incl. Authentication and Security mode setting, but no

Accept

Default: NAS_OtherwiseFail

Comments: GMM signalling for the establishment of a mobile terminating GMM (signalling) connection to be used

by SM or SMS.

The establishment signalling includes Authentication and Security mode setting.

ServiceAccept is not sent.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_ServiceRequest(c_ServiceType_v(p_Type), c_MobileIdPTMSI_Iv (tcv_AssignedPTMSI), tcv_PS_KeySeq))		SERVIC E REQUE ST - Service type is 'signallin g' - Mobile Id is current P-TMSI
2		+ts_GMM_Authentication (p_CellId)			ServiceT ype 'Paging respons e' (010) resp 'Signallin g' (000) AUTHE NTICATI ON AND CIPHER ING REQUE ST
					AUTHE NTICATI ON AND CIPHER ING RESPO NSE

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	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
3		+ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE			

Detailed Comments: This is GMM test step ts_GMM_ServiceRequest without the Service Accept message which may be omitted in some circumstances. Uses Cell A.

Test Step Name : ts_CC_BS20_MT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective: To generate an MT SETUP message with appropriate Bcap for BS20 service.

Default : NAS_OtherwiseFail

Comments : 3G TS 27.001 clause B.1.2
3G TS 22.002 clause 3

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more than

5 parameters are used for the BCAP constraints.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_Serv = tsc_Srv31kHz]			
2		+ lt_31kHz			
3		[p_Serv = tsc_SrvPIAFS]			
4		+ It_PIAFS			
5		[p_Serv = tsc_SrvFTM]			
6		+ lt_FTM			
7		[p_Serv = tsc_SrvV110]			
8		+ lt_V110			
9		[p_Serv = tsc_SrvV120]			
10		+ lt_V120			
11	ERR1	[TRUE]		1	
		lt_31kHz			
12		[px_BcapFNUR = tsc_Bcap28800]			
13		+ lt_31kHz_T			
14		[px_BcapFNUR <> tsc_Bcap28800]			
15		+ lt_31kHz_NT			
		lt_31kHz_NT			
16		[px_BcapUeFlowControl = tsc_BcapFlowInband]			
17		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450 , px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.2
18		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			
19		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450 , px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.2
20		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
21		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType , px_BcapOtherModemType)))			see 3G TS 27.001 cl B.1.2.2			
22	ERR2	[TRUE]		I				
		lt_31kHz_T						
23		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_AsyncT (tsc_BcapITC_31kHz , tsc_BcapRA_No , tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, px_BcapModemType , px_BcapOtherModemType)))			see 3G TS 27.001 cl B.1.2.2			
24		It_PIAFS (tcv_SetupMT := cs_SetupMT (cs_BcapMT_5a_AsyncNT (tsc_BcapITC_UDI , tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare , tsc_BcapOtherRA_PIAFS , tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone , tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.4			
		lt_FTM						
25		[px_BcapITC = tsc_BcapITC_IntUDI]						
26		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31 ,tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.3			
27		[px_BcapITC = tsc_BcapITC_IntRDI]						
28		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5a_AsyncNT (tsc_BcapITC_Other, tsc_BcapRA_X31, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_Spare, tsc_BcapStopBitSpare, tsc_BcapDataB8, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see 3G TS 27.001 cl B.1.2.3			
29	ERR3	[(px_BcapITC <> tsc_BcapITC_IntRDI) AND (px_BcapITC <> tsc_BcapITC_IntUDI)]		1				
		lt_V110						
30		[px_BcapFNUR = tsc_Bcap28800]						
31		+ lt_V110_T						
32		[px_BcapFNUR <> tsc_Bcap28800]						
33		+ lt_V110_NT						
24		It_V110_NT						
34		[px_BcapUeFlowControl = tsc_BcapFlowInband]						

		Test Step Dynamic B	ehaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
35		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_Iso6429)))			see 3G TS 27.001 cl B.1.2.1
36		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			
37		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_7_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.1
38		[px_BcapUeFlowControl = tsc_BcapFlowOutband]			
39		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_AsyncNT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None , tsc_BcapOtherMT_None))			see 3G TS 27.001 cl B.1.2.1
40	ERR4	TRUE]		1	
		lt_V110_T			
41		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_AsyncT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			27.001 cl B.1.2.1
		lt_V120			
42 43		[(px_BcapITC = tsc_BcapITC_IntUDI)] + lt_V120_UDI_RDI (tsc_BcapITC_UDI, tsc_BcapOtherITC_Spare)			
44		[px_BcapITC = tsc_BcapITC_IntRDI]			
45		+ It_V120_UDI_RDI (tsc_BcapITC_Other, tsc_BcapOtherITC_RDI)			seeTS 27.001 cl B.1.2.1
46	ERR5	[(px_BcapITC <> tsc_BcapITC_IntUDI) AND (px_BcapITC <> tsc_BcapITC_IntRDI)]		1	
		lt_V120_UDI_RDI (p_ltcLt : B3 ; p_OtherltcLt : B2)			
47		[px_BcapUeFlowControl = tsc_BcapFlowInband]			
48		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (p_ltcLt, tsc_BcapSACP_l440450, p_OtherltcLt, tsc_BcapASync, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapU2_lso6429)))			see 3G TS 27.001 cl B.1.2.1
49		[px_BcapUeFlowControl = tsc_BcapFlowNoFlowCtrl]			

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
50		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (p_ltcLt, tsc_BcapSACP_l440450, p_OtherltcLt, tsc_BcapASync, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity, tsc_BcapU2_CopNoFlct)))			see 3G TS 27.001 cl B.1.2.1				
51		[px_BcapUeFlowControl = tsc_BcapFlowOutband]							
52		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab_AsyncNT (p_ItcLt, tsc_BcapRA_Other, tsc_BcapSACP_I440450, p_OtherItcLt, tsc_BcapOtherRA_V120, px_BcapNumberStopBits, px_BcapNumberDataBits, px_BcapParity)))			see 3G TS 27.001 cl B.1.2.1				
53	ERR6	[TRUE]		1					

```
The algorithm for derivation of BS20 Bearer Capabilities:
IF service = 31kHz
    IF rate = 28800
      Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with T
   ELSE
     IF FlowControl = Inband
        Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with NT UIL2P=ISO6429
     IF FlowControl = NoFlowControl
       Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with NT UIL2P=COPnoFlct
      IF FlowControl = Outband
       Use coding of BACP BS20 3.1kHz (see TS 27.001 B.1.2.2) with NT without UIL2P
IF service = PIAFS
        Use coding of BCAP BS20 PIAFS NT (see TS 27.001 B.1.2.4)
IF service = FTM
        IF itc = UDI
            Use coding of BCAP BS20 FTM NT (see TS 27.001 B.1.2.3) with UDI
            Use coding of BCAP BS20 FTM NT (see TS 27.001 B.1.2.3) with RDI
        IF itc <> RDI AND itc <> UDI
            ERROR
IF service = V110
  IF rate = 28800
     Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V110 T UDI
  ELSE
     IF FlowControl = Inband
        Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110 NT UDI UIL2P=ISO6429
     IF FlowControl = NoFlowControl
       Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110 NT UDI
UIL2P=COPnoFlct
      IF FlowControl = Outband
       Use coding of BCAP BS20 (see TS 27.001 B.1.2.1) with V110 NT UDI without UIL2P
IF service = V120
    IF itc = UDI
          IF FlowControl = Inband
             use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI UIL2P=ISO6429
          IF FlowControl = NoFlowControl
            use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI
UIL2P=COPnoFlct
           IF FlowControl = Outband
             use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT UDI without UIL2P
```

Detailed Comments : ...

IF itc = RDI

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI

IF FlowControl = Inband

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI UIL2P=ISO6429

IF FlowControl = NoFlowControl

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI UIL2P=COPnoFlct

IF FlowControl = Outband

use coding of BCAP BS20 (see TS 27.001 B.1.2.1) V120 NT RDI without UIL2P

Test Step Name : ts_CC_BS30_MT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective: To generate an MT SETUP message with appropriate Bcap for BS30 service.

Default : NAS_OtherwiseFail

Comments : 3G TS 27.001 clause B.1.3
3G TS 22.002 clause 3

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more than

5 parameters are used for the BCAP constraints.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_Serv = tsc_Srv31kHz]			
2		+ lt_31kHz			
3		[p_Serv = tsc_SrvV110]			
4		+ lt_V110			
5		[p_Serv = tsc_SrvX31]			
6		+ lt_X31			
7		[p_Serv = tsc_SrvV120]			
8		+ lt_V120			
9		[p_Serv = tsc_SrvBTM]			
10		+ It_BTM			
11		[p_Serv = tsc_SrvMmediaCall]			
12		+ It_Mmedia			
13	ERR1	[TRUE]		1	
		lt_31kHz			
14		[px_BcapSACP = tsc_BcapSACP_I440450]			non X.32
15		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType)))			see TS 27.001 cl. B.1.3.2.
16		[px_BcapSACP = tsc_BcapSACP_X32]			X.32
17		[px_BcapFNUR = tsc_Bcap28800]			
18		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType)))			see TS 27.001 cl. B.1.3.2. 2
19		[px_BcapFNUR <> tsc_Bcap28800]			
20		<pre>(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_31kHz, tsc_BcapRA_No, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, px_BcapModemType, px_BcapOtherModemType, tsc_BcapU2_X25)))</pre>			see TS 27.001 cl. B.1.3.2. 2
21	ERR2	[TRUE]		1	
22	ERR3	[(px_BcapSACP <> tsc_BcapSACP_I440450) AND (px_BcapSACP <> tsc_BcapSACP_X32)]		ı	
		lt_V110			
	-		ı		

		Test Step Dynamic I	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
23		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_V110, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.
24		It_X31			
24		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
25		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.
26		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			
27		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_7_SyncNT (tsc_BcapITC_UDI, tsc_BcapRA_X31, tsc_BcapSACP_X32, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.
28	ERR4	[TRUE]		1	
		lt_V120			
29		[px_BcapITC = tsc_BcapITC_IntUDI]			
30		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
31		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1.
32		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			
33		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.
34	ERR5	[TRUE]		ı	
35		[px_BcapITC = tsc_BcapITC_IntRDI]			
36		[(px_BcapUeFlowControl = tsc_BcapFlowNoX25)]			
37		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X25)))			see TS 27.001 cl. B.1.3.1. 2
38		[(px_BcapUeFlowControl = tsc_BcapFlowNoX75)]			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
39		(tcv_SetupMT := cs_SetupMT (cs_BcapMT_5ab7_V120 (tsc_BcapITC_UDI, tsc_BcapSACP_X32, tsc_BcapOtherITC_Spare, tsc_BcapSync , tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapU2_X75)))			see TS 27.001 cl. B.1.3.1.			
40	ERR6	[TRUE]		ı				
41	ERR7	[(px_BcapITC <> tsc_BcapITC_IntUDI) AND (px_BcapITC <> tsc_BcapITC_IntRDI)]		I				
		lt_BTM						
42		[px_BcapFNUR = tsc_Bcap56000]						
43		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_Other, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_Spare, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1. 7			
44		[(px_BcapFNUR = tsc_Bcap64000)]						
45		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_No, tsc_BcapSACP_I440450, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapMT_None, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.			
46	ERR8	[TRUE]		1				
		lt_Mmedia						
47		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap33600)]						
48		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_31kHz, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_V34)))			see TS 27.001 cl. B.1.3.2.			
49		[(px_BcapFNUR = tsc_Bcap32000) OR (px_BcapFNUR = tsc_Bcap64000)]						
50		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_UDI, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_Spare, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.			
51		[(px_BcapFNUR = tsc_Bcap56000)]						
52		(tcv_SetupMT := cs_SetupMT (cds_BcapMT_5a_SyncT (tsc_BcapITC_Other, tsc_BcapRA_Other, tsc_BcapSACP_I440450, tsc_BcapOtherITC_RDI, tsc_BcapOtherRA_H223, tsc_BcapStopBitSpare, tsc_BcapDataBitSpare, tsc_BcapParityNone, tsc_BcapOtherMT_None)))			see TS 27.001 cl. B.1.3.1.			

Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
53	ERR9	[TRUE]		I				
Deta	Detailed Comments : The algorithm for derivation of BS30 Bearer Capabilities							

Detailed Comments: The algorithm for derivation of BS30 Bearer Capabilities

IF service = 31Khz

IF sacp = I.440

Use coding of with BCAP BS30 31kHz nonX32 (see TS 27.001 cl. B.1.3.2.1)

IF sacp = X.32

IF rate = 28800

Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with TELSE

Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with NT

IF service = V110

Use coding of BACP BS30 UDI nonX32 (see TS 27.001 cl. B.1.3.1.1)

IF service = X31

Use coding of BCAP BS30 UDI X32 (see TS 27.001 cl. B.1.3.1.2) with X31

IF service = V120

IF itc = UDI

Lies coding of BCAP BS30 UDI X32 (see TS 27.001 cl. B.1.3.1.3) with V120 NT

IF itc = UDI
Use coding of BCAP BS30 UDI X32 (see TS 27.001 cl. B.1.3.1.2) with V120 NT
IF itc = RDI
Use coding of BCAP BS30 RDI X32 (see TS 27.001 cl. B.1.3.1.2) with V120 NT
ELSE
ERROR

IF service = BTM
IF itc = UDI
Use coding of BCAP BS30 BTM (see TS 27.001 cl. B.1.3.1.7) with UDI
IF itc = RDI
Use coding of BCAP BS30 BTM (see TS 27.001 cl. B.1.3.1.7) with RDI

Use coding of BCAP BS30 BTM (see TS 27.001 cl. B.1.3.1.7) with RDI ELSE ERROR

IF service = Sync_MmediaCall_
IF rate = 28800 OR rate = 33600
Use coding with BCAP BS30 31kHz X32 (see TS 27.001 cl. B.1.3.2.2) with T
IF rate = 32000 OR rate = 64000
Use coding of BCAP BS30 3GH (see TS 27.001 cl. B.1.3.1.6) with UDI
IF rate = 56000

Use coding of BCAP BS30 3GH (see TS 27.001 cl. B.1.3.1.6) with RDI

Test Step Name : ts_CC_BasicServMT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To generate a Bcap and a MT SETUP message based on the service, as well as on several IXIT

parameters.

Default : NAS_OtherwiseFail

Comments : 1. This test step generates an appropriate MT SETUP message according to the IXIT parameters of

Bearer services/Teleservices for an MT call.

2. The detailed algorithms for Bcap derivation for each Bearer service/Teleservice are described in test

steps ts_CC_BS20_MT, ts_CC_BS30_MT, ts_CC_TS61_MT, and ts_CC_TelephonyMT.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_InitTCV_MT (p_Serv)			
2		[p_Serv = tsc_SrvTelephony]			
3		(tcv_SetupMT := cs_SetupMT (cs_BcapSpeechMT))			
4		+ ts_UT_ConfigUE_MT (p_Serv)			
5		[p_Serv = tsc_SrvAltSpeechFax]			
6		+ ts_CC_TS61_MT (p_Serv)			
7		+ ts_UT_ConfigUE_MT (p_Serv)			
8		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
9		[px_BcapSyncAsync = tsc_BcapASync]			
10		+ ts_CC_BS20_MT (p_Serv)			
11		+ ts_UT_ConfigUE_MT (p_Serv)			
12		[px_BcapSyncAsync = tsc_BcapSync]			
13		+ ts_CC_BS30_MT (p_Serv)			
14		+ ts_UT_ConfigUE_MT (p_Serv)			
15	ERR1	[TRUE]		I	1
16	ERR2	[TRUE]		I	

Test Step Dynamic Behaviour

Test Step Name : ts_CC_BasicServMT_Def

Detailed Comments: 1. Invalid service

Group: L3M_CC_Steps/

Objective: To generate a Bcap and a MT SETUP message based on the default service.

The selected service is the PIXIT value.

Default : NAS_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_BasicServMT (px_CC_Serv)			

Detailed Comments:

Test Step Name : ts_CC_CheckServSupported (p_Serv : Services)

Group : L3M_CC_Steps/

Objective: To check wether the Basic Service p_Serv is supported against PICS answers.

Default : NAS_OtherwiseFail

Comments: In PICS, if the p_Serv is declared supported, the test case variable tcv_Res is set to TRUE, otherwise

FALSE.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Res := FALSE)			
2		[(p_Serv = tsc_SrvTelephony) AND pc_Speech]			
3		(tcv_Res := TRUE)			
4		[(p_Serv = tsc_SrvEmgCall) AND pc_EmergSpeech]			
5		(tcv_Res := TRUE)			
6		[(p_Serv = tsc_SrvAltSpeechFax) AND pc_AltSpeechFax_TS61]			
7		(tcv_Res := TRUE)			
8		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Async31kHz_9600]			
9		(tcv_Res := TRUE)			
10		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_Async31kHz_14400]			
11		(tcv_Res := TRUE)			
12		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_Async31kHz_19200]			
13		(tcv_Res := TRUE)			
14		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Async31kHz_28800]			
15		(tcv_Res := TRUE)			
16		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapModemType = tsc_BcapMT_Autobaud1) AND pc_Async31kHz_AutoBanding1]			
17		(tcv_Res := TRUE)			
18		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV110_9600]			
19		(tcv_Res := TRUE)			
20		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV110_14400]			
21		(tcv_Res := TRUE)			

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV110_19200]			
23		(tcv_Res := TRUE)			
24		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV110_28800]			
25		(tcv_Res := TRUE)			
26		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV110_38400]			
27		(tcv_Res := TRUE)			
28		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_AsyncV120_9600]			
29		(tcv_Res := TRUE)			
30		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_AsyncV120_14400]			
31		(tcv_Res := TRUE)			
32		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_AsyncV120_19200]			
33		(tcv_Res := TRUE)			
34		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_AsyncV120_28800]			
35		(tcv_Res := TRUE)			
36		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_AsyncV120_38400]			
37		(tcv_Res := TRUE)			
38		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_AsyncV120_48000]			
39		(tcv_Res := TRUE)			
40		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncV120_56000]			
41		(tcv_Res := TRUE)			
42		[(p_Serv = tsc_SrvPIAFS) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_AsyncPIAFS_32000]			
43		(tcv_Res := TRUE)			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		[(p_Serv = tsc_SrvPIAFS) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncPIAFS_64000]			
45		(tcv_Res := TRUE)			
46		[(p_Serv = tsc_SrvFTM) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_AsyncFTM_56000]			
47		(tcv_Res := TRUE)			
48		[(p_Serv = tsc_SrvFTM) AND (px_BcapSyncAsync = tsc_BcapASync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_AsyncFTM_64000]			
49		(tcv_Res := TRUE)			
50		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_Sync31kHzA_9600]			
51		(tcv_Res := TRUE)			
52		[(p_Serv = tsc_Srv31kHz)AND(px_BcapSyncAsync = tsc_BcapSync)AND(px_BcapFNUR = tsc_Bcap14400)AND pc_Sync31kHzA_14400]			
53		(tcv_Res := TRUE)			
54		[(p_Serv = tsc_Srv31kHz)AND(px_BcapSyncAsync = tsc_BcapSync)AND(px_BcapFNUR = tsc_Bcap19200)AND pc_Sync31kHzA_19200]			
55		(tcv_Res := TRUE)			
56		[(p_Serv = tsc_Srv31kHz) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_Sync31kHzA_28800]			
57		(tcv_Res := TRUE)			
58		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV110_28800]			
59		(tcv_Res := TRUE)			
60		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV110_48000]			
61		(tcv_Res := TRUE)			
62		[(p_Serv = tsc_SrvV110) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV110_56000]			
63		(tcv_Res := TRUE)			
64		[(p_Serv = tsc_SrvX31) AND(px_BcapSyncAsync = tsc_BcapSync) AND(px_BcapFNUR = tsc_Bcap9600) AND pc_SyncX31_9600]			
65		(tcv_Res := TRUE)			

Nr Lab 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 80	Behaviour Description	Constraints Ref Ver	rdict Comments
67 68 69 70 71 72 73 74 75 76	px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncX31_14400] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncX31_19200] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND		
68 69 70 71 72 73 74 75 76 77 78 79	[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncX31_19200] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND		
69 70 71 72 73 74 75 76	px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncX31_19200] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND		
70 71 72 73 74 75 76 77 78	[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND		
71 72 73 74 75 76 77 78	px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncX31_28800] (tcv_Res := TRUE) [(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND		
72 73 74 75 76 77 78	[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND		
73 74 75 76 77 78	px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND		
74 75 76 77 78			
75 76 77 78	(tcv_Res := TRUE)		
76 77 78	[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncX31_48000]		
77 78	(tcv_Res := TRUE)		
78	[(p_Serv = tsc_SrvX31) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncX31_56000]		
79	(tcv_Res := TRUE)		
	[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap9600) AND pc_SyncV120_9600]		
80	(tcv_Res := TRUE)		
	[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap14400) AND pc_SyncV120_14400]		
81	(tcv_Res := TRUE)		
82	[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap19200) AND pc_SyncV120_19200]		
83	(tcv_Res := TRUE)		
84	[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncV120_28800]		
85	1 ,		
86	(tcv_Res := TRUE)		
87	(tcv_Res := TRUE) [(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap38400) AND pc_SyncV120_38400]		

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
88		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap48000) AND pc_SyncV120_48000]			
89		(tcv_Res := TRUE)			
90		[(p_Serv = tsc_SrvV120) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncV120_56000]			
91		(tcv_Res := TRUE)			
92		[(p_Serv = tsc_SrvBTM) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncBTM_56000]			
93		(tcv_Res := TRUE)			
94		[(p_Serv = tsc_SrvBTM) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_SyncBTM_64000]			
95		(tcv_Res := TRUE)			
96		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap28800) AND pc_SyncMmediaCall_28800]			
97		(tcv_Res := TRUE)			
98		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap32000) AND pc_SyncMmediaCall_32000]			
99		(tcv_Res := TRUE)			
100		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap33600) AND pc_SyncMmediaCall_33600]			
101		(tcv_Res := TRUE)			
102		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap56000) AND pc_SyncMmediaCall_56000]			
103		(tcv_Res := TRUE)			
104		[(p_Serv = tsc_SrvMmediaCall) AND (px_BcapSyncAsync = tsc_BcapSync) AND (px_BcapFNUR = tsc_Bcap64000) AND pc_SyncMmediaCall_64000]			
105		(tcv_Res := TRUE)			
106		[TRUE]			
Detai	led Com	ments :			

Test Step Name : ts_CC_CheckState (p_CellId: INTEGER; p_State : B6)

Group: L3M_CC_Steps/

Objective: To check whether the UE under test is in the CC state 'p_State' and cause = #30.

Default : NAS_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_StatusEnq (tcv_TI_S))		
2	TSP	Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Status (tcv_TI_R, p_State, 30))	(P)	
3		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_CC_StatusAny (tcv_TI_R))		
4	TSF	[tcv_TestBody]		(F)	1
5	TSI	[NOT tcv_TestBody]		(I)	2

Detailed Comments: 1. If the state is not correct and this step is executed during test body

2. If the state is not correct and this step is executed during the preamble or the postamble of a

test

 $\textbf{Test Step Name} \quad : \ \, ts_CC_EnterU10_MT_Def \left(\ \, p_CellId : INTEGER \right.)$

Group : L3M_CC_Steps/

Objective: To bring UE to CC state U10 with an MT call.

Default : NAS_OtherwiseFail
Comments : See TS34.108 cl. 7.2.3.1

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_RRC_PagType1_TMSI_PTMSI_Cau (p_CellId, px_TMSI_Def , tcv_PagingCau)			
2		+ ts_RRC_ConnEst (p_CellId , est_MT, tcv_EstCause)			Step 1 – 5
3		Dc?RRC_DataInd	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, c_PagRsp (?, c_MobileIdTMSI_Iv))		Step 6
4		+ ts_MM_Authentication (p_CellId)			Steps 7–8
5		+ts_RRC_Security(p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)			Steps 9–10
6		Dc!RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, tcv_SetupMT)		Step 11
7		+ ts_CC_RcvCallConf (p_CellId)			Step 12
8		+ ts_RRC_SetUpRAB (p_CellId , tcv_RAB_Id ,tcv_CC_RB_ConfigType)			Step 13–14
9		+ It_ReceiveConnectOrAlerting			Step 15–16
10		Dc ! RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, cs_ConnAck (tcv_TI_S))		Step 17
11		+ ts_CC_CheckState (p_CellId, tsc_StateU10)			
12		It_ReceiveConnectOrAlerting Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Connect (tcv_TI_R))		Step 16
13		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Alert (tcv_TI_R))		Step 15
14		+ ts_AT_AnswerCall			
15		Dc ? RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_Connect (tcv_TI_R))		Step B16

Test Step Name : ts_CC_InitTCV_MT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective : To assign the tcv_RB_ConfigType test case variable, that is used in other steps that configure the

radio bearer for MT calls.

To assign the tcv_EstCause test case variable, that is used for the RRC connection establishment.

To assigne the tcv_BcapCE test case variable, that is used in the steps ts_CC_BSxx.

To assign the tcv_ActiveService test case variable, that contains the service used for the CC call To assign the tcv_PagingCau test case variable, that contains the paging cause value used in the

PAGING REQUEST message to be sent by SS to initiate the call.

To assign the tcv_TI_S and tcv_TI_R with the value 0.

Default : NAS_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_ActiveService := p_Serv, tcv_TI_S := cs_TI_MT, tcv_TI_R := cs_TI_MT, tcv_TI_R.tiFlag := '1'B, tcv_CN_Domain := cs_domain)			
2		[(p_Serv = tsc_SrvTelephony) OR (p_Serv = tsc_SrvAltSpeechFax)]			
3		(tcv_CC_RB_ConfigType := cell_DCH_Speech, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
4		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
5		[px_BcapSyncAsync = tsc_BcapASync]			
6		+ It_Asynchronous			
7		[px_BcapSyncAsync = tsc_BcapSync]			
8		+ It_Synchronous			
9	ERR4	[TRUE]		1	
10	ERR5	[TRUE]		1	
		It_Synchronous			
11		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
12		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau := terminatingConversationalCall)			
13		[(p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvX31)]			

	Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
14		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)				
15		[p_Serv = tsc_Srv31kHz]				
16		[px_BcapFNUR = tsc_Bcap28800]				
17		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB , tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall, tcv_PagingCau :=				
		terminatingConversationalCall)				
18		[px_BcapFNUR <> tsc_Bcap28800]				
19		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall , tcv_PagingCau := terminatingStreamingCall)				
20	ERR2	[TRUE]		1		
21	ERR3	[TRUE]		1		
		It_Asynchronous				
22		[(p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvV120)]				
23		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)				
24		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_Srv31kHz)]				
25		[(p_Serv = tsc_Srv31kHz) AND (px_BcapModemType = tsc_BcapMT_Autobaud1)]				
26		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT , tcv_EstCause := terminatingStreamingCall , tcv_PagingCau := terminatingStreamingCall)				
27		[(px_BcapFNUR = tsc_Bcap28800) OR (px_BcapFNUR = tsc_Bcap48000) OR (px_BcapFNUR = tsc_Bcap56000)]				
28		(tcv_CC_RB_ConfigType := cell_DCH_64kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_T, tcv_EstCause := terminatingConversationalCall,				
		tcv_PagingCau := terminatingConversationalCall)				
29		[TRUE]				

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
30		(tcv_CC_RB_ConfigType := cell_DCH_57_6kCS_RAB_SRB, tcv_BcapCE := tsc_BcapCE_NT, tcv_EstCause := terminatingStreamingCall, tcv_PagingCau := terminatingStreamingCall)						
31	ERR1	[TRUE]		1				
Deta	Detailed Comments :							

Test Step Name : ts_CC_RcvCallConf (p_CellId : INTEGER)

Group : L3M_CC_Steps/

Objective: To receive the CALL CONFIRMED message with or without Steam Identifier.

Default : NAS_OtherwiseFail
Comments : see TS 24.008 cl. 5.2.2.3.2

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd (tcv_CallConf := RRC_DataInd.msg, tcv_RAB_Id := tcv_CallConf.streamId.val)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_CallConf (tcv_TI_R, cr_StreamIdPresent))		1.
2		Dc ? RRC_DataInd (tcv_CallConf := RRC_DataInd.msg, tcv_RAB_Id := tsc_RAB_DefCS)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_CallConf (tcv_TI_R, -))		2.

Detailed Comments: 1. see TS 24.008 cl. 5.2.2.3.2: the SI received by the SS in the CALL CONFIRMED message shall

be included in the RABid

 $\hbox{2.see TS 24.008 cl. 5.2.2.3.2: if SS receive a CALL CONFIRMED message with no SI, the value } \\$

shall be set to 1.

Test Step Name : ts_CC_TS61_MT (p_Serv : Services)

Group : L3M_CC_Steps/

Objective: To generate an MT SETUP message with appropriate Bcap for TS61 service.

Default : NAS_OtherwiseFail

Comments : 3G TS 27.001 cl.s B.1.8 and B.1.10.3

The BCAP is a highly structured information element with 69 fields and the intention is to make the constraint re–usable, so the key fields of the BCAP shall be parametrised. This implies that more than

5 parameters are used for the BCAP constraints.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(px_BcapFNUR = tsc_Bcap9600) OR (px_BcapFNUR = tsc_Bcap14400)]			
2		<pre>(tcv_SetupMT := cs_SetupMT_2_Bcap (cs_BcapSpeechMT, cs_BcapMT_AsyncNT (tsc_BcapITC_Fax3, tsc_BcapRA_No , tsc_BcapSACP_I440450, tsc_BcapStopBitSpare , tsc_BcapDataB8 , tsc_BcapParityNone , tsc_BcapMT_None , tsc_BcapOtherMT_None)))</pre>			1. see 3G TS 27.001 B.1.8 B.1.10.3
3	ERR1	[(px_BcapFNUR <> tsc_Bcap9600) AND (px_BcapFNUR <> tsc_Bcap14400)]		1	2.

Detailed Comments: 1. The first bearer capability for TS61 (Alternate Speech / Fascimile) is: SPEECH. The second

berarer capability for TS 61 (Alternate Speech / Facsimile) is: FAX

2. The FNUR for TS61 can be 9600 bit/s or 14400 bit/s only

Test Step Name : ts_GMM_PagingResp (p_CellId : INTEGER)

Group: L3M_MM_GMM_Steps/

Objective : This Step will receive a Service Request message with casue set as Pagin Response

Default: NAS_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Dc ? RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v('010'B), c_MobileIdPTMSI_Iv (tcv_AssignedPTMSI),tcv_P S_KeySeq))		SERVIC E REQUE ST - Service type is 'paging respons e' - Mobile Id is current P-TMSI
2		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
3		+ ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, FALSE, ps_domain)			

Detailed Comments:

Test Step Name: ts_GMM_PagingType1_PTMSI(p_CellId : INTEGER; p_PagCause : PagingCause; p_PTMSI :

OCTETSTRING)

Group : L3M_MM_GMM_Steps/
Objective : Page UE for PS using PTMSI.

Default : NAS_OtherwiseFail

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_Delay(tsc_WaitBeforePaging)			Give delay before paging type1
2		+ts_CMAC_Pag1_Cfg(p_CellId)			
3		TM!RLC_TR_DATA_REQ	cas_PagingType1(p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_PTM SI(p_PagCause, o_ConvertPTMSI(p_PTMSI)		
			, ps_domain))		

Test Step Dynamic Behaviour

Test Step Name : ts_MM_StartCellA

Group : L3M_MM_GMM_Steps/

Objective : To configure cell A, for cell_DCH with paramters as set in the corresponding SSCellInfo tables (in

variable tcv_CellInfoA).

Default: NAS_OtherwiseFail

Comments : Description :

Detailed Comments:

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_CreateCellDCH (tsc_CellA)			
2		+ts_SendDefSysInfo(tsc_CellA)			

Detailed Comments: NOTE: If the test case writer needs other parameters than default then he should set them before

calling this test step as in following example:

This results in cell A configured with power levels as a neighbour cell.

 $\begin{tabular}{ll} \textbf{Test Step Name} &: ts_RRC_PagType1_TMSI_PTMSI_Cau \ (& p_Cellid: INTEGER; \end{tabular}$

p_Tmsi:OCTETSTRING; p_PagCause: PagingCause)

Group : L3M_RRC_Steps/

Objective : To send PAGING TYPE 1 with TIMSI for CS and PTMSI for PS and with a given paging cause

: RRC_Def1 Default

Comments : SS CMAC shall be configured before sending the PAGING TYPE 1 message.

Description

Detailed Comments:

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_RRC_Delay(tsc_WaitBeforePaging)			Give delay before paging type1
2		+ts_CMAC_Pag1_Cfg(p_CellId)			
3		[tcv_CN_Domain = cs_domain]			
4		TM!RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_TMSI (p_PagCause, o_ConvertTMSI(p_Tmsi), tcv_CN_Domain))		
5		[tcv_CN_Domain = ps_domain]			
6		TM!RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_PTM SI (p_PagCause, o_ConvertPTMSI (p_Tmsi		
), tcv_CN_Domain))		

 $\textbf{Test Step Name} \quad : \ ts_RRC_SendRB_SetUpDCH_57_6k_CS \ (\ p_CellId: INTEGER; p_RAB_Id: BITSTRING; p_ActTime: P_RAB_Id \ : \ P_RAB_Id: BITSTRING; p_ActTime: BITSTRING; p_A$

ActivationTime)

Group: L3M_RRC_Steps/L3M_RRC_RAB_Steps/

Objective: To setup a RADIO BEARER cell_DCH_57_6kCS_RAB_SRB and to reconfigure the SS accordingly.

Default : RRC_Def1

Comments : This Step is used by RLC test cases.

See TS 34.108 clause 6.10.2.4.17

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		+ ts_SetTmpCellInfo (p_CellId)						
2		AM ! RLC_AM_DATA_REQ	cas_RB_SetUpAM_WithCnf					
			tsc_CellDedicated,					
			tsc_RB2, tsc_Mui,					
			cbs_108_RB_SetUp57_6k_					
			CS(
			tcv_CellIndInfo.dl_Integrity					
			CheckInfo, tcv_RRC_Ti,					
			p_ActTime,					
			OMIT, p_RAB_Id,					
			tcv_TmpCellInfo.priScrmCo de,					
			tov TmpCollinfo ul Corombi					
			tcv_TmpCellInfo.uL_Scrambl ingCode					
3		AM ? RLC_AM_DATA_CNF	car_AM_DataMuiCnf					
ľ		AW : NEO_AW_DATA_ONI	(tsc_CellDedicated,					
			tsc_RB2, tsc_Mui)					
4		+ts_SS_2DCH_Modify (p_CellId, c_DCH_576_148_UL_Info(p_ActTime) ,						
		c_DCH_576_148_DL_Info(p_ActTime),						
		c_TrChInfoUL_576_148, c_TrChInfoDL_576_148,						
		c_TrLogMappingUL_4DCCH_1DTCH,						
		c_TrLogMappingDL_4DCCH_1DTCH, p_ActTime, cb_DL_DPCH_64K_CS						
		(c_DL_CommonInformationRB_SetUp (
		tsc_DL_DPCH1_SFP_Streaming),						
		tcv_TmpCellInfo.dl_DPCH_2ndScrCode), cb_UL_DPCH_Info(
		tsc_UL_DPDCH_SF_Streaming, pl0_96,						
_		tcv_TmpCellInfo.uL_ScramblingCode))			novlood			
5		+ts_SS_RB10_TM_Cfg (576)			payload size=			
					RLC payload			
					sizie +			
					RLC			
6	TSP	+ ts_RRC_ReceiveRB_SetupCmpl (header			
`	135	p_CellId ,						
		cell_DCH_57_6kCS_RAB_SRB)						
Detailed Comments :								

 $\textbf{Test Step Name} \quad : \ ts_RRC_SendRB_SetUpDCH_64k_CS \ (\ p_Cellid: INTEGER; p_RAB_Id : BITSTRING; p_ActTime: BITSTRING; p_ActTi$

ActivationTime)

Group: L3M_RRC_Steps/L3M_RRC_RAB_Steps/

Objective: To setup a RADIO BEARER cell_DCH_64kCS_RAB_SRB and to reconfigure the SS accordingly.

Default : RRC_Def1

Comments: This Step is used by RLC test cases.

See tS 34.108 clause 6.10.2.4.1.13

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		AM!RLC_AM_DATA_REQ	cas_RB_SetUpAM_WithCnf		
			tsc_CellDedicated, tsc_RB2, tsc_Mui, cbs_108_RB_SetUp64k_C S (
			tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, p_ActTime, OMIT, p_RAB_Id,		
			tcv_TmpCellInfo.priScrmCo de,		
			tcv_TmpCellInfo.uL_Scrambl ingCode		
)		
3		AM ? RLC_AM_DATA_CNF	car_AM_DataMuiCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui)		
4		+ts_SS_2DCH_Modify(p_CellId, c_DCH_640_148_UL_Info(p_ActTime), c_DCH_640_148_DL_Info(p_ActTime), c_TrChInfoUL_640_148, c_TrChInfoDL_640_148, c_TrLogMappingUL_4DCCH_1DTCH, c_TrLogMappingDL_4DCCH_1DTCH, p_ActTime, cb_DL_DPCH_64K_CS (c_DL_CommonInformationRB_SetUp (tsc_DL_DPCHI_SFP_64k_CS), tcv_TmpCellInfo.dl_DPCH_2ndScrCode), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_64k_CS, pl0_88, tcv_TmpCellInfo.uL_ScramblingCode))			
5		+ts_SS_RB10_TM_Cfg(640)			
6	TSP	+ ts_RRC_ReceiveRB_SetupCmpl (p_CellId , cell_DCH_64kCS_RAB_SRB)			
			•	•	•

 $\textbf{Test Step Name} \quad : \ ts_RRC_SendRB_SetUpDCH_64k_PS \ (\ p_CellId: \ INTEGER; \ p_RAB_Id: BITSTRING; \ p_ActTime: \ p_Ac$

ActivationTime)

Group: L3M_RRC_Steps/L3M_RRC_RAB_Steps/

Objective: To setup a RADIO BEARER cell_DCH_64kPS_RAB_SRB and to reconfigure the SS accordingly.

Default : RRC_Def1

Comments: This Step is used by RLC test cases.

See TS 34.108 clause 6.10.2.4.1.26

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		AM!RLC_AM_DATA_REQ	cas_RB_SetUpAM_WithCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui, cbs_108_RB_SetUp64k_PS (tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, p_ActTime, p_RAB_Id,		
			tcv_TmpCellInfo.priScrmCo de, tcv_TmpCellInfo.uL_Scrambl ingCode)		
3		AM ? RLC_AM_DATA_CNF	car_AM_DataMuiCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui)		
4		+ts_SS_2DCH_Modify(p_CellId, cb_DCH_336_148_UL_Info (p_ActTime), cb_DCH_336_148_DL_Info (p_ActTime), cb_TrChInfoUL_336_148, cb_TrChInfoDL_336_148, cb_TrLogMappingUL_4DCCH_1DTCH_PS, cb_TrLogMappingDL_4DCCH_1DTCH_PS, p_ActTime, cb_DL_DPCH_64K_PS (c_DL_CommonInformationRB_SetUp (tsc_DL_DPCH1_SFP_64k_PS),tcv_TmpCellInfo.dl_DPCH_2ndScrCode), cb_UL_DPCH_Info (tsc_UL_DPDCH_SF_64k_PS, pl0_96, tcv_TmpCellInfo.uL_ScramblingCode))			
5		+ts_SS_RB20_AM_PS_Cfg(320)			payload= RLC payload + RLC header
	TSP	+ ts_RRC_ReceiveRB_SetupCmpl (1

 $\textbf{Test Step Name} \hspace{0.2cm} : \hspace{0.1cm} ts_RRC_SendRB_SetUpDCH_Speech \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} ActTime: \hspace{0.1cm} ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} ActTime: \hspace{0.1cm} ActTime: \hspace{0.1cm} ActTime: \hspace{0.1cm} ActTime: \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} ActTime: \hspace{0.$

ActivationTime)

Group: L3M_RRC_Steps/L3M_RRC_RAB_Steps/

Objective: To setup a RADIO BEARER cell_DCH_Speech and to reconfigure the SS accordingly.

Default : RRC_Def1

Comments: This Step is used by RLC test cases.

See TS 34.018 clause 6.10.2.4.1.4

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		AM!RLC_AM_DATA_REQ	cas_RB_SetUpAM_WithCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui, cbs_108_RB_SetUpSpeech (tcv_CellIndInfo.dl_Integrity CheckInfo , tcv_RRC_Ti , p_ActTime , p_RAB_Id, tcv_TmpCellInfo.priScrmCo de, tcv_TmpCellInfo.uL_Scrambl		
3		AM ? RLC_AM_DATA_CNF +ts_SS_4DCH_Modify (p_CellId,	ingCode)) car_AM_DataMuiCnf (tsc_CellDedicated, tsc_RB2, tsc_Mui)		
		p_ActTime, c_DL_CommonInformationRB_SetUpSpeech (tsc_DL_DPCH1_SFP_Speech), cb_UL_DPCH_Info(tsc_UL_DPDCH_SF_Speech, pl0_84, tcv_TmpCellInfo.uL_ScramblingCode))			
5		+ts_SS_RB10_ToRB12_TM_Cfg			
6	TSP	+ ts_RRC_ReceiveRB_SetupCmpl (p_CellId , cell_DCH_Speech)			

 $\textbf{Test Step Name} \hspace{0.2cm} : \hspace{0.2cm} ts_RRC_SendRB_SetUpFACH_PS(\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} INTEGER; \hspace{0.1cm} p_RAB_Id: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.1cm} (p_CellId: \hspace{0.1cm} BITSTRING; \hspace{0.1cm} p_ActTime: \hspace{0.$

ActivationTime)

Group: L3M_RRC_Steps/L3M_RRC_RAB_Steps/

Objective: To setup a RADIO BEARER cell_FACH_PS and to reconfigure the SS accordingly.

Default : RRC_Def1

Comments : See TS 34.108 cl. 6.10.2.4.3.2.1.2 for downlink and 6.10.2.4.4.1.1.1 for uplink

No channel reconfiguration is needed, because the complete configuration is setup in

ts_SS_CreateCellFACH

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		(tcv_TmpCellInfo.cRNTI := '101010101010101010'B)			
3		+ ts_SaveCellInfo (p_CellId)			
4		AM ! RLC_AM_DATA_REQ	cas_RB_SetUpAM (tsc_CellDedicated, tsc_RB2, cbs_108_RB_SetUpFACH_ PS (tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, p_RAB_Id, tcv_TmpCellInfo.cRNTI		
_		(DDO D.L. (00)))		
5		+ ts_RRC_Delay (80)			
6		+ts_CMAC_New_RNTI_Reconf (FALSE, p_CellId, tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI)			
7	TSP	+ ts_RRC_ReceiveRB_SetupCmpl (p_CellId , cell_FACH_PS)			

Test Step Name : ts_RRC_SetUpRAB (

p_CellId: INTEGER; p_RAB_Id : BITSTRING;

p_RB_ConfigType : RB_ConfigType)
: L3M_RRC_Steps/L3M_RRC_RAB_Steps/

Objective : To setup a RADIO BEARER for different configuration and to reconfigure the SS accordingly.

Default : RRC_Def1

Comments : Description :

Group

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CalculateActTime (p_CellId)			
2		[p_RB_ConfigType = cell_DCH_Speech]			
3		+ ts_RRC_SendRB_SetUpDCH_Speech(p_CellId, p_RAB_Id, tcv_ActTime)			
4		+ ts_SetCellCfg (p_CellId, cell_DCH_Speech)			1.
5		[p_RB_ConfigType = cell_DCH_64kCS_RAB_SRB]			
6		+ts_RRC_SendRB_SetUpDCH_64k_CS (p_CellId, p_RAB_Id, tcv_ActTime)			
7		+ ts_SetCellCfg (p_CellId, cell_DCH_64kCS_RAB_SRB)			1.
8		[p_RB_ConfigType = cell_DCH_57_6kCS_RAB_SRB]			
9		+ts_RRC_SendRB_SetUpDCH_57_6k_CS (p_CellId, p_RAB_Id, tcv_ActTime)			
10		+ ts_SetCellCfg (p_CellId, cell_DCH_57_6kCS_RAB_SRB)			1.
11		[p_RB_ConfigType = cell_FACH_PS]			
12		+ts_RRC_SendRB_SetUpFACH_PS(p_CellId, p_RAB_Id, tcv_ActTime)			
13		+ ts_SetCellCfg (p_CellId, cell_FACH_PS)			1.
14		[p_RB_ConfigType = cell_DCH_64kPS_RAB_SRB]			
15		+ ts_RRC_SendRB_SetUpDCH_64k_PS (p_CellId, p_RAB_Id, tcv_ActTime)			
16		+ ts_SetCellCfg (p_CellId, cell_DCH_64kPS_RAB_SRB)			1.
17		[(p_RB_ConfigType = cell_RLC_DCH_AM_RAB_7Lis) OR (p_RB_ConfigType = cell_RLC_DCH_UM_RAB_7Lis) OR (p_RB_ConfigType = cell_RLC_DCH_UM_RAB_15Lis) OR (p_RB_ConfigType = cell_RLC_DCH_AM_RAB_15Lis)]			1.
18		[(p_RB_ConfigType = cell_PDCP_AM_RAB) OR (p_RB_ConfigType = cell_PDCP_UM_RAB) OR (p_RB_ConfigType = cell_PDCP_AM_UM_RAB)]		1	2.
19		[(p_RB_ConfigType = cell_Two_DTCH)]		ı	4.
20		[TRUE]		1	3.

Detailed Comments: 1. These configurations are applied to RLC test cases that should use specific Steps for this RAB setup procedure.

- Detailed Comments: ...

 2.These configurations are applied to PDCP test cases that should use specific Steps for this RAB setup procedure.

 Contain only SRB)

 - 3. No RAB is defined for other configurations (contain only SRB)4.This configurations is applied to RAB test cases that should use specific Steps for this RAB setup procedure.

Test Step Name : ts_ActivatePDP_AcceptMO (p_CellId :INTEGER)

Group : L3M_SM_Steps/

Objective: To establish mobile originated PDP Context.

Default : NAS_OtherwiseFail

Comments: This test step will receive PDP Context Activation and send PDP Context Accept to the UE.

This will take care of estabishing the RAB as per the received NSAPI.

Parameters; NIL

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_InitialiseDlyAndTrafficClass			
2		Dc ? RRC_DataInd (tcv_ActPDP_ContextReq := RRC_DataInd.msg, tcv_TI_R := tcv_ActPDP_ContextReq.ti, tcv_PktDataProtoAddr := tcv_ActPDP_ContextReq.pDP_Address, tcv_RecdNSAPI := tcv_ActPDP_ContextReq.requestedNSAPI.nSA PI_Value)	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_ActPDP_ContextReqMO (cr_QoS_InteractiveOrBackg roundMO_lv (tcv_DlyClass, tcv_TrafficClass)))		Receive PDP Context Activatio n Request, Store the recd NSAPI in tcv_recd _NSAPI
3		+lt_InitVaariableForStaticAddress			
4		+ts_SetTI_Rsp(tcv_TI_R)			
5		+ts_RRC_SetUpRAB(tsc_CellA, INT_TO_BIT(BIT_TO_INT(tcv_RecdNSAPI), 8), cell_DCH_64kPS_RAB_SRB)			This will establish the RAB using the received NSAPI. Ref 34.108, clause 7.2.4.2
6		+ ts_ReceiveActivatePDP_Accept_DCH (p_CellId)			
7		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
		lt_InitVaariableForStaticAddress			
8		[tcv_PktDataProtoAddr = (cr_PktDataProtoAddrMO_lv_Len (o_IntToOct((LENGTH_OF((o_IA5_IP_ToOct (px_PDP_IP_AddrInfoDCH , TRUE))) + 2), 1), px_PDP_IP_AddrInfoDCH))]			
9		(tcv_StaticPDP_AddressReceived := TRUE)			
10		[TRUE]			

Detailed Comments: Step1:

If we receive PDP Context Activation Request, once again before expiry of T3380, this means

that UE has not accepted the PDP Context Accept or some problem at the UE side.

 $\textbf{Test Step Name} \quad : \ \, \text{ts_InitialiseDlyAndTrafficClass}$

Group : L3M_SM_Steps/

Objective

Default : NAS_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]			
2		(tcv_DlyClass := '011'B, tcv_TrafficClass := '011'B)			
3		[pc_Background AND (px_RRC_PS_ServTested = ps_Background)]			
4		(tcv_DlyClass := '100'B, tcv_TrafficClass := '100'B)			
5		[TRUE]			

Test Step Name : ts_ReceiveActivatePDP_Accept_DCH (p_CellId :INTEGER)

Group : L3M_SM_Steps/

Objective: To establish mobile originated PDP Context.

Default : NAS_OtherwiseFail

Comments: This test step will send PDP Context Accept to the UE.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Len:= LENGTH_OF((o_IA5_IP_ToOct (px_PDP_IP_AddrInfoDCH , TRUE))) + 2)			Calculate the length field
2		(tcv_LenBit:= o_IntToOct(tcv_Len, 1))			Convert length in INTEGE R into bits
3		+ ts_InitialiseDlyAndTrafficClass			
4		[pc_UMTS_GSM = TRUE]			
5		[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]			
6		[tcv_StaticPDP_AddressReceived = FALSE]			If Static PDP Address NOT Received , hence include PDP address
7		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_GSM _v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), cs_PktDataProtoAddrMT (tcv_LenBit, px_PDP_IP_AddrInfoDCH)))		Send PDP Context Activatio n Accept, with LLC SAPI set as 3
8		[TRUE]			If Static PDP Address Received
9		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_GSMV, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), OMIT))		Send PDP Context Activatio n Accept, with LLC SAPI set as 3

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		<pre>[pc_Background AND (px_RRC_PS_ServTested = ps_Background) 1</pre>			
11		[tcv_StaticPDP_AddressReceived = FALSE]			If Static PDP Address NOT Received , hence include PDP address
12		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_GSM _v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), cs_PktDataProtoAddrMT (tcv_LenBit, px_PDP_IP_AddrInfoDCH)))		Send PDP Context Activatio n Accept, with LLC SAPI set as 3
13		[TRUE]			If Static PDP Address Received
14		Dc! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_GSM _v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), OMIT))		Send PDP Context Activatio n Accept, with LLC SAPI set as 3
15	ERR1	[TRUE]		ı	Paramet er error
16		[pc_UMTS_GSM = FALSE]			
17		<pre>[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]</pre>			
18		[tcv_StaticPDP_AddressReceived = FALSE]			If Static PDP Address NOT Received , hence include PDP address

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		Dc! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), cs_PktDataProtoAddrMT (tcv_LenBit, px_PDP_IP_AddrInfoDCH)))		Send PDP Context Activatio n Accept, with LLC SAPI set as 0 (not assigned)
20		[TRUE]			If Static PDP Address Received
21		Dc! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), OMIT))		Send PDP Context Activatio n Accept, with LLC SAPI set as 0 (not assigned)
22		<pre>[pc_Background AND (px_RRC_PS_ServTested = ps_Background)]</pre>			
23		[tcv_StaticPDP_AddressReceived = FALSE]			If Static PDP Address NOT Received , hence include PDP address
24		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_v, cs_QoS_InteractiveOrBackg roundMT_lv(tcv_DlyClass, tcv_TrafficClass), cs_PktDataProtoAddrMT (tcv_LenBit, px_PDP_IP_AddrInfoDCH)))		Send PDP Context Activatio n Accept, with LLC SAPI set as 0 (not assigned)
25		[TRUE]	, "		If Static PDP Address Received

	Test Step Dynamic Behaviour									
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments					
26		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_ActPDP_ContextAcpMT (tcv_TI_S, cs_LLC_SAPI_UMTS_v, cs_QoS_InteractiveOrBackg roundMT_Iv(tcv_DlyClass, tcv_TrafficClass), OMIT))		Send PDP Context Activatio n Accept, with LLC SAPI set as 0 (not assigned)					
27	ERR2	[TRUE]		I	Paramet er error					

Detailed Comments: Step1:

If we receive PDP Context Activation Request, once again before expiry of T3380, this means that UE has not accepted the PDP Context Accept or some problem at the UE side.

Test Step Dynamic Behaviour

Test Step Name : ts_SetTI_Rsp(p_tir: TI) Group : L3M_SM_Steps/

: To set the value of TI when a message is sent from the network as a response to a request from the Objective

Default : NAS_OtherwiseFail

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Tl_S.tiFlag := '1'B)			
2		(tcv_TI_S.tiVal := p_tir.tiVal)			

 $\begin{tabular}{ll} \textbf{Test Step Name} &: ts_SS_4DCH_Modify (p_CellId : INTEGER; p_ActTime : ActivationTime; \\ & p_DL_CommonInformation : DL_CommonInformation; p_UL_DPCH_Info : UL_DPCH_Info) \\ \end{tabular}$

Group : L3M_SS_ConfigSteps/

: to modify physical channel DPCH1and connect DCH1, DCH2, DCH3 and DCH5 to the physical Objective

channel, then map DCCH1-4 on to the DCH5 transport channel and map DTCH(subflow#1), DTCH(subflow#2), DTCH(subflow#3) to the DCH1, DCH2, DCH3 transport channel respectively.

Used for AMR speech.

Default : SS_Def

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		$[px_RAT = fdd]$			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, cb_DL_DPCH_122_AMR (p_DL_CommonInformation		1.
			tcv_TmpCellInfo.dl_DPCH_ 2ndScrCode),p_ActTime)		
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_4DCH_DL_Info (p_CellId, tsc_DL_DPCH1,c_TrChCo nfigTypeDCH_NoSHO,p_Ac tTime)		2.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_DL_DPCH1)		
7		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoDL_122_AMR, c_TrLogMappingDL_4DCC H_3DTCH ,p_ActTime)		3. C-RNTI and U-RNTI are not needed on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo (p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info ,p_ActTime)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf (p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_RE Q	ca_4DCH_UL_Info (p_CellId, tsc_UL_DPCH1,c_TrChCo nfigTypeDCH_NoSHO,p_Ac tTime)		2.
12		CPHY?CPHY_TrCH_Config_C NF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		

	Test Step Dynamic Behaviour									
Nr	Label	Beha	viour Description	Constraints Ref	Verdict	Comments				
13			CMAC! CMAC_Config_REQ	ca_CMAC_ReconfigInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_122_AMR, c_TrLogMappingUL_4DCC H_3DTCH,p_ActTime)		3. C-RNTI and U-RNTI are not needed on DPCH				
14			CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)						
15	ERR1	$[px_RAT = tdd]$			1					
16	ERR2	[TRUE]			I					

Detailed Comments: 1. configure new DPCH1for transporting conversational/speech/UL:12.2 DL:12.2 kbps/CS RAB +

UL:3.4 DL:3.4 kbps SRBs for DCCH.

2. connect DCH1, DCH2, DCH3 and DCH5 to DPCH1.

3. map logical channels: DCCH1-4 to DCH5, DTCH1 to DCH1, DTCH2 to DCH2, DTCH3 to DCH3 for both uplink and downlink and send relevant transport channel configuration information

to MAC.

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB10_TM_Cfg (p_PayLoad: INTEGER)

Group: L3M_SS_ConfigSteps/

Objective : setup radio bearers : RB10. default values from 34.123–1Table 7.2/3A

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info (tsc_CellDedicated , tsc_RB10, p_PayLoad, {uLlogicalChannelIdentity tsc_UL_DTCH1, dLlogicalChannelIdentity tsc_DL_DTCH1})		cofigure radio bearers: RB10 (TM + DTCH) note: set UE to AM mode correspondingly
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_CellDedicated , tsc_RB10)		
Deta	iled Com	ments :		•	•

Test Step Name : ts_SS_RB10_ToRB12_TM_Cfg

Group: L3M_SS_ConfigSteps/

Objective : setup radio bearers : RB10, RB11, RB12 for radio beaer subflow#1, subflow#2, subflow#3

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDe dicated, tsc_RB10, 81, {uLlogicalChannelIdentity tsc_UL_DTCH1, dLlogicalChannelIdentity tsc_DL_DTCH1})		cofigure radio bearers: RB10 for AMR subflow #1
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_Cell Dedicated, tsc_RB10)		
3		CRLC ! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDe dicated, tsc_RB11, 103, {uLlogicalChannelIdentity tsc_UL_DTCH2, dLlogicalChannelIdentity tsc_DL_DTCH2})		cofigure radio bearers : RB11 for AMR subflow #2
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_Cell Dedicated, tsc_RB11)		
5		CRLC! CRLC_Config_REQ	ca_RB_TM_Info(tsc_CellDe dicated, tsc_RB12, 60, {uLlogicalChannelIdentity tsc_UL_DTCH3, dLlogicalChannelIdentity tsc_DL_DTCH3})		cofigure radio bearers: RB12 for AMR subflow #3
6		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(tsc_Cell Dedicated, tsc_RB12)		
Deta	led Com	ments:	Dedicated, tsc_RB12)		

Test Step Name : ts_AT_CMSS (p_MsgNum: INTEGER)

Group: L3M_UT_Steps/

Objective : To set the UE to send message with index 'p_MsgNum + px_SMS_IndexOffset' from Preferred

message store

Default : UT_OtherwiseFail

Comments : Message with index=p_MsgNum + px_SMS_IndexOffset is sent from Preferred message store using

the AT command '+CMSS=<p_MsgNum + px_SMS_IndexOffset>'

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_BuildAT_Cmd			
2		Ut! AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1.
3		Ut ? AT_CmdCnf(tcv_AT_Cmd := AT_CmdCnf.resultString)	ca_AT_CmdCnfWithString		
4		(tcv_Res := o_CheckStringStartWith (tcv_AT_Cmd , " <cr><lf>+CMSS:"))</lf></cr>			2.
5	TSP	[tcv_Res]		(P)	
6	TSF	[NOT tcv_Res]		(F)	
		lt_BuildAT_Cmd			
7		(tcv_IA5_String1 := o_ConcatStrg("AT+CMSS=", o_IntToIA5((p_MsgNum + px_SMS_IndexOffset), 1)))			3.
8		(tcv_AT_Cmd := o_ConcatStrg(tcv_IA5_String1, " <cr>"))</cr>			4.

Detailed Comments: 1. see TS 27.005 cl. 3.5.2

2. the String in the AT ASP Confirmation primitive shall indicate that the setting was successful

3. AT+CMSS=<p_MsgNum>
4. AT+CMSS=<p_MsgNum><CR>

Test Step Dynamic Behaviour

Test Step Name : ts_AT_InitSMS_MO
Group : L3M_UT_Steps/

Objective: To attempt a MO short message service at the UE under test.

Default : UT_OtherwiseFail

Comments: To attempt a MO short message service at the UE under test.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_AT_CMSS(0)			1. send msg with index 0

Detailed Comments: 1. MMI_CmdReq (" Please initiate sending of a mobile originated short message from the UE ")
2. Index means index + px_SMS_IndexOffset

Test Step Name : ts_AT_OrgPS_Call (p_CellId : INTEGER)

Group : L3M_UT_Steps/

Objective: To originate a PDP Context from the UE.

Default : UT_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_AT_SupportToInit_PS_Call = TRUE]			USE complete set of AT comman ds.
2		+ It_AssignAT_Cmd			
3		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
4		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
5		+ts_AT_SetQoS			
6		(tcv_AT_Cmd :="AT+CGACT=1,1 <cr>")</cr>			ACTIVA TE PDP CONTE XT message for MO
7		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
8		[pc_AT_SupportToInit_PS_Call = FALSE]			USE only CGACT to initiate a call
9		(tcv_AT_Cmd :="AT+CGACT=1,1 <cr>")</cr>			ACTIVA TE PDP CONTE XT message for MO
10		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
		lt_AssignAT_Cmd			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
11		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Tvo_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Tvo_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Tvo_DTCH)						
		cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)]						
12		(tcv_AT_Cmd :=o_ConcatStrg(o_ConcatStrg("AT+CGDCONT=1,""IP"",""", o_ConcatStrg (o_ConcatStrg (tsc_AccessPtNameDCH,""","""), px_PDP_IP_AddrInfoDCH)), """,0,0 <cr>"))</cr>			Prepare ACTIVA TE PDP CONTE XT message for MO			

Test Step Dynamic Behaviour						
Nr L	abel	Behaviour Description	Constraints Ref	Verdict	Comments	
Nr L		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_OR (tcv_TmpCellInfo.cellConfig = cell_FACH_C_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NOConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_O_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]	Constraints Ref	Verdict	Comments	
14		(tcv_AT_Cmd :=o_ConcatStrg(o_ConcatStrg("AT+CGDCONT=1,""IP"",""", o_ConcatStrg (o_ConcatStrg (tsc_AccessPtNameFACH,""","""), px_PDP_IP_AddrInfoFACH)), """,0,0 <cr>"))</cr>			Prepare ACTIVA TE PDP CONTE XT message for MO	
15]	[TRUE]		I	Program ming error	

Test Step Name : ts_AT_SetQoS Group : L3M_UT_Steps/ Objective : This Step sets the QoS Default : UT_OtherwiseFail

Comments Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_PrepareAT_CmdCGEQREQ			set up the QoS with the followin g paramet ers:
2		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		
3		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
		It_PrepareAT_CmdCGEQREQ			
4		[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]			
5		(tcv_AT_Cmd := ("AT+CGEQREQ=1,2,64,64,,,1,320,""1E4"",""1E 5"",1,,3 <cr>"))</cr>			
6		[pc_Background AND (px_RRC_PS_ServTested = ps_Background)]			
7		(tcv_AT_Cmd := ("AT+CGEQREQ=1,3,64,64,,,1,320,""1E4"",""1E 5"",1,, <cr>"))</cr>			
8	ERR1	[TRUE]		I	Paramet er error

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_AT_AnswerCall Group : L3M_UT_Steps/

Objective : To request the UE to answer to a call

Default : UT_OtherwiseFail

Comments : The A AT command is used (see TS 27.007 clause 6.25)

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		Ut! AT_CmdReq	ca_AT_CmdReq ("ATA <cr>")</cr>					
2		Ut ? AT_CmdCnf	ca_AT_CmdCnfWithString					
Deta	Detailed Comments :							

Test Step Name : ts_AT_CmdCBST (p_Serv : Services)

Group : L3M_UT_Steps/

Objective: To configure the UE for the selected bearer service, using AT commands.

Default : UT_OtherwiseFail

Comments : First, the UE shall be configured for teh single mode (using the +CMOD AT command see 3G TS

27.007 clause 6.4).

Then, the UE is configured for the selected bearer service, the AT command line shall be created following this syntax: "AT+CBST=<speed>,<name>,<ce>" (See 3G TS 27.001 clause 6.7). Before calling this test step the tcv_BcapCE test case variables has to be set to correct value.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut ! AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0 <cr>")</cr>		0
,		LIF 2 AT CondCof	l '		
2		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
3		+ It_BuildAT_Cmd	as AT CondDoc /		
4		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		1
5		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
		lt_BuildAT_Cmd			
6		+ It_Speed			2
7		+ It_Name			
8		+ lt_Ce			
		It_Speed			
9		[(p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvFTM)]			
10		[px_BcapFNUR = tsc_Bcap9600]			
11		(tcv_AT_Cmd := "AT+CBST=71")			
12		[px_BcapFNUR = tsc_Bcap14400]			
13		(tcv_AT_Cmd := "AT+CBST=75")			
14		[px_BcapFNUR = tsc_Bcap19200]			
15		(tcv_AT_Cmd := "AT+CBST=79")			
16		[px_BcapFNUR = tsc_Bcap28800]			
17		(tcv_AT_Cmd := "AT+CBST=80")			
18		[px_BcapFNUR = tsc_Bcap38400]			
19		(tcv_AT_Cmd := "AT+CBST=81")			
20		[px_BcapFNUR = tsc_Bcap48000]			
21		(tcv_AT_Cmd := "AT+CBST=82")			
22		[px_BcapFNUR = tsc_Bcap56000]			
23		(tcv_AT_Cmd := "AT+CBST=83")			
24		[px_BcapFNUR = tsc_Bcap64000]			
25		(tcv_AT_Cmd := "AT+CBST=84")			
26		[p_Serv = tsc_SrvBTM]			
27		[px_BcapFNUR = tsc_Bcap56000]			
28		(tcv_AT_Cmd := "AT+CBST=115")			
29		[px_BcapFNUR = tsc_Bcap64000]			
30		(tcv_AT_Cmd := "AT+CBST=116")			
31		[p_Serv = tsc_SrvPIAFS]			
32		[px_BcapFNUR = tsc_Bcap32000]			
33		(tcv_AT_Cmd := "AT+CBST=120")			
34		[px_BcapFNUR = tsc_Bcap64000]			

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
35		(tcv_AT_Cmd := "AT+CBST=121")					
36		[p_Serv = tsc_SrvV120]					
37		[px_BcapFNUR = tsc_Bcap9600]					
38		(tcv_AT_Cmd := "AT+CBST=39")					
39		[px_BcapFNUR = tsc_Bcap14400]					
40		(tcv_AT_Cmd := "AT+CBST=43")					
41		[px_BcapFNUR = tsc_Bcap19200]					
42		(tcv_AT_Cmd := "AT+CBST=47")					
43		[px_BcapFNUR = tsc_Bcap28800]					
44		(tcv_AT_Cmd := "AT+CBST=48")					
45		[px_BcapFNUR = tsc_Bcap38400]					
46		(tcv_AT_Cmd := "AT+CBST=49")					
47		[px_BcapFNUR = tsc_Bcap48000]					
48		(tcv_AT_Cmd := "AT+CBST=50")					
49		[px_BcapFNUR = tsc_Bcap56000]					
50		(tcv_AT_Cmd := "AT+CBST=51")					
51		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvMmediaCall)]					
52		[px_BcapModemType = tsc_BcapMT_Autobaud1]					
53		(tcv_AT_Cmd := "AT+CBST=0")					
54		[px_BcapFNUR = tsc_Bcap9600]					
55		[px_BcapModemType = tsc_BcapMT_V32]					
56		(tcv_AT_Cmd := "AT+CBST=7")					
57		[px_BcapOtherModemType = tsc_BcapOtherMT_V34]					
58		(tcv_AT_Cmd := "AT+CBST=12")					
59		[px_BcapFNUR = tsc_Bcap14400]					
60		(tcv_AT_Cmd := "AT+CBST=14")					
61		[px_BcapFNUR = tsc_Bcap19200]					
62		(tcv_AT_Cmd := "AT+CBST=15")					
63		[px_BcapFNUR = tsc_Bcap28800]					
64		(tcv_AT_Cmd := "AT+CBST=16")					
65		[px_BcapFNUR = tsc_Bcap38400]					
66		(tcv_AT_Cmd := "AT+CBST=17")					
		It_Name					
67		[(px_BcapITC = tsc_BcapITC_IntUDI) OR (px_BcapITC = tsc_BcapITC_Int31kHzA)]					
68		[px_BcapSyncAsync = tsc_BcapASync]					
69		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",0"))					
70		[px_BcapSyncAsync = tsc_BcapSync]					
71		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",1"))					
72		[px_BcapITC = tsc_BcapITC_IntRDI]					
73		[px_BcapSyncAsync = tsc_BcapASync]					
74		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",4"))					

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
75		[px_BcapSyncAsync = tsc_BcapSync]						
76		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",5"))						
		lt_Ce						
77		[tcv_BcapCE = tsc_BcapCE_T]						
78		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",0 <cr>"))</cr>						
79		[tcv_BcapCE = tsc_BcapCE_NT]						
80		(tcv_AT_Cmd := o_ConcatStrg (tcv_AT_Cmd , ",1 <cr>"))</cr>						

Detailed Comments: 0. Configure UE for a single mode

1. configure the UE for the selected bearer service using the AT command

2. build the AT +CBST command line +CBST=<speed>,<name>,<ce>. See 3G TS 27.001 clause 6.7

Test Step Dynamic Behaviour

Test Step Name : ts_AT_DeactPDP_Context

Group : L3M_UT_Steps/

Objective: To deactivate a PDP Context using AT Commands

Default : UT_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_AT_Cmd :="AT+CGACT=0,1 <cr>")</cr>			Prepare DEACTI VATE PDP CONTE XT message for MO
2		Ut!AT_CmdReq	ca_AT_CmdReq (tcv_AT_Cmd)		

Test Step Name : ts_AT_TerminateCall
Group : L3M_UT_Steps/

Objective: To request the UE to terminate the call

Default : UT_OtherwiseFail

Comments : The H AT command issued(see TS 27.007 cl. 6.25)

Description :

Label	Behaviour Description	Constraints Ref	Verdict	Comments
	[pc_CHUP_AT_CommandSupp]			
	Ut! AT_CmdReq	ca_AT_CmdReq ("AT+CHUP <cr>")</cr>		
	Ut ? AT_CmdCnf	ca_AT_CmdCnf		
	[NOT pc_CHUP_AT_CommandSupp]			
	Ut! AT_CmdReq	ca_AT_CmdReq ("AT+CVHU=0 <cr>")</cr>		
	Ut ? AT_CmdCnf	ca_AT_AnyRsp		
	Ut!AT_CmdReq	ca_AT_CmdReq ("ATH <cr>")</cr>		
	Ut ? AT_CmdCnf	ca_AT_CmdCnf		
	Label	[pc_CHUP_AT_CommandSupp] Ut!AT_CmdReq Ut?AT_CmdCnf [NOT pc_CHUP_AT_CommandSupp] Ut!AT_CmdReq Ut?AT_CmdCnf Ut?AT_CmdCnf	[pc_CHUP_AT_CommandSupp] Ut!AT_CmdReq	[pc_CHUP_AT_CommandSupp] Ut!AT_CmdReq

Test Step Name : ts_UT_ConfigUE_MT (p_Serv : Services)

Group: L3M_UT_Steps/

Objective: Configure UE for MT call using AT or MMI commands.

Default : UT_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CC_CheckServSupported (p_Serv)			
2		[p_Serv = tsc_SrvTelephony]			
3		[tcv_Res]			
4		+ lt_ConfigTelephony			
5		[NOT tcv_Res]			
6		[p_Serv = tsc_SrvAltSpeechFax]			
7		[tcv_Res]			
8		+ lt_ConfigTS61			
9		[NOT tcv_Res]			
10		[(p_Serv = tsc_Srv31kHz) OR (p_Serv = tsc_SrvV110) OR (p_Serv = tsc_SrvV120) OR (p_Serv = tsc_SrvPIAFS) OR (p_Serv = tsc_SrvFTM) OR (p_Serv = tsc_SrvX31) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvBTM) OR (p_Serv = tsc_SrvMmediaCall)]			
11		[tcv_Res]			
12		+ ts_AT_CmdCBST (p_Serv)			
13		[NOT tcv_Res]			
14	ERR1	[TRUE]		I	0
		lt_ConfigTelephony			
15		Ut!AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=0 <cr>")</cr>		1
16		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
17		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MT telephony call")		
18		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
		lt_ConfigTS61			
19		Ut!AT_CmdReq	ca_AT_CmdReq ("AT+CMOD=1 <cr>")</cr>		2
20		Ut ? AT_CmdCnf	ca_AT_CmdCnf		
21		Ut!MMI_CmdReq	ca_MMI_CmdReq ("Configure UE for an MT telephony call")		3
22		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		

Detailed Comments: 0. invalid service

1. Configure UE for a single mode (see 3G TS 27.007 clause 6.4)

2. Configure UE for an alternating voice/fax mode (see 3G TS 27.007 clause 6.4)

3. For TS61, the UE is first configured for Voice

 $\textbf{Test Step Name} \quad : \ ts_CalculateActTime \ (\ p_CellId: INTEGER \)$

Group : BasicM_General_Steps/

Objective: To calculate the activation time with the tti value corresponding to the actual SS configuration.

Default : SS_Def

Comments : The tti value passed as parameter to ts_CPHY_ActTime is equal to tti/10 (e.g. tti 40 -> 4)

Based on 34.108 on SRB tti.

Description :

1	f Verdict Comments
cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB_SOR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis_) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis_) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis_) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis_) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis_) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB_) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_ST_6kCS_RAB_SRB_) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_ST_6kCS_RAB_SRB_) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS_) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2CR_SPS_) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS_) OR	
(tcv_TmpCellInfo.cellConfig = cell_DCH_64KCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6KCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64KPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6KCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6KCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init) OR	An RRC
cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_TSLS) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_TSLS) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_TSLS) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_TSLS) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_TSLS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_ST_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_ST_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_STANAIONeSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_SC_SIND_R (tcv_TmpCellInfo.cellConfig = cell_DCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_PS_Init) OR	connecti
(tov_TmpCellinfo.cellConfig = cell_DCH_57_6KCS_RAB_SRB)OR (tov_TmpCellinfo.cellConfig = cell_DCH_64kPS_RAB_SRB)OR (tov_TmpCellinfo.cellConfig = cell_PDCP_AM_RAB)OR (tov_TmpCellinfo.cellConfig = cell_PDCP_LM_RAB)OR (tov_TmpCellinfo.cellConfig = cell_PDCP_LM_RAB)OR (tov_TmpCellinfo.cellConfig = cell_PDCP_AM_UM_RAB)OR (tov_TmpCellinfo.cellConfig = cell_PDCP_AM_UM_RAB)OR (tov_TmpCellinfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis)OR (tov_TmpCellinfo.cellConfig = cell_RLC_DCH_LM_RAB_15Lis)OR (tov_TmpCellinfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis)OR (tov_TmpCellinfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis)OR (tov_TmpCellinfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)OR (tov_TmpCellinfo.cellConfig = cell_DCH_StandAloneSRB)OR (tov_TmpCellinfo.cellConfig = cell_DCH_2AM_PS)OR (tov_TmpCellinfo.cellConfig = cell_DCH_2C_SPS_Call)OR (tov_TmpCellinfo.cellConfig = cell_DCH_CS_PS_OR (tov_TmpCellinfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tov_TmpCellinfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tov_TmpCellinfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tov_TmpCellinfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tov_TmpCellinfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tov_TmpCellinfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tov_TmpCellinfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	on is
cell_DCH_57_6kCS_RAB_SRB_)OR (tov_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB_)OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB_)OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_LM_RAB_)OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_LM_RAB_)OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB_)OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis_)OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_LM_RAB_15Lis_)OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_TLis_)OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_TLis_)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB_)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS_)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_PS_CS_OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_PS_CS_OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_CS_PS_Init_)OR	establish
(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2CAM_CRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_CS_PS_Init) OR	ed.
cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Cail) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Cail) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_CS_PS_Init) OR	Use
(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_5C_BC_NAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_5T_BC_SC_NAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR	DCCH on DL
cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_557_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_PS_CS) OR	DPCH1
(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS_PS_Init_OR	Bi 9iii
cell_PDCP_UM_RAB) OR (tvy_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tvy_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tvy_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tvy_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tvy_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tvy_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tvy_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tvy_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tvy_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tvy_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tvy_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tvy_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tvy_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tvy_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR	
(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR	
(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Tmo_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR	
cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Tw_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Tw_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Tw_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR	
(tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Tor_DTCH_PS_CS) OR	
=cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_PS_OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_PS_Init_) OR	
(tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR	
=cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig =cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6KCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR	
(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR	
=cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Tour_DTCH_PS_CS)OR	
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cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR	
cell_DCH_StandAloneSRB)OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Tvo_DTCH_PS_CS)OR	
(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Tvo_DTCH_CS_PS_Init)OR	
cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
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cell_Two_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
cell_Four_DTCH_CS_PS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
cell_Two_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init)OR	
cell_Two_DTCH_CS_PS_Init)OR	
l l l l	
I I (tcv ImpCellinto.cellContig = I	
cell_Four_DTCH_CS_PS_Init)OR (tcv_TmpCellInfo.cellConfig =	
cell_Two_DTCH_PS_CS_Init)OR	
(tcv_TmpCellInfo.cellConfig =	
cell_Four_DTCH_PS_CS_Init)]	
3 + ts_CPHY_ActTime (p_CellId,	
tsc_DL_DPCH1, 4)	

Nr 4 4 5 6	Label	Behaviour Description [(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2PRACH_NoConn)] + ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1) [(tcv_TmpCellInfo.cellConfig = cell_FACH) OR	Constraints Ref	Verdict	Comments No RRC connecti on is establish ed Use CCCH configur ation
5		cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn)] + ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			connecti on is establish ed Use CCCH configur
		tsc_S_CCPCH1, 1)			1
6		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_StandAlonePCH_PS)]			One RRC connecti on establish ed on FACH
7		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
8		[(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn)]			One RRC connecti on establish ed on FACH BMC
9		+ ts_CPHY_ActTime (p_CellId, tsc_S_CCPCH1, 1)			
10		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR			
11		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 2)			
12		[(tcv_TmpCellInfo.cellConfig = cell_DCH_HS_DSCH)]			
13		+ ts_CPHY_ActTime (p_CellId, tsc_DL_DPCH1, 4)			
14		[(tcv_TmpCellInfo.cellConfig = cell_NotConfigured)]		I	
15		[TRUE]			

Test Step Name : ts_CountConfiguredCell
Group : BasicM_General_Steps/

Objective: Assign tcv_NumCfgCell to the number of cells already configured.

Default : SS_Def

Comments: When a cell is configured, the corresponding receod.cellConfig is set to a different value than

cell_NotConfigured

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_NumCfgCell := 0)			
2		+ lt_CheckOneCell (tcv_CellInfoA)			
3		+ lt_CheckOneCell (tcv_CellInfoB)			
4		+ It_CheckOneCell (tcv_CellInfoC)			
5		+ lt_CheckOneCell (tcv_CellInfoD)			
6		+ lt_CheckOneCell (tcv_CellInfoE)			
7		+ lt_CheckOneCell (tcv_CellInfoF)			
8		+ lt_CheckOneCell (tcv_CellInfoG)			
9		+ lt_CheckOneCell (tcv_CellInfoH)			
		lt_CheckOneCell (p_CellInfo : CellInfoCfg)			
10		[p_CellInfo.cellConfig <> cell_NotConfigured]			
11		(tcv_NumCfgCell := tcv_NumCfgCell + 1)			
12		[p_CellInfo.cellConfig = cell_NotConfigured]			

Test Step Name : ts_InitVariables

Group : BasicM_General_Steps/

Objective: Initialisation of the test case variables tcv_CellInfoX, tcv_SF_Pilot and tcv_SF512.

Default : SS_Def

Comments : tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE and tcv_CellInfoF :

contains the cell information used to configure SS.

tcv_SF_Pilot and tcv_SF512 are assigned based on the capability of the UE.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ lt_CalculateFrequencyInfo			
2		+lt_Init_SSInfo_CellA			
3		+lt_Init_SSInfo_CellB			
4		+lt_Init_SSInfo_CellC			
5		+lt_Init_SSInfo_CellD			
6		+lt_Init_SSInfo_CellE			
7		+lt_Init_SSInfo_CellF			
8		+lt_Init_SSInfo_CellG			
9		+lt_Init_SSInfo_CellH			
		lt_CalculateFrequencyInfo			
10		+ lt_CalculateFreqMid			
11		+ lt_CalculateFreqHigh			
12		+ lt_CalculateFreqLow			
		lt_CalculateFreqMid			
13		+ lt_CheckFreqSeperation(px_UARFCN_D_Mid, px_UARFCN_U_Mid)			
14		[NOT tcv_Res]			
15		(tcv_FreqInfoMid := c_FreqInfo (px_UARFCN_U_Mid, px_UARFCN_D_Mid))			
16		[tcv_Res]			
17		(tcv_FreqInfoMid := c_FreqInfo (OMIT, px_UARFCN_D_Mid))			Uplink UARFC N is OMITTE D when the distance of 190 MHz is used (distanc e of 950 in UARFC N)
		lt_CalculateFreqHigh			
18		+ It_CheckFreqSeperation(px_UARFCN_D_High, px_UARFCN_U_High)			
19		[NOT tcv_Res]			
20		(tcv_FreqInfoHigh := c_FreqInfo (px_UARFCN_U_High, px_UARFCN_D_High))			
21		[tcv_Res]			

		Test Step Dynamic B	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		(tcv_FreqInfoHigh := c_FreqInfo (OMIT, px_UARFCN_D_High))			Uplink UARFC N is OMITTE D when the distance of 190 MHz is used (distanc e of 950 in UARFC N)
23		lt_CalculateFreqLow + lt_CheckFreqSeperation(px_UARFCN_D_Low,			
23		px_UARFCN_U_Low)			
24		[NOT tcv_Res]			
25		(tcv_FreqInfoLow := c_FreqInfo (px_UARFCN_U_Low, px_UARFCN_D_Low))			
26 27		[tcv_Res] (tcv_FreqInfoLow := c_FreqInfo (OMIT,			Uplink
		px_UARFCN_D_Low))			UARFC N is OMITTE D when the distance of 190 MHz is used (distanc e of 950 in UARFC N)
		It_CheckFreqSeperation(p_UARFCN_D, p_UARFCN_U:INTEGER)			
28		[px_FDD_OperationBand = 1]			Operatio n Band 1 under test
29		[((p_UARFCN_D - p_UARFCN_U) = 950)]			Default seperati on
30 31		(tcv_Res := TRUE) [TRUE]			Non default seperati on
32 33		(tcv_Res := FALSE) [px_FDD_OperationBand = 2]			Operatio n Band 2 under test

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
34		[((p_UARFCN_D - p_UARFCN_U) = 400)]			Default seperati on
35 36		(tcv_Res := TRUE) [TRUE]			Non default seperati on
37 38		(tcv_Res := FALSE) [px_FDD_OperationBand = 3]			Operatio n Band 3 under test
39		[((p_UARFCN_D - p_UARFCN_U) = 475)]			Default seperati on
40		(tcv_Res := TRUE)			
41		[TRUE]			Non default seperati on
42		(tcv_Res := FALSE)			
43		[(px_FDD_OperationBand = 5) OR (px_FDD_OperationBand = 6)]			Operatio n Band 5 0r 6 under test
44		[((p_UARFCN_D - p_UARFCN_U) = 225)]			Default seperati on
45		(tcv_Res := TRUE)			
46		[TRUE]			Non default seperati on
47		(tcv_Res := FALSE)			
48		[TRUE]		I	
		It_Init_SSInfo_CellA			
49		(tcv_CellInfoA := c_CellInfoDef (tsc_CellA, px_PriScrmCode, tsc_URA_IdCellA, px_TCellA, tsc_SFN_OffsetA, tcv_FreqInfoMid , px_UL_ScramblingCode))			1.
		lt_Init_SSInfo_CellB			
50		(tcv_CellInfoB := c_CellInfoDef (tsc_CellB, ((px_PriScrmCode + 50) MOD 512) ,			2.
		tsc_URA_IdCellB, px_TCellB, tsc_SFN_OffsetB, tcv_FreqInfoMid , ((px_UL_ScramblingCode +1000) MOD 16777216)))			
		lt_Init_SSInfo_CellC			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
51		(tcv_CellInfoC := c_CellInfoDef (tsc_CellC, ((px_PriScrmCode + 100) MOD 512), tsc_URA_IdCellC, px_TCellC, tsc_SFN_OffsetC, tcv_FreqInfoMid, ((px_UL_ScramblingCode +2000) MOD 16777216)))			3.
		lt_Init_SSInfo_CellD			
52		(tcv_CellInfoD := c_CellInfoDef (tsc_CellD, ((px_PriScrmCode + 150) MOD 512), tsc_URA_IdCellD, px_TCellD, tsc_SFN_OffsetD, tcv_FreqInfoHigh, ((px_UL_ScramblingCode +3000) MOD 16777216)))			4.
		lt_Init_SSInfo_CellE			
53		(tcv_CellInfoE := c_CellInfoDef (tsc_CellE, ((px_PriScrmCode + 200) MOD 512), tsc_URA_IdCellE, px_TCellE,tsc_SFN_OffsetE, tcv_FreqInfoHigh, ((px_UL_ScramblingCode +4000) MOD 16777216)))			5.
		It_Init_SSInfo_CellF			
54		(tcv_CellInfoF := c_CellInfoDef (tsc_CellF, ((px_PriScrmCode + 250) MOD 512), tsc_URA_IdCellF, px_TCellF, tsc_SFN_OffsetF, tcv_FreqInfoHigh , ((px_UL_ScramblingCode +5000) MOD 16777216)))			6.
		lt_Init_SSInfo_CellG			
55		(tcv_CellInfoG := c_CellInfoDef (tsc_CellG, ((px_PriScrmCode + 300) MOD 512), tsc_URA_IdCellG, px_TCellG, tsc_SFN_OffsetG, tcv_FreqInfoMid , ((px_UL_ScramblingCode +6000) MOD 16777216)))			
		lt_Init_SSInfo_CellH			
56		(tcv_CellInfoH := c_CellInfoDef (tsc_CellH, ((px_PriScrmCode + 350) MOD 512), tsc_URA_IdCellH, px_TCellH, tsc_SFN_OffsetH, tcv_FreqInfoMid , ((px_UL_ScramblingCode +7000) MOD 16777216)))			

- **Detailed Comments**: 1. The primary scrambling code of cell A is equal to the pixit value
 - 2. The primary scrmabling code of cell B is equal to the pixit value + 50
 - 3. The primary scrmabling code of cell B is equal to the pixit value + 100
 - 4. Cell A and D do not have the same frequency, the primary scrambling code of cell D is equal to the one of cell A
 - 5. Cell B and E do not have the same frequency, the primary scrambling code of cell E is equal to the one of cell B
 - 6. Cell C and F do not have the same frequency, the primary scrambling code of cell F is equal to the one of cell C

Test Step Name : ts_NAS_Delay(p_Dly: INTEGER)

Group : BasicM_General_Steps/
Objective : Realization of a Delay
Default : NAS_OtherwiseFail

Comments : Description :

		Constraints Ref	Verdict	Comments
1	START t_Dly(p_Dly)			
2	?TIMEOUT t_Dly			

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_RRC_Delay (p_Dly: INTEGER)

Group : BasicM_General_Steps/
Objective : Realization of a Delay

Default : RRC_Def1

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		START t_Dly(p_Dly)			
2		?TIMEOUT t_Dly			

 $\textbf{Test Step Name} \quad : \ ts_RRC_InitVariablesPS \ (\ p_CellToBeCreated \ : \ CellToBeCreated \)$

Group : BasicM_General_Steps/

Objective : Initialisation of Testcase variables for RRC testcases in the PS_domain

Default : RRC_Def1

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_InitVariables			
2		(tcv_CN_Domain := ps_domain, tcv_RAB_Id := tsc_RAB_DefPS)			
3		[p_CellToBeCreated = cell_FACH]			1.
4		(tcv_RRC_RAB_Type := cell_FACH_PS)			
5		+ lt_RRC_InitServVarPS			
6		[p_CellToBeCreated = cell_DCH]			
7		(tcv_RRC_RAB_Type := cell_DCH_64kPS_RAB_SRB)			
8		+ lt_RRC_InitServVarPS			
		It_RRC_InitServVarPS			
9		[pc_Interactive AND (px_RRC_PS_ServTested = ps_Interactive)]			
10		(tcv_RRC_PagingCau := terminatingInteractiveCall, tcv_RRC_EstCauMO := originatingInteractiveCall, tcv_RRC_EstCauMT := terminatingInteractiveCall)			
11		[pc_Background AND (px_RRC_PS_ServTested = ps_Background)]			
12		(tcv_RRC_PagingCau := terminatingBackgroundCall, tcv_RRC_EstCauMO := originatingBackgroundCall, tcv_RRC_EstCauMT := terminatingBackgroundCall)			
13	ERR1	[TRUE]		I	Paramet er error

Detailed Comments: 1. In the ps_domain with a cell_FACH configuration, the RAB configuration to be used is

cell_FACH_PS

Test Step Name : ts_SaveCellInfo (p_CellId : INTEGER)

Group : BasicM_General_Steps/

Objective: To save in the variable dedicated to the cell p_CellID, the value contained in tcv_TmpCellInfo.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_CellId = tsc_CelIA]			
2		(tcv_CellInfoA := tcv_TmpCellInfo)			
3		[p_CellId = tsc_CellB]			
4		(tcv_CellInfoB:= tcv_TmpCellInfo)			
5		[p_CellId = tsc_CellC]			
6		(tcv_CellInfoC:= tcv_TmpCellInfo)			
7		[p_CellId = tsc_CelID]			
8		(tcv_CellInfoD:= tcv_TmpCellInfo)			
9		[p_CellId = tsc_CellE]			
10		(tcv_CellInfoE := tcv_TmpCellInfo)			
11		[p_CellId = tsc_CellF]			
12		(tcv_CellInfoF := tcv_TmpCellInfo)			
13		[p_CellId = tsc_CelIG]			
14		(tcv_CellInfoG := tcv_TmpCellInfo)			
15		[p_CellId = tsc_CelIH]			
16		(tcv_CellInfoH := tcv_TmpCellInfo)			
17		[TRUE]		I	program ming error
Detai	iled Com	ments :	<u> </u>	•	•

Test Step Dynamic Behaviour

 $\textbf{Test Step Name} \quad : \ ts_SetCellCfg \ (\ p_CellId : INTEGER \ ; \ p_CellConfig : RB_ConfigType \)$

Group : BasicM_General_Steps/

Objective: To assign the field cellConfig of the cell given as parameter to the value 'p_CellConfig'.

(tcv_CellInfo[p_CellId] := p_CellConfig)

Default : SS_Def

Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
1		+ ts_SetTmpCellInfo (p_CellId)				
2		(tcv_TmpCellInfo.cellConfig := p_CellConfig)				
3		+ ts_SaveCellInfo (p_CellId)				
Detailed Comments :						

Test Step Name : ts_SetTmpCellInfo (p_CellId : INTEGER)

Group : BasicM_General_Steps/

Objective : To Set global variable tcv_TmpCellInfo to the table corresponding to given cell

Default : SS_Def

Comments: This Step helps the programmer when he/she needs to access cell information in a generic test Step.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
1		[p_CellId = tsc_CellA]				
2		(tcv_TmpCellInfo := tcv_CellInfoA)				
3		[p_CellId = tsc_CellB]				
4		(tcv_TmpCellInfo := tcv_CellInfoB)				
5		[p_CellId = tsc_CellC]				
6		(tcv_TmpCellInfo := tcv_CellInfoC)				
7		[p_CellId = tsc_CellD]				
8		(tcv_TmpCellInfo := tcv_CellInfoD)				
9		[p_CellId = tsc_CellE]				
10		(tcv_TmpCellInfo := tcv_CellInfoE)				
11		[p_CellId = tsc_CellF]				
12		(tcv_TmpCellInfo := tcv_CellInfoF)				
13		[p_CellId = tsc_CellG]				
14		(tcv_TmpCellInfo := tcv_CellInfoG)				
15		[p_CellId = tsc_CellH]				
16		(tcv_TmpCellInfo := tcv_CellInfoH)				
17	ERR	[TRUE]		I	Fatal error	
Deta	Detailed Comments :					

Test Step Name : ts_GMM_Authentication (p_CellId : INTEGER)

Group: BasicM_MM_GMM_Steps/

Objective: Generate authentication paramters and run the GMM Authentication procedure

Default: NAS_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_GMM_AuthenticationInit			Comput e all relevant authenti cation paramet ers.
2		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated , tsc_RB3, cs_AuthAndCiphReq (c_GMM_AuthRAND(tcv_Au thRAND), c_GMM_KeySeq_tv(tcv_PS_KeySeq), c_GMM_AuthAUTN(tcv_Au thAUTN)))		AUTHE NTICATI ON AND CIPHER ING REQUE ST using relevant PS keys compute d before.
3		Dc ? RRC_DataInd (tcv_TmpAuthAndCiphRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value, tcv_AuthRspExt := tcv_TmpAuthAndCiphRspPDU.authRspExt)	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphRsp (c_AuthRspAny_tv,c_AuthC iphRspExtAny))		AUTHE NTICATI ON AND CIPHER ING RESPO NSE including both Authenti cation Respons e paramter s (RES and RES ext)
4		(tcv_Res := o_AuthRspChk(tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			Verify that the received Authenti cation Respons e paramter s match expecte d respons e.
5	TSF1	[tcv_Res = FALSE]		(F)	-

		Test Step Dynami	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
6 7	TSP1	[tcv_Res = TRUE] Dc ? RRC_DataInd (tcv_TmpAuthAndCiphRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_TmpAuthAndCiphRspPDU.authRsp.value)	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphRsp (c_AuthRspAny_tv, -))	(P)	AUTHE NTICATI ON AND CIPHER ING RESPO NSE including only one Authenti cation Respons
8	7050	(tcv_Res := o_AuthRspChk(tcv_AuthRsp, _, tcv_AuthK, tcv_AuthRAND, FALSE))			e paramter s (RES) Verify that the received Authenti cation Respons e paramter s match expecte d respons e.
9 10 11	TSF2 TSP2	[tcv_Res = FALSE] [tcv_Res = TRUE] Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_AuthAndCiphFailureAny)	(F) (P) I	AUTHE NTICATI ON AND CIPHER ING Failure, then stop execution by assignin g INCON CLUSIV E verdict as this might be a USIM issue.

Detailed Comments: See 3GPP 24.008 / 4.7, 3GPP 33.102 / 6.3 and 3GPP 34.108 / 8 (for the computation of

authentication paramters

for Test USIM)

See also the detailed description in test Step ts_MM_Authentication, on which this test Step is

based.

Test Step Name : ts_GMM_AuthenticationInit
Group : BasicM_MM_GMM_Steps/

Objective: Computation of variables related to the Authentication and Key Agreement

procedure for PS domain

Default : NAS_OtherwiseFail

Comments: Based on TS 34.108 cl. 8.1.2 and TS 33.102 cl.s 6.3 and 6.8.1.2

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_IncrementCiphKeySeqNum			
2		+lt_AuthCalcAUTN			1. Calculati on of AUTN needed for Authenti cation Request
3		+lt_AuthCalcUMTS_Others			2. Calculati on of other authenti cation informati on needed (IK, CK, XRES)
4		+lt_AuthCalcKcGSM			3. Calculati on of Kc GSM, using IK and CK
		lt_IncrementCiphKeySeqNum			
5		[tcv_PS_KeySeq = '000'B]			
6		(tcv_PS_KeySeq := '001'B)			
7		[tcv_PS_KeySeq = '001'B]			
8		(tcv_PS_KeySeq := '010'B)			
9		[tcv_PS_KeySeq = '010'B]			
10		(tcv_PS_KeySeq := '011'B)			
11		[tcv_PS_KeySeq = '011'B]			
12		(tcv_PS_KeySeq := '100'B)			
13		[tcv_PS_KeySeq = '100'B]			
14		(tcv_PS_KeySeq := '101'B)			
15		[tcv_PS_KeySeq = '101'B]			
16		(tcv_PS_KeySeq := '110'B)			
17		[TRUE]			
18		(tcv_PS_KeySeq := '000'B)			
		lt_AuthCalcAUTN			
Ь	ı		I .		1

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
19		(tcv_AuthXDOUT := o_BitstringXOR(tcv_AuthRAND, tcv_AuthK, 128))			XDOUT := RAND XOR K
20		(tcv_AuthCDOUT := o_BitstringConcat(tsv_AuthSQN, tcv_AuthAMF, 48, 16))			CDOUT := SQN AMF
21		(tcv_AuthXDOUT_Half := o_BitstringXtract(tcv_AuthXDOUT, 128, 64, 0))			XDOUT _half := 64 bits of XDOUT starting from offset 0
22		(tcv_AuthAK := o_BitstringXtract(tcv_AuthXDOUT, 128, 48, 24))			AK := 48 bits of XDOUT starting from offset 24
23		(tcv_AuthAUTN_1 := o_BitstringXOR(tsv_AuthSQN, tcv_AuthAK, 48))			AUTN1 := SQN XOR AK
24		(tcv_AuthMAC := o_BitstringXOR(tcv_AuthXDOUT_Half, tcv_AuthCDOUT, 64))			MAC := XDOUT _half XOR CDOUT
25		(tcv_AuthAUTN_2 := o_BitstringConcat(tcv_AuthAMF, tcv_AuthMAC, 16, 64))			AUTN2 := AMF MAC
26		(tcv_AuthAUTN := o_BitstringConcat(tcv_AuthAUTN_1, tcv_AuthAUTN_2, 48, 80)) It_AuthCalcUMTS_Others			AUTN := AUTN1 AUTN2
27		(tcv_PS_AuthIK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 16))			IK := 128 bits of XDOUT starting from offset 16 (wrappin g)

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
28		(tcv_PS_AuthCK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 8))			CK := 128 bits of XDOUT starting from offset 8 (wrappin g)			
29		<pre>(tcv_AuthXRES := o_BitstringXtract(tcv_AuthXDOUT, 128, (tcv_AuthN + 1), 0))</pre>			XRES := (n+1) bits of XDOUT starting from offset 0			
30		It_AuthCalcKcGSM (tcv_AuthCK_1 := o_BitstringXtract(tcv_PS_AuthCK, 128, 64, 0))			CK1 := 64 bits of CK starting from offset 0			
31		(tcv_AuthCK_2 := o_BitstringXtract(tcv_PS_AuthCK, 128, 64, 64))			CK2 := 64 bits of CK starting from offset 64			
32		(tcv_AuthIK_1 := o_BitstringXtract(tcv_PS_AuthIK, 128, 64, 0))			IK1 := 64 bits of IK starting from offset 0			
33		(tcv_AuthIK_2 := o_BitstringXtract(tcv_PS_AuthIK, 128, 64, 64))			IK2 := 64 bits of IK starting from offset 64			
34		<pre>(tcv_AuthCK_XOR := o_BitstringXOR(tcv_AuthCK_1, tcv_AuthCK_2, 64))</pre>			CK_XO R := CK1 XOR CK2			
35		(tcv_AuthIK_XOR := o_BitstringXOR(tcv_AuthIK_1, tcv_AuthIK_2, 64))			IK_XOR := IK1 XOR IK2			

Continued from previous page

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
36		(tcv_AuthKcGSM := o_BitstringXOR(tcv_AuthCK_XOR, tcv_AuthIK_XOR, 64))			KcGSM := CK_XO R XOR IK_XOR (= CK1 XOR CK2 XOR IK1 XOR IK2)				
Deta	iled Com	ments: (see ts_MM_AuthenticationInit)							

Test Step Name : ts_GMM_IdleUpdated (p_CellId : INTEGER)

Group : BasicM_MM_GMM_Steps/

Objective: Turn on UE and register for PS or combined PS/CS services.

Default : NAS_OtherwiseFail
Comments : Initial conditions:

- Cell referenced by p_CellId is configured and sending SysInfos on BCCH

- UE is switched off with a valid Test USIM inserted

Input paramters:

- p_CellId referencing the Cell

Global paramters used:

- The SS will use global authentication paramters and keys which are generated in test Step

 $ts_GMM_Authentication:$

tcv_AuthRAND, tcv_KeySeq, tcv_AuthAUTN, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM.

- The SS will assign to the UE default values for P-TMSI, P-TMSI signature and

(in case of combined PS/IMSI attach) TMSI.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_I)]			If UE is in operatio n mode A and network mode of operatio n is I, then run combine d PS/CS
		. It felled by describ NIMO I			es.
3		+lt_IdleUpdated_NMO_I			
4		(tcv_Use_E_PLMN := FALSE)			Invalidat e the tcv_E_P LMN
5		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_II)]			If UE is in operatio n mode A and network mode of operatio n is II, then run first CS and PS procedur es indepen dently
6		+lt_IdleUpdated_NMO_II			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
7		(tcv_Use_E_PLMN := FALSE)			Invalidat e the
		, U5 0 M 1 0 M 1 0			tcv_E_P LMN
8		[tcv_UE_OpMode = opModeC]			If UE is in operatio
					n mode C,
					then run GMM procedur
					e (for PS only attach).
9		+lt_GMMOnly_IdleUpdated			
10		(tcv_Use_E_PLMN := FALSE)			Invalidat e the tcv_E_P LMN
11	ERR	[TRUE]		I	Program ming error
		lt_IdleUpdated_NMO_I			
12		+ ts_MMI_UE_SwitchOn			
13		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establis h RRC connecti on
14		[pc_AutomaticAttachSwitchON = TRUE]			Perform combine d CS/PS procedur e
15		+lt_AttachRequest			ATTACH REQUE ST
16		+ts_GMM_Authentication(p_CellId)			AUTHE NTICATI
					ON AND CIPHER
					ING REQUE ST
					AUTHE NTICATI ON
					AND CIPHER
					ING RESPO NSE

Comm	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
17		+lt_SecurityMode			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE		
18		+lt_AttachAccept			ATTACH ACCEP T ATTACH COMPL ETE		
19		+It_RRC_ConnRel			RRC connecti on release		
20		[pc_AutomaticAttachSwitchON = FALSE]			First perform Location Update procedur e, and then trigger UE via AT comman d to perform GPRS Attach		
21		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start) + ts_SS_SecurityDownloadStart (car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		Any Location Update request		
23		cs_domain, tcv_Start) +ts_MM_Authentication(p_CellId)			Authenti cation		
24		+ts_RRC_Security (p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain) + lt_LocUpdAcc			53.1311		
26		+lt_RRC_ConnRel			Release RRC connecti on		
27		START t_WaitS(1)			Wait 1 s to allow UE to relax		

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
28		?TIMEOUT t_WaitS			
29		START t_WaitS (60)			
30		+ts_AT_TriggerGMM_Attach			trigger UE to initiate GMM Attach after allowing the UE to decode Sys Infos
31		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establis h RRC connecti on
32		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:=	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (ATTACH REQUE ST -
		tcv_TmpAttachReqPDU.at tachType.type, tcv_Start := RRC_DataInd.start)CANCEL t_WaitS	c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		Extract Attach type requeste d
33		+ ts_SS_SecurityDownloa dStart (ps_domain, tcv_Start)			
34		+ts_GMM_Authenticati on (p_CellId)			AUTHE NTICATI ON AND CIPHER ING REQUE ST AUTHE NTICATI ON AND CIPHER ING RESPO NSE
35		+It_SecurityMode			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
36		+lt_AttachAccept			ATTACH ACCEP T ATTACH				
					COMPL ETE				
37		+lt_RRC_ConnRe I			RRC connecti on release				
38		? TIMEOUT t_WaitS It_IdleUpdated_NMO_II		F	IF UE doesent respond to Attach triggere d Fail the UE.				
39		+ ts_MMI_UE_SwitchOn							
40		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establis h RRC connecti on				
41		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start)	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		Any Location Update request				
42		(tcv_GMM_AttachExpect := TRUE, tcv_GMM_AttachRec := FALSE)			Set Flags in order to enable default handler to store ATTACH REQUE ST PDU in case it is sent during Location Update procedur e				
43		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)							
44		+ts_MM_Authentication(p_CellId)			Authenti cation				
45		+ts_RRC_Security (p_CellId, tcv_AuthCK, tcv_AuthIK, tcv_AuthKcGSM, TRUE, cs_domain)							
46		+ lt_LocUpdAcc							
47		+lt_HandleAttachRequest							

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
48		+ts_GMM_Authentication (p_CellId)			AUTHE NTICATI ON AND CIPHER ING REQUE ST AUTHE NTICATI ON AND CIPHER ING
49		+lt_SecurityMode			RESPO NSE SECURI TY MODE COMMA ND SECURI TY MODE COMPL
50		+lt_AttachAccept			ETE ATTACH ACCEP T ATTACH COMPL
51		+lt_RRC_ConnRel			RRC connecti on release
52		It_HandleAttachRequest (tcv_GMM_AttachExpect := FALSE)			Disable NAS default handler for ATTACH REQUE ST
53		[tcv_GMM_AttachRec = TRUE]			ATTACH REQUE ST was received and handled by NAS default handler

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
54		[NOT pc_AutomaticAttachSwitchON]			ATTACH REQUE ST was NOT yet received and the UE does not automati cally attach at switch on		
55		+lt_RRC_ConnRel			RRC connecti on release		
56		START t_WaitS (1)			Wait 1 s to allow UE to relax		
57		?TIMEOUT t_WaitS					
58		START t_WaitS (60)					
59		+ts_AT_TriggerGMM_Attach			Trigger UE to initiate GMM Attach after allowing the UE to decode Sys Infos		
60		<pre>+ts_RRC_ConnEst(p_CellId, est_Reg, registration)</pre>			Establis h RRC connecti on		
61		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.t ype, tcv_Start := RRC_DataInd.start)CANCEL t_WaitS	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUE ST – Extract Attach type requeste d		
62		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)					
63		? TIMEOUT t_WaitS		F			

		Test Step Dynam	ic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
64		[TRUE]			The UE did not send ATTACH REQUE ST but it should since it shall automati call switch attach at switch on
65 66		START t_WaitS(5) Dc?RRC_DataInd(car_PS_InitDirectTransfer		ATTACH
		tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_Start := RRC_DataInd.start)CANCEL t_WaitS	(tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		REQUE ST – Extract Attach type requeste d
67		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
68		? TIMEOUT t_WaitS			Now, if this event happens, then the UE didn't send an ATTACH REQUE ST yet. We give the UE a last chance: We release the connecti on and wait for the UE to autamtic ally start a connecti on and finally send an ATTACH REQUE ST

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
69		+lt_RRC_ConnRel			RRC connecti on release
70		START t_WaitS (5)			
71		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establis h RRC connecti on
72		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.ty pe, tcv_Start := RRC_DataInd.start)CANCEL t_WaitS	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v, ?))		ATTACH REQUE ST - Extract Attach type requeste d
73		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)			
74 75 76		? TIMEOUT t_WaitS It_GMMOnly_IdleUpdated + ts_MMI_UE_SwitchOn +It_GMMOnly_TriggerAttach		F	Here we finally FAIL the UE! [Note: Actually the timout will be handled by the default handler of ts_RRC _ConnE st]
77		+ts_RRC_ConnEst(p_CellId, est_Reg, registration)			Establis h RRC connecti on
78		+lt_AttachRequest			ATTACH REQUE ST

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
79		+ts_GMM_Authentication (p_CellId)			AUTHE NTICATI ON AND CIPHER ING REQUE ST
					AUTHE NTICATI ON AND CIPHER ING RESPO NSE
80		+lt_SecurityMode			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE
81		+lt_AttachAccept			ATTACH ACCEP T ATTACH COMPL ETE
82		+lt_RRC_ConnRel			RRC connecti on release
		lt_GMMOnly_TriggerAttach			
83		[NOT pc_AutomaticAttachSwitchON]			
84		+ts_NAS_Delay(tsc_TWaitSysInfo)			Allow UE to decode Sys Infos
85		+ts_AT_TriggerGMM_Attach			Trigger UE to initiate GMM Attach after allowing the UE to decode Sys Infos

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
86		[TRUE]			Do nothing: UE will automati cally attempt PS attach		
87		Dc ? RRC_DataInd (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_Start := RRC_DataInd.start)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUE ST – Extract Attach type requeste d		
88		+ ts_SS_SecurityDownloadStart (ps_domain, tcv_Start)					
89		It_LocUpdAcc					
90		[tcv_Use_E_PLMN = FALSE] Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac))		LOCATI ON UPDATI NG ACCEP T		
91		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		TMSI REALLO CATION COMPL ETE		
92		[TRUE]			[tcv_Us e_E_PL MN = TRUE]		
93		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI_E_PLM N (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_E_PLMN))		LOCATI ON UPDATI NG ACCEP T including 'equivale nt PLMN list'		
94		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		TMSI REALLO CATION COMPL ETE		
		lt_SecurityMode					

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
95		+ ts_RRC_Security (p_CellId, tcv_PS_AuthCK, tcv_PS_AuthIK, tcv_AuthKcGSM, TRUE, ps_domain)			SECURI TY MODE COMMA ND SECURI TY MODE COMPL ETE			
		It_AttachAccept						
96		[(tcv_UE_OpMode = opModeA) AND (tcv_TmpCellInfo.nmo = tsc_NMO_I)]			if UE is mode A and NMO II			
97		(tcv_AssignedTMSI :=px_TMSI_Def, tcv_AssignedPTMSI :=px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values			
98		[tcv_Use_E_PLMN = FALSE]						
99		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated, tsc_RB3, cs_AttachAcc(c_GMM_AttachResult('011' B), c_RAI_v(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature (tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_GMM_MobileIdTMSI (tcv_AssignedTMSI)))		ATTACH ACCEP T for combine d CS/PS - Attach result 'GPRS/I MSI attached , - RAI default - P-TMSI signatur e - MobileId P-TMSI - defaut TMSI			
100		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPL ETE			
101		[TRUE]			[tcv_Us e_E_PL MN = TRUE]			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
102		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated, tsc_RB3, cs_AttachAccE_PLMN(c_GMM_AttachResult('011' B), c_RAI_v(ATTACH ACCEP T for combine d CS/PS
			tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac), c_PTMSI_Signature		- Attach result 'GPRS/I MSI attached
			(tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI), c_GMM_MobileIdTMSI		- RAI default
			(tcv_AssignedTMSI), tcv_E_PLMN		P-TMSI signatur e
					MobileId P-TMSI - defaut TMSI
					equivale nt PLMN list
103		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPL ETE
104		[TRUE]			If mode is C or if NMO is II
105		(tcv_AssignedPTMSI := px_PTMSI_Def, tcv_Assigned_PTMSI_Sig := px_PTMSI_SigDef)			Use default values
106 107		[tcv_Use_E_PLMN = FALSE] Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated, tsc_RB3, cs_AttachAcc(c_GMM_AttachResult('001' B),		ATTACH ACCEP T for PS only
			c_RAI_v(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_TmpCellInfo.rac),		- Attach result 'GPRS attached
			c_PTMSI_Signature (tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI),		- RAI default (RAI-1) - P-TMSI
					-1 signatur e
					_ MobileId

		Test Step Dy	namic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
108		Do 2 BBC Dataind	car PS UnlinkDirectTransfe		P-TMSI -1 - omit TMSI ATTACH
108		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		COMPL
109		[TRUE]			[tcv_Us e_E_PL MN = TRUE]
110		Dc ! RRC_DataReq	ca_PS_DataReq(tsc_CellDe dicated, tsc_RB3, cs_AttachAccE_PLMN(c_GMM_AttachResult('001' B), c_RAI_v(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.lac,		ATTACH ACCEP T for PS only - Attach result 'GPRS attached
			tcv_TmpCellInfo.rac), c_PTMSI_Signature (tcv_Assigned_PTMSI_Sig), c_MobileIdPTMSI (tcv_AssignedPTMSI), -, tcv_E_PLMN))		, — RAI default (RAI–1) — P–TMSI –1 signatur
					e - MobileId P-TMSI -1 - omit TMSI
					equivale nt PLMN list
111		Dc ? RRC_DataInd	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cr_AttachComplete)		ATTACH COMPL ETE
		lt_RRC_ConnRel			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
112		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			
113		+ ts_RRC_ConnRel (p_CellId, cell_Fach_Dcch)			
114		[tcv_TmpCellInfo.cellConfig <> cell_FACH]			
115		+ ts_RRC_ConnRel (p_CellId, cell_Dch)			

Detailed Comments : See 3GPP 24.008 / 4.7 and also 3GPP 34.108 / 7.2.2 (Registration on PS)

See also the detailed description in test Step ts_MM_IdleUpdated, on which this test Step is based.

Test Step Name : ts_IdleUpdated (p_CellId: INTEGER)

Group : BasicM_MM_GMM_Steps/

Objective : To bring the UE into MM and/or GMM state Idle Updated

Default : NAS_OtherwiseFail
Comments : Initial conditions:

- The UE is initially switched off

- The cell referred has been properly configured.

Note-1: The cell settings (like PLMN, LAC and RAC) used during the registration procedure are

extracted from cell info record in tcv_CellInfoX

Note-2: If 'equivalent PLMN list' is to be used, please set global variable tcv_Use_E_PLMN to TRUE

and accordingly initialise tcv_E_PLMN

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_CS AND pc_PS]			both CS and PS supporte d and for testing
2		+ts_GMM_IdleUpdated (p_CellId)			
3		[pc_CS]			CS supporte d and for testing
4		+ts_MM_IdleUpdated (p_CellId)			
5		[pc_PS]			PS supporte d and for testing
6		+ts_GMM_IdleUpdated (p_CellId)			
7	ERR1	[TRUE]		1	

Detailed Comments: Parameter description:

p_CellIId Cell Identification INTEGER

Test Step Name: ts_MM_Authentication (p_CellId: INTEGER)

Group : BasicM_MM_GMM_Steps/ Objective : Normal authentication Default : NAS_OtherwiseFail

Comments : To be used after the synchronization of the authentication in both SS and UE has been achieved.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_MM_AuthenticationInit			1.
2		Dc!RRC_DataReq	ca_DataReq (tsc_CellDedicated, tsc_RB3, c_AuthReq (tcv_CS_KeySeq, tcv_AuthRAND, c_AUTN(tcv_AuthAUTN)))		Authenti cation Request
3		Dc?RRC_DataInd (tcv_AuthRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp, tcv_AuthRspExt := tcv_AuthRspPDU.authRspExt)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthRspAnyExt)		Authenti cation Respons e with extensio n
4		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, TRUE))			
5	TSF1	[tcv_Res = FALSE]		(F)	
6		[tcv_Res = TRUE]			
7		Dc?RRC_DataInd (tcv_AuthRspPDU := RRC_DataInd.msg, tcv_AuthRsp := tcv_AuthRspPDU.authRsp)	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthRspAnyNoExt)		Authenti cation Respons e without extensio n
8		(tcv_Res := o_AuthRspChk (tcv_AuthRsp, tcv_AuthRspExt, tcv_AuthK, tcv_AuthRAND, FALSE))			
9	TSF2	[tcv_Res = FALSE]		(F)	
10		[tcv_Res = TRUE]			
11	TSF3	Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_AuthFailAny)	(F)	2.

- Detailed Comments: Normal authentication to be used after the synchronization between SS and UE has been performed successfully.
 - 1. Authentication request is sent by the network. Key Sequence and RAND as provided by the corresponding variables tcv_KeySeq and tcv_AuthRAND.
 - 2. If the UE generates a response, this response may consist of 2 parts which have to be extracted from the received message.
 - 3. The response is checked against an expected response calculated using a test suite operation.
 - 4. If the comparison of expected and calculated response is not ok, then authentication fails.
 - 5. Otherwise authentication is granted.
 - 6. If the UE sends an Authentication Failure the authentication fails. Steps:

- Detailed Comments: ...

 1. Initialization of the authentication variables (see 34.108 cl. 8.1.2)

 2. Authentication Failure: should not happen because the synchronization has been done already

Test Step Name : ts_MM_AuthenticationInit
Group : BasicM_MM_GMM_Steps/

Objective: Initialization of variables related to authentication.

Default: NAS_OtherwiseFail

Comments: Based on TS 34.108 cl. 8.1.2 and TS 33.102 cl.s 6.3 and 6.8.1.2

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+lt_IncrementCiphKeySeqNum			
2		+lt_AuthCalcAUTN			1.
					Calculati on of
					AUTN
					needed for
					Authenti
					cation
		old Andreas Indiana			Request
3		+lt_AuthCalcUMTS_Others			2. Calculati
					on of
					other authenti
					cation
					informati
					on needed
					(IK, CK,
					XRES)
4		+lt_AuthCalcKcGSM			3. Calculati
					on of Kc
					GSM,
					using IK and CK
		 It_IncrementCiphKeySeqNum			
5		[tcv_CS_KeySeq = '000'B]			
6		(tcv_CS_KeySeq := '001'B)			
7		[tcv_CS_KeySeq = '001'B]			
8		(tcv_CS_KeySeq := '010'B)			
9		[tcv_CS_KeySeq = '010'B]			
10		(tcv_CS_KeySeq := '011'B)			
11		[tcv_CS_KeySeq = '011'B]			
12		(tcv_CS_KeySeq := '100'B)			
13		[tcv_CS_KeySeq = '100'B]			
14		(tcv_CS_KeySeq := '101'B)			
15		[tcv_CS_KeySeq = '101'B]			
16		(tcv_CS_KeySeq := '110'B)			
17		[TRUE]			
18		(tcv_CS_KeySeq := '000'B)			
1.		It_AuthCalcAUTN			
19		(tcv_AuthXDOUT := o_BitstringXOR(XDOUT := RAND
		tcv_AuthRAND,			XOR K
		tcv_AuthK,			
		128))			

	Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
20		(tcv_AuthCDOUT := o_BitstringConcat(tsv_AuthSQN, tcv_AuthAMF, 48, 16))			CDOUT := SQN AMF	
21		(tcv_AuthXDOUT_Half := o_BitstringXtract(tcv_AuthXDOUT, 128, 64, 0))			XDOUT _half := 64 bits of XDOUT starting from offset 0	
22		(tcv_AuthAK := o_BitstringXtract(tcv_AuthXDOUT, 128, 48, 24))			AK := 48 bits of XDOUT starting from offset 24	
23		<pre>(tcv_AuthAUTN_1 := o_BitstringXOR(tsv_AuthSQN, tcv_AuthAK, 48))</pre>			AUTN1 := SQN XOR AK	
24		(tcv_AuthMAC := o_BitstringXOR(tcv_AuthXDOUT_Half, tcv_AuthCDOUT, 64))			MAC := XDOUT _half XOR CDOUT	
25		<pre>(tcv_AuthAUTN_2 := o_BitstringConcat(tcv_AuthAMF, tcv_AuthMAC, 16, 64))</pre>			AUTN2 := AMF MAC	
26		(tcv_AuthAUTN := o_BitstringConcat(tcv_AuthAUTN_1, tcv_AuthAUTN_2, 48, 80)) It_AuthCalcUMTS_Others			AUTN := AUTN1 AUTN2	
27		(tcv_AuthIK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 16))			IK := 128 bits of XDOUT starting from offset 16 (wrappin g)	

	Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
28		(tcv_AuthCK := o_BitstringXtract(tcv_AuthXDOUT, 128, 128, 8))			CK := 128 bits of XDOUT starting from offset 8 (wrappin g)	
29		(tcv_AuthXRES := o_BitstringXtract(tcv_AuthXDOUT, 128, (tcv_AuthN + 1), 0))			XRES := (n+1) bits of XDOUT starting from offset 0	
30		It_AuthCalcKcGSM (tcv_AuthCK_1 := o_BitstringXtract(tcv_AuthCK, 128, 64, 0))			CK1 := 64 bits of CK starting from offset 0	
31		(tcv_AuthCK_2 := o_BitstringXtract(tcv_AuthCK, 128, 64, 64))			CK2 := 64 bits of CK starting from offset 64	
32		(tcv_AuthIK_1 := o_BitstringXtract(tcv_AuthIK, 128, 64, 0))			IK1 := 64 bits of IK starting from offset 0	
33		(tcv_AuthIK_2 := o_BitstringXtract(tcv_AuthIK, 128, 64, 64))			IK2 := 64 bits of IK starting from offset 64	
34		(tcv_AuthCK_XOR := o_BitstringXOR(tcv_AuthCK_1, tcv_AuthCK_2, 64))			CK_XO R := CK1 XOR CK2	
35		(tcv_AuthIK_XOR := o_BitstringXOR(tcv_AuthIK_1, tcv_AuthIK_2, 64))			IK_XOR := IK1 XOR IK2	

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
36		(tcv_AuthKcGSM := o_BitstringXOR(tcv_AuthCK_XOR, tcv_AuthIK_XOR, 64))			KcGSM := CK_XO R XOR IK_XOR (= CK1 XOR CK2 XOR IK1 XOR IK2)		

Detailed Comments: Initialization of the variables needed for authentication. The calculation is done according to the

prescription of TS 34.108 cl. 8.1.2. and TS 33.102 cl. 6.8.1.2

The AUTN calculated is used as parameter of the Authentication Request.

CK, IK and Kc GSM are used by RRC.

XRES is used to check the RES contained in Authentication Response.

Test Step Name : ts_MM_IdleUpdated (p_CellId: INTEGER)

Group: BasicM_MM_GMM_Steps/

Objective : To bring the UE into MM state Idle Updated - CS mode, general case

Default: NAS_OtherwiseFail

Comments : Before IdleUpdated can be used a Cell is to be created and System Information must be sent. This test

Step covers the general case: the UE has a valid TMSI.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			Fetch SS_CellI nfo table correpo nding to the cell
2		+ts_MM_PwrOrUSIM_On(tsc_USIM_NeedRmv)			2. Activate the UE
3		START t_Dly (150000)			3. Supervis e the receptio n of the expecte d Location Updatin g Request
4		+ ts_RRC_ConnEst (p_CellId, est_Reg, OMIT)			Connect ion Establis hment MO
5		Dc?RRC_DataInd (tcv_Start := RRC_DataInd.start) CANCEL t_Dly	car_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cb_LocUpdReqAny(?))		4. Any Location Update request
6		+ ts_SS_SecurityDownloadStart (cs_domain, tcv_Start)			
7		+ts_MM_Authentication(p_CellId)			4.1 Authenti cation
9		+ts_RRC_Security (p_CellId,			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI(tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac))		4.2 Location Updatin g Accept without 'equivale nt PLMN list'
11		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		4.3 TMSI reallocati on complete
12		+ It_RRC_ConnRel			Connect ion Release
13		[TRUE]			[tcv_Us e_E_PL MN = TRUE]
14		Dc!RRC_DataReq	ca_DataReq(tsc_CellDedicated, tsc_RB3, c_LocUpdAcpTMSI_E_PLM N (tcv_TmpCellInfo.mcc, tcv_TmpCellInfo.mnc, tcv_TmpCellInfo.lac, tcv_E_PLMN))		4.2 Location Updatin g Accept including 'equivale nt PLMN list'
15		Dc?RRC_DataInd	car_UplinkDirectTransfer (tsc_CellDedicated, tsc_RB3, c_TMSI_ReallocCmpl)		4.3 TMSI reallocati on complete
16		+ It_RRC_ConnRel			Connect ion Release
		lt_RRC_ConnRel			
17		(tcv_Use_E_PLMN := FALSE)			De-initia lise the variable tcv_Use _E_PLM N

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
18		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR					
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)]					
19		+ ts_RRC_ConnRel (p_CellId, cell_Fach_Dcch)					
20		[tcv_TmpCellInfo.cellConfig <> cell_FACH]					
21		+ ts_RRC_ConnRel (p_CellId, cell_Dch)					

Detailed Comments: Parameter description:

p_CellIId Cell Identification INTEGER

Algorithm/Steps:

- 1. UE is deactivated
- 2. UE is activated
- 3. Location registration is expected to happen within time TwaitLocUpdReq
- 4. The location registration is accepted, and a new TMSI the default TMSI used for testing is passed to the UE. The UE stores the newly provided TMSI.
- 4.1 Authentication with default values
- 4.2 Location Updating Accept with default TMSI and MNC, MCC, LAI
- 4.3 Completion of the TMSI reallocation procedure
- 5. If NO Location Updating Request is received, ie the timer supervising the receipt of the Location registration runs out, this is assumed to be due to the fact that the PLMN is in the forbidden list. In this case local test Step It_RmvFbdnList is executed to clear this situation.
- 6. This should not happen, so the verdict is INCONCLUSIVE. Resources are to be released properly and automatic PLMN selection is to be restablished.

Test Step Name : ts_MM_PwrOrUSIM_Off (p_USIM_Rmvd : BOOLEAN)

Group : BasicM_MM_GMM_Steps/
Objective : Deactivation of the UE

Default : NAS_OtherwiseFail

Comments : Depending upon UE's properties (USIM removal, switching off or powering off)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND			SIM
		(pc_USIM_Rmv)]			needs to
					be
					removed
2		+ts_MMI_USIM_Remove			remove
					SIM
					card
3		[pc_SwitchOnOff]			
4		+ts_MMI_UE_SwitchOff			switch
					off the
					UE
5		[TRUE]			
6		+ts_MMI_UE_PwrOff			power
					off the
i					UE

Detailed Comments: There are 2 types of deactivation required for testing:

1. USIM removal or switching off or removal of the power source

2. Switching off or removal of the power source

Parameter p_USIM_Rmvd controls the variant to be applied:

1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be removed if possible

Test Step Name: ts_MM_PwrOrUSIM_On (p_USIM_Rmvd: BOOLEAN)

Group : BasicM_MM_GMM_Steps/

Objective : Activation of the UE
Default : NAS_OtherwiseFail

Comments : Depending upon the UE's properties (USIM insertion, switching on or powering on)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_USIM_Rmvd) AND (pc_USIM_Rmv)]			USIM has been removed
2		+ts_MMI_USIM_Insert			insert USIM card
3		[pc_SwitchOnOff]			
4		+ts_MMI_UE_SwitchOn			switch on the UE
5		[(((NOT p_USIM_Rmvd) OR (NOT pc_USIM_Rmv)) AND (NOT pc_SwitchOnOff))]			
6		+ts_MMI_UE_PwrOn			power on the UE

Detailed Comments: There are 2 types of activation required for testing:

1. USIM insertion or switching on or restoration of the power source

2. Switching on or restoration of the power source

Parameter p_USIM_Rmvd controls the variant to be applied:

1. tsc_USIM_NeedRmv(=TRUE): variant 1 is to be used, the USIM is to be inserted if possible

This test Step is the counterpart to $ts_MM_PwrOrUSIM_Off$ resp $ts_MM_IMSI_Detach$.

Test Step Name : po_ConnectionAndSS_Rel (p_CellId : INTEGER)

Group : BasicM_Postambles/

Objective: To release the existing RRC connection and release the channels that are configured in the SS.

Default : RRC_Def1

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]			
3		+ It_Send_RRC_ConnectionRelease			
4		+ ts_SS_Rel (p_CellId)			
5		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]		I	0.
		lt_Send_RRC_ConnectionRelease			
6		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR			3.
		(tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRBO_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoCon n)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCon n)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_StandAlonePCH_2a_NoC onn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_NoC onn)OR			
		cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_No Conn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_No			
		Conn)]			

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
7		[TRUE]			4.		
8		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRBO) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_SCCPCH_StandAlonePCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_Cnfg2)OR (tcv_TmpCellInfo.			1.		
		cell_FACH_3_SCCPCH_3_FACH_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)O R (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)O R (tcv_TmpCellInfo.cellConfig=cell_FACH_2SCCP CH_StandAlonePCH_PS_2a)]					
9		UM!RLC_UM_DATA_REQ	cas_RRC_ConnReIDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnReIDCC H(tcv_CellIndInfo.dl_Integri tyCheckInfo, tcv_RRC_Ti, OMIT))				
10		AM?RLC_AM_DATA_IND	car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti))	(P)			
11		+ ts_RRC_Delay(tsc_DelayAfterRRC_ConnRel)					
12		[TRUE]			2.		

		Test Step Dynami	c Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		(tcv_N308 := 1, tcv_K := 1)			Maximu m number of retransm issions of the RRC CONNE CTION RELEAS E COMPL ETE
14		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnRelDCC H(tcv_CellIndInfo.dl_Integri tyCheckInfo, tcv_RRC_Ti, tcv_N308))		message
15		UM?RLC_UM_DATA_IND	car_RRC_ConnRelCmplUM(tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti))	(P)	
16		REPEAT It_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)] It_RptRcvConnRel			UE sends RRC Connect ion Release Complet e for N308 times
17		START t_Dly			
18	TSF2	? TIMEOUT t_Dly		(F)	
19		(tcv_K := tcv_N308 + 1)			To stop the loop
20	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1,	(P)	Retrans mission
			cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti))		

Detailed Comments: 0. The cell has not been configured, it shall not be released
1. cell_FACH state
2. cell_DCH state
3. No RRC connection is established

4. An RRC connection is established

 $\begin{array}{ll} \textbf{Test Step Name} & : \ ts_RRC_ConnEst \ (\\ & \ p_CellId : INTEGER; \end{array}$

p_CellId : INTEGER;
p_MO_Reg : RegOr_MO;

p_EstCause : EstablishmentCause

Group: BasicM_RRC_Steps/

Objective: The generic Step to establish RRC Connection and bring UE to CELL_FACH or CELL_DCH state.

Default : RRC_DefConnEst

Comments : In this Step , 5 Signalling Radio Bearers with 3.4kbps DL & UL is setup (RB#0, 1, 2, 3,4)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_PrepareCellRRC_ConnEst (p_CellId)			
2		+ ts_SetTmpCellInfo (p_CellId)			
3		+lt_RcvConnReq			
4		+lt_Send_ConnSetUp			
5		+ ts_RRC_ReceiveConnSetupCmpl (p_CellId)			
		lt_RcvConnReq			
6		[p_MO_Reg = est_Reg]			
7		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_M essage.message.rrcConnectionRequest.initialUE_ Identity)	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (registration))		
8		[(p_MO_Reg = est_MO) OR (p_MO_Reg = est_MT)]			
9		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CCCH_M essage.message.rrcConnectionRequest.initialUE_ Identity)	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (p_EstCause))		
		lt_Send_ConnSetUp	,,		
10		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoCon n)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCon n) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_StandAlonePCH_2a_No Conn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_4_FACH_2a_Cnfg1_N			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
		oConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_N oConn) OR (tcv_TmpCellInfo.cellConfig =cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_No Conn)]			
11		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetupF ACH (
			tcv_TmpCellInfo.uRNTI ,		
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn]			
13		+ ts_SetCellCfg (p_CellId, cell_FACH)			1.
14		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn]			
15		+ ts_SetCellCfg (p_CellId, cell_FACH_BMC)			1.
16		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn]			
17		+ ts_SetCellCfg (p_CellId, cell_FACH_2_PRACH)			1.
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn]			
19		+ ts_SetCellCfg (p_CellId, cell_FACH_2_SCCPCH)			1.
20		[tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoC onn]			
21		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH)			
22		[tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn]			
23		+ ts_SetCellCfg (p_CellId, cell_FACH_MAC_SRB)			
24		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No Conn]			
25		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1)			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
26		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn]						
27		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2)						
28		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn]						
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH)						
30		[tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_N oConn]						
31		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a)						
32		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn]						
33		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1)						
34		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn]						
35		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)						
36		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn]						
37		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)						
38		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]						
39		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetup DCH (tcv_InitialUE_Id, tcv_RRC_Ti,					
			tcv_TmpCellInfo.priScrmCo de ,					
			tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.uL_Scrambl					
			ingCode					
40		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn]	,					

Continued from previous page

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
41		+ ts_SetCellCfg (p_CellId, cell_DCH_StandAloneSRB)						
42		[tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn]						
43		+ ts_SetCellCfg (p_CellId, cell_DCH_MAC_SRB)						
44	ERR	[TRUE]		I	2.			

Detailed Comments : 1. Update the cell configuration 2. A RRC connection has already been established.

Test Step Name : ts_RRC_ConnEst_DCH_MT_PTMSI (

p_CellId: INTEGER; p_PagCause: PagingCause; p_P_tmsi:P_TMSI_GSM_MAP; p_EstCause: EstablishmentCause

)

Group: BasicM_RRC_Steps/

Objective : To bring the the UE into CELL_DCH state with a MT call with Paging Type P_TMSI

Default : RRC_DefConnEst

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_PrepareCellRRC_ConnEst (p_CellId)			
2		+ ts_SetTmpCellInfo (p_CellId)			
3		+ts_RRC_Delay(tsc_WaitBeforePaging)			Give delay before paging type1
4		+ts_CMAC_Pag1_Cfg(p_CellId)			
5		TM!RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_PTM		
			SI (p_PagCause, p_P_tmsi, tcv_CN_Domain))		
6		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CC CH_Message.message.rrcConnectionRequ est.initialUE_Identity)	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (p_EstCause))		
7		UM!RLC_UM_DATA_REQ	cas_RRC_ConnSetup(p_CellId, tsc_RB0, cbs_108_RRC_ConnSetup DCH (tcv_InitialUE_Id, tcv_RRC_Ti, tcv_TmpCellInfo.priScrmCo		
			de , tcv_TmpCellInfo.uRNTI , tcv_TmpCellInfo.uL_Scrambl		
		At DDO David Con Con Con M	ingCode)		
8		+ts_RRC_ReceiveConnSetupCmpl (p_CellId)			
9		+ ts_SetCellCfg(p_CellId, cell_DCH_StandAloneSRB)			1.

Detailed Comments: 1. Update the cell configuration

2. Download the START value to SS

 $\textbf{Test Step Name} \hspace{0.2cm} : \hspace{0.1cm} \text{ts_RRC_ConnEst_DCH_MT_TMSI} \hspace{0.1cm} ($

p_CellId: INTEGER;
p_PagCause: PagingCause;
p_Tmsi:OCTETSTRING;

p_EstCause: EstablishmentCause)

Group: BasicM_RRC_Steps/

Objective : To bring the the UE into CELL_DCH state with a MT call with Paging Type TMSI

Default : RRC_DefConnEst

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_PrepareCellRRC_ConnEst (p_CellId)			
2		+ ts_SetTmpCellInfo (p_CellId)			
3		+ts_RRC_Delay(tsc_WaitBeforePaging)			Give delay before paging type1
4		+ts_CMAC_Pag1_Cfg(p_CellId)			
5		TM!RLC_TR_DATA_REQ	cas_PagingType1 (p_CellId, tsc_RB_PCCH, cs_RRC_PagingType1_TMSI (p_PagCause,		
			o_ConvertTMSI(p_Tmsi), tcv_CN_Domain))		
7		TM ? RLC_TR_DATA_IND (tcv_InitialUE_Id := RLC_TR_DATA_IND.tM_message.uL_CC CH_Message.message.rrcConnectionRequ est.initialUE_Identity) UM!RLC_UM_DATA_REQ	car_RRC_ConnReq (p_CellId, tsc_RB0, cbr_108_RRC_ConnReq (
1		UM!RLC_UM_DATA_REQ	p_CellId, tsc_RB0, cbs_108_RRC_ConnSetup DCH (tcv_InitialUE_Id, tcv_RRC_Ti,		
			tcv_TmpCellInfo.priScrmCo de , tcv_TmpCellInfo.uRNTI ,		
			tcv_TmpCellInfo.uL_Scrambl ingCode)		
8		+ts_RRC_ReceiveConnSetupCmpl(p_CellId)			
9		+ ts_SetCellCfg(p_CellId, cell_DCH_StandAloneSRB)			1.
Deta	iled Com	ments :			

 $\begin{array}{ll} \textbf{Test Step Name} & : \ ts_RRC_ConnRel \ (\\ & \ p_CellId: \ INTEGER; \end{array}$

p_RRC_RelStatus : RRC_Rel_Status

Group : BasicM_RRC_Steps/

Objective : To bring the UE from state CELL_DCH/ CELL_FACH to idle state by releasing the RRC connection

Default : RRC_Def1

Comments : Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_RRC_Delay (tsc_DelayBeforeRRC_ConnRel)			
3		+ It_Send_RRC_ConnectionRelease			
4		+ It_RestartCRLC_ForNextConnection			
5		+ ts_SS_ResetSecurityKey			
		It_RestartCRLC_ForNextConnection			
6		[tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB]			
7		+ ts_CRLC_RelReconfSRB (p_CellId)			
8		+ ts_SetCellCfg(p_CellId, cell_DCH_StandAloneSRB_NoConn)			
9		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			
10		+ ts_CRLC_RelReconfSRB (p_CellId)			
11		+ ts_SetCellCfg(p_CellId, cell_FACH_NoConn)			
12		[tcv_TmpCellInfo.cellConfig = cell_FACH_BMC]			
13		+ ts_CRLC_RelReconfSRB (p_CellId)			
14		+ ts_SetCellCfg(p_CellId, cell_FACH_BMC_NoConn)			
15		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH]			
16		+ ts_CRLC_RelReconfSRB (p_CellId)			
17		+ ts_SetCellCfg(p_CellId, cell_FACH_2_PRACH_NoConn)			
18		[tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH]			
19		+ ts_CRLC_RelReconfSRB (p_CellId)			
20		+ ts_SetCellCfg(p_CellId, cell_FACH_2_SCCPCH_NoConn)			
21		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
22		+ ts_CRLC_RelReconfSRB (p_CellId)			[
23		+ ts_SetCellCfg(p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_NoC onn)			
24		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1]			
25		+ ts_CRLC_RelReconfSRB (p_CellId)			

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
26		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No Conn)					
27		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2]					
28		+ ts_CRLC_RelReconfSRB (p_CellId)					
29		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn)					
30		[tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH]					
31		+ ts_CRLC_RelReconfSRB (p_CellId)					
32		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn)					
33		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a) OR(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]					
34		+ ts_CRLC_RelReconfSRB (p_CellId)					
35		+ ts_SetCellCfg (p_CellId, cell_FACH_2SCCPCH_StandAlonePCH_2a_N oConn)					
36		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1)]					
37		+ ts_CRLC_RelReconfSRB (p_CellId)					
38		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_ NoConn)					
39		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]					
40		+ ts_CRLC_RelReconfSRB (p_CellId)					
41		+ ts_SetCellCfg (p_CellId, cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_ NoConn)					
42		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)]					
43		+ ts_CRLC_RelReconfSRB (p_CellId)					
44		+ ts_SetCellCfg(p_CellId, cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_ NoConn)					

		Test Step Dynamic B	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
45		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)]			
46 47		+ ts_SS_ReconfigRAB_ToSRB (p_CellId) + ts_SetCellCfg (p_CellId,			
48	ERR1	cell_DCH_StandAloneSRB_NoConn) [(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_StandAlonePCH_NoConn)]		I	1.
49	ERR2	[TRUE]		ı	
		lt_Send_RRC_ConnectionRelease			
50		[p_RRC_RelStatus= cell_Dch]			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
51		(tcv_N308 := 1, tcv_K := 1)			Maximu m number of retransm issions of the RRC CONNE CTION RELEAS E COMPL ETE
52		UM ! RLC_UM_DATA_REQ	cas_RRC_ConnReIDCCH (tsc_CellDedicated, tsc_RB1, cs_108_RRC_ConnReIDCC H(tcv_CellIndInfo.dl_Integri tyCheckInfo,		message
53	TSP1	UM ? RLC_UM_DATA_IND	tcv_RRC_Ti, tcv_N308)) car_RRC_ConnRelCmplUM (tsc_CellDedicated, tsc_RB1, cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti)	(P)	
54		REPEAT It_RptRcvConnRel UNTIL [tcv_K = (tcv_N308+1)]			UE sends RRC Connect ion Release Complet e for N308 times
55		[p_RRC_RelStatus = cell_Fach_Dcch]			
56		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelDCCH (tsc_CellDedicated, tsc_RB1,		
57	TSP2	AM ? RLC_AM_DATA_IND	cs_108_RRC_ConnRelDCC H (tcv_CellIndInfo.dl_Integrity CheckInfo, tcv_RRC_Ti, OMIT)) car_RRC_ConnRelCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti)	(P)	
58		+ ts_RRC_Delay (tsc_DelayAfterRRC_ConnRel)			

		Test Step Dyn	amic Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
59		[p_RRC_RelStatus = cell_Fach_Ccch]			
60		UM!RLC_UM_DATA_REQ	cas_RRC_ConnRelCCCH(p_CellId, tsc_RB0,		
			cs_108_RRC_ConnRelCCC H (c_U_RNTI, tcv_RRC_Ti))		
61		[TRUE]		I	Program ming error
		It_RptRcvConnRel			
62		START t_Dly			
63	TSF2	? TIMEOUT t_Dly		(F)	
64		(tcv_K := tcv_N308 + 1)			To stop the loop
65	TSP2	UM?RLC_UM_DATA_IND (tcv_K := tcv_K+1) CANCEL t_Dly	car_RRC_ConnRelCmplUM (tsc_CellDedicated , tsc_RB1,	(P)	Retrans mission
			cbr_108_RRC_ConnRelCm pl (tcv_RRC_Ti)		

 $\textbf{Test Step Name} \quad : \ \, ts_RRC_ReceiveConnSetupCmpI \ (\ p_CellId : INTEGER \,)$

Group: BasicM_RRC_Steps/

Objective : To receive RRC CONNECTION SETUP COMPLETE message and download SS security keys

according to the received information element.

Default : RRC_DefConnEst,RRC_Def1

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1 2		+ ts_SetTmpCellInfo (p_CellId) [(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS)]			
3		START t_WaitMS			
5	TSF1 TSP1	? TIMEOUT t_WaitMS AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.uL_DCC H_Message.message.rrcConnectionSetupCo mplete.startList, tcv_CellIndInfo.cipheringAlgorithmCapability := RLC_AM_DATA_IND.aM_message.uL_DCC H_Message.message.rrcConnectionSetupCo mplete.ue_RadioAccessCapability.securityCap ability.cipheringAlgorithmCap) CANCEL t_WaitMS	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupC mpl (tcv_RRC_Ti, ?))	(F) (P)	UE capabilit y ie is present in a DCH comfigur ation
6 7		+ It_GetHFN [(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRBO_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRBO) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_SCCPCH_StandAlonePCH_NoConn) OR			

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
8 9 10	TSF2 TSP2	(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoC onn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoC onn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoC onn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)] START t_WaitMS ? TIMEOUT t_WaitMS ? TIMEOUT t_WaitMS AM ? RLC_AM_DATA_IND (tcv_StartList := RLC_AM_DATA_IND.aM_message.ul_DCC H_Message.message.rrcConnectionSetupCo mplete.startList)	car_RRC_ConnSetupCmpl (tsc_CellDedicated, tsc_RB2, cr_108_RRC_ConnSetupC mpl (tcv_RRC_Ti, ?))	(F) (P)	UE capabilit y ie is not present				
11		CANCEL t_WaitMS + It_GetHFN			in a FACH configur ation				
12		[TRUE]		1					
		lt_GetHFN							
13		(tcv_Count := NUMBER_OF_ELEMENTS (tcv_StartList))							
14		[tcv_Count = 1]							
15		+ lt_FirstValue							
16		[tcv_Count = 2]							
17		+ lt_FirstValue							
18		+ It_SecondValue							
19	ERR1	[TRUE]		F					
		lt_FirstValue							
20		[tcv_StartList.[0].cn_DomainIdentity = tsc_CS_Domain]							

Continued from previous page

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
21		(tcv_CellIndInfo.start_CS := tcv_StartList.[0].start_Value)							
22		[tcv_StartList.[0].cn_DomainIdentity = tsc_PS_Domain]							
23		(tcv_CellIndInfo.start_PS := tcv_StartList.[0].start_Value)							
24	ERR2	[TRUE]		F					
		It_SecondValue							
25		[tcv_StartList.[1].cn_DomainIdentity = tsc_CS_Domain]							
26		(tcv_CellIndInfo.start_CS := tcv_StartList.[1].start_Value)							
27		[tcv_StartList.[1].cn_DomainIdentity = tsc_PS_Domain]							
28		(tcv_CellIndInfo.start_PS := tcv_StartList.[1].start_Value)							
29	ERR3	[TRUE]		F					
Deta	iled Com	ments: 1. Download the START value to SS			·				

Test Step Name : ts_RRC_ReceiveRB_SetupCmpl (p_CellId : INTEGER; p_RbType: RB_ConfigType)

Group: BasicM_RRC_Steps/

Objective : To receive RADIO BEARER SETUP COMPLETE message and reconfigure SS according to the

received information element values.

Default : RRC_Def1

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		START t_WaitMS			
3		[(p_RbType = cell_DCH_Speech)OR (p_RbType = cell_DCH_64kCS_RAB_SRB) OR			TM RAB
		(p_RbType = cell_DCH_57_6kCS_RAB_SRB) OR			
		<pre>(p_RbType = cell_Two_DTCH) OR (p_RbType = cell_Four_DTCH_CS) OR ((p_RbType = cell_Two_DTCH_PS_CS) AND (tcv_CN_Domain = cs_domain)) OR ((p_RbType = cell_Four_DTCH_PS_CS) AND (tcv_CN_Domain = cs_domain)) OR ((p_RbType = cell_DCH_DSCH_CS_PS) AND (tcv_CN_Domain = cs_domain))]</pre>			
4		[(tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain = cs_domain)]			
5		+ It_CipheringStartedTM_RAB			
6		[(tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND ((p_RbType = cell_DCH_Speech) OR (p_RbType = cell_DCH_64kCS_RAB_SRB))]			For RAB test cases
7		+ lt_CipheringStartedTM_RAB			
8		[tcv_CellIndInfo.cs_cipheringStarted = FALSE]			
9		+ It_CipheringNotStartedTM_RAB			
10		[TRUE]			AM/UM RAB
11		[(tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND(tcv_CellIndInfo.recentSecureDomain = ps_domain)]			
12		+ It_CipheringStartedAM_RAB			
13		[TRUE]			
14		+ It_CipheringNotStartedAM_RAB			
		It_CipheringStartedTM_RAB			
15		+ ts_CMAC_DownloadSecurityKey(tcv_AuthCK,			
		OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)			
16		+ ts_CMAC_UL_DL_CipherCfg(tcv_CellIndInfo.dL_CipherMode, tcv_ActTime ,notInc)			
17	TSF1	? TIMEOUT t_WaitMS		(F)	

Contin	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
18	TSP2	AM ?RLC_AM_DATA_IND (tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.radioBearerSetupComplete.c ount_C_ActivationTime, tcv_CellIndInfo.start_CS := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.radioBearerSetupComplete.st art_Value) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, *, OMIT))	(P)	A new start value is provided				
19		+ts_CMAC_DownloadSecurityKey(tcv_Auth CK, OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)							
20		+ ts_CMAC_UL_DL_CipherCfg(tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime, incPerCFN_Cycle)							
		It_CipheringStartedAM_RAB							
21	TSF3	? TIMEOUT t_WaitMS		(F)					
22	TSP4	AM ?RLC_AM_DATA_IND (tcv_CellIndInfo.start_PS := RLC_AM_DATA_IND.aM_message.uL_DCCH_Me ssage.message.radioBearerSetupComplete.start_V alue , tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_Me ssage.message.radioBearerSetupComplete.rb_UL_ CiphActivationTimeInfo) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, OMIT, *))	(P)	A new start value is provided A RB UL cipher is not present				
23		+ It_SS_CipheringAM_RAB_UL_DL (tcv_PS_AuthCK)							
		It_CipheringNotStartedTM_RAB							
24 25	TSF5 TSP5	? TIMEOUT t_WaitMS AM ?RLC_AM_DATA_IND (tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Me ssage.message.radioBearerSetupComplete.count_ C_ActivationTime, tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_Me ssage.message.radioBearerSetupComplete.rb_UL_ CiphActivationTimeInfo) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cr_RRC_RB_SetUpCmplNo StartVal (tcv_RRC_Ti, *,*))	(F) (P)	No start value No RB UL cipher				
26		+ ts_CMAC_DownloadSecurityKey (OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)							
27		+ ts_CMAC_UL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime,notInc)							
28	TSP6	AM ?RLC_AM_DATA_IND (tcv_CipherActTime := RLC_AM_DATA_IND.aM_message.uL_DCCH_Me ssage.message.radioBearerSetupComplete.count_ C_ActivationTime, tcv_CellIndInfo.start_CS := RLC_AM_DATA_IND.aM_message.uL_DCCH_Me ssage.message.radioBearerSetupComplete.start_V alue) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, *, OMIT))	(P)	A new start value is provided				

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
29		+ ts_CMAC_DownloadSecurityKey (OMIT, OMIT, tcv_CN_Domain, tcv_CellIndInfo.start_CS)					
30		+ ts_CMAC_UL_CipherCfg (tcv_CellIndInfo.dL_CipherMode, tcv_CipherActTime ,notInc)					
		lt_CipheringNotStartedAM_RAB					
31	TSF5	? TIMEOUT t_WaitMS		(F)			
32	TSP5	AM ?RLC_AM_DATA_IND CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cr_RRC_RB_SetUpCmplNo StartVal (tcv_RRC_Ti, OMIT,OMIT))	(P)	No start value No RB UL cipher		
33		+ It_SS_CipheringAM_RAB_UL_DL(OMIT)					
34	TSP6	AM ?RLC_AM_DATA_IND (tcv_CellIndInfo.start_PS := RLC_AM_DATA_IND.aM_message.uL_DCCH_Me ssage.message.radioBearerSetupComplete.start_V alue) CANCEL t_WaitMS	car_RB_SetUpCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RB_SetUpCmpl (tcv_RRC_Ti, OMIT, OMIT))	(P)	A new start value is provided		
35		+ lt_SS_CipheringAM_RAB_UL_DL (OMIT)					
		lt_SS_CipheringAM_RAB_UL_DL (p_KC : KeyCiphering)					
36		[(p_RbType = cell_DCH_64kPS_RAB_SRB) OR					
		(p_RbType = cell_FACH_PS) OR (p_RbType = cell_Two_DTCH_CS_PS) OR (p_RbType = cell_Four_DTCH_CS_PS) OR (p_RbType = cell_PDCP_AM_RAB)OR (p_RbType= cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)OR (p_RbType = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (p_RbType = cell_FACH_3_SCCPCH_SCH_PS) OR (p_RbType = cell_DCH_DSCH_PS) OR (p_RbType = cell_DCH_DSCH_CS_PS) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH_PS)]					
37		+ It_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)					
38		(tcv_RLC_SeqNumDL_RB20 := 0)					
39		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode , p_RbType ,notInc)					
40		+ ts_CRLC_UL_CipherCfg_RAB (ps_domain, cs_RB_ActTimeInfoList20 (0) ,notInc)					
41		[(p_RbType = cell_DCH_2AM_PS) OR (p_RbType =cell_DCH_2_PS_Call)]					
42		+ It_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)					
43		(tcv_RLC_SeqNumDL_RB20 := 0, tcv_RLC_SeqNumDL_RB22 := 0)					

	Test Step Dynamic Behaviour Nr. Label Rehaviour Description Constraints Ref. Verdict Comments							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
44		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode , p_RbType ,notInc)						
45		+ ts_CRLC_UL_CipherCfg_RAB (ps_domain,cs_RB_ActTimeInfoList20_22 (0, 0),notInc)						
46		[(p_RbType = cell_PDCP_AM_UM_RAB)]						
47		+ It_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)						
48		(tcv_RLC_SeqNumDL_RB20 := 0, tcv_RLC_SeqNumDL_RB21 := 0)						
49		+ ts_CRLC_DL_CipherCfgRB(tcv_CellIndInfo.dL_CipherMode, p_RbType ,notInc)						
50		+ ts_CRLC_UL_CipherCfg_RAB (ps_domain,cs_RB_ActTimeInfoList20_21 (0, 0),notInc)						
51		[(p_RbType = cell_PDCP_UM_RAB)]						
52		+ It_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)						
53		(tcv_RLC_SeqNumDL_RB21 := 0)						
54		+ ts_CRLC_DL_CipherCfgRB(tcv_CellIndInfo.dL_CipherMode, p_RbType ,notInc)						
55		+ ts_CRLC_UL_CipherCfg_RAB (ps_domain, cs_RB_ActTimeInfoList21 (0) ,notInc)						
56		[(p_RbType = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)OR						
		(p_RbType= cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)						
		OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]						
57		+ It_CRLC_SecurityConfig (tcv_CellIndInfo.start_PS, p_KC)						
58		(tcv_RLC_SeqNumDL_RB20 := 0, tcv_RLC_SeqNumDL_RB24 := 0)						
59		+ ts_CRLC_DL_CipherCfgRB(tcv_CellIndInfo.dL_CipherMode,p_RbType ,notInc)						
60		+ ts_CRLC_UL_CipherCfg_RAB (ps_domain,cs_RB_ActTimeInfoList20_24 (0, 0),notInc)						
61		[TRUE]			for RLC do nothing			
		It_CRLC_SecurityConfig(p_Hfn_LT: HyperFrameNumber;p_KC_LT: KeyCiphering)						

Continued from previous page

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
62		CRLC ! CRLC_SecurityMode_Config_REQ	ca_CRLC_SecurityModeCfg Req (tsc_CellDedicated , tcv_CellIndInfo.recentSecur eDomain, p_Hfn_LT , p_KC_LT, OMIT, OMIT)		Downloa d security keys for RLC. CRLC is configur ed with cellId -1 (tsc_Cell Dedicate d)				
63		CRLC ? CRLC_SecurityMode_Config_CNF	ca_CRLC_SecurityModeCfg Cnf (tsc_CellDedicated)						
Deta	iled Com	iments :		•	•				

Test Step Name : ts_CRLC_GetRLC_SeqNumSecurity (p_CellId : INTEGER)

Group : BasicM_Security_Steps/

Objective : To assign the variables to the current RLC sequnce number of its corresponding SRB and RAB if

configured.

Default: SS_Def_Special

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB1)		
3		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB1 := CRLC_SequenceNumber_CNF.count_C_LSB_ DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB1)		
4		CRLC ! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB2)		
5		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB2 := CRLC_SequenceNumber_CNF.count_C_LS B_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB2)		
6		CRLC! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB3)		
7		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB3 := CRLC_SequenceNumber_CNF.count_C _LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB3)		
8		CRLC! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB4)		
9		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB4 := CRLC_SequenceNumber_CNF.count _C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB4)		
10		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR ((tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)) OR ((tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlon ePCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH _Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH _Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH _Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH _Cnfg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH _Cnfg2) OR			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
		_CTCH)OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH _2a_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlon ePCH_2a)) AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
11		CRLC! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
12		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20) :=	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
13		CRLC_SequenceNumber_CNF. count_C_LSB_DL) [(tcv_TmpCellInfo.cellConfig =			
13		cell_PDCP_UM_RAB)AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
14		CRLC! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
15		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB21 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
16		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
17		CRLC! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
18		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20) := CRLC_SequenceNumber_CNF.	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
19		count_C_LSB_DL) CRLC! CRLC_SequenceNumber_RE	cas_GetRLC_SeqNum (tsc_CellDedicated,		
20		Q CRLC ? CRLC_SequenceNumber_C NF	tsc_RB22) car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB22)		
		tcv_RLC_SeqNumDL_RB22 :=			
21		CRLC_SequenceNumber_C NF.count_C_LSB_DL) [(tcv_TmpCellInfo.cellConfig =			
۷1		cell_PDCP_AM_UM_RAB)AND(tcv_CellIndInfo. recentSecureDomain =ps_domain)]			

Continued from previous page

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		CRLC! CRLC_SequenceNumber_REQ	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
23		CRLC ? CRLC_SequenceNumber_CNF (tcv_RLC_SeqNumDL_RB20 := CRLC_SequenceNumber_CNF. count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB20)		
24		CRLC! CRLC_SequenceNumber_RE Q	cas_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
25		CRLC ? CRLC_SequenceNumber_C NF (tcv_RLC_SeqNumDL_RB21 := CRLC_SequenceNumber_C NF.count_C_LSB_DL)	car_GetRLC_SeqNum (tsc_CellDedicated, tsc_RB21)		
26		[TRUE]			
Deta	iled Comments	:			

Test Step Name : ts_InitSystemSpecificCap
Group : BasicM_Security_Steps/

Objective : If UE supports GSM, this step initialises tcv_UE_SystemSpecificCap based on PICS

Default : RRC_Def1

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[pc_UMTS_GSM]			IF GSM
					is supporte
					d
2		(tcv_UE_SystemSpecificCap := 0)			
3		+lt_A57			
4		+lt_A56			
5		+lt_A55			
6		+lt_A54			
7		+lt_A53			
8		+lt_A52			
9		+lt_A51			
10		[TRUE]			IF GSM
					not Support
					ed
11		(tcv_UE_SystemSpecificCap := 0)			
		lt_A57			
12		[pc_MS_ClsmkA5_7='1'B]			A5_7
					Support ed
13		(tcv_UE_SystemSpecificCap :=			eu
13		tcv_UE_SystemSpecificCap+64)			
14		[TRUE]			
		lt_A56			
15		[pc_MS_ClsmkA5_6='1'B]			A5_6
					Support
40		/tour LIE SuptameSpacificCon .			ed
16		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+32)			
17		[TRUE]			
		lt_A55			
18		[pc_MS_ClsmkA5_5='1'B]			A5_5
					Support
					ed
19		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+16)			
20		[TRUE]			
		lt_A54			
21		[pc_MS_ClsmkA5_4='1'B]			A5_4
[[Support
					ed
22		(tcv_UE_SystemSpecificCap :=			
22		tcv_UE_SystemSpecificCap+8)			
23	ued on ne	[TRUE]			

2

Detailed Comments:

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
		lt_A53							
24		[pc_MS_ClsmkA5_3='1'B]			A5_3 Support ed				
25		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+4)							
26		[TRUE]							
		lt_A52							
27		[pc_MS_ClsmkA5_2='1'B]			A5_2 Support ed				
28		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+2)							
29		[TRUE]							
		lt_A51							
30		[pc_MS_ClsmkA5_1='0'B]			A5_1 Support ed				
31		(tcv_UE_SystemSpecificCap := tcv_UE_SystemSpecificCap+1)							
32		[TRUE]							
Deta	iled Com	ments :							

	Test Step Dynamic Behaviour							
Test	Step Nai	ne: ts_CMAC_DownloadSecurityKey (p_KC: KeyCiphering; p_IK: IntegrityKey; p_GSM_ck: GSM_CipheringKey; p_CN_Domain: CN_DomainIdentity; p_HFN: B20)						
Grou	ıp	: BasicM_Security_Steps/						
Objective		: To download all security keys to CMAC. Only the keys/Parameters to be downloaded wi depending on the PICS.	ll be passed as parameters, rest w	vill be omitted				
Defa	ult	: SS_Def						
Com	ments	:						
Desc	ription	:						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		CMAC ! CMAC_SecurityMode_Config_REQ	ca_CMAC_SecurityModeCf gReq (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC, p_IK, p_GSM_ck)		Downloa d security keys for			

ca_CMAC_SecurityModeCf gCnf (tsc_CellDedicated)

security keys for MAC

CMAC ? CMAC_SecurityMode_Config_CNF

 $\textbf{Test Step Name} \quad : \ ts_CMAC_DL_CipherCfg \ (\ p_CipherMode: CipheringModeCommand; \ p_ActTime: INTEGER; \ (\ p_CipherMode: CipherMode: CipherM$

p_IncrDcr : Increment_Mode)

Group : BasicM_Security_Steps/

Objective: Configure ciphering on the MAC layer for DL RBs.

This step shal be called when required.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CMAC ! CMAC_Ciphering_Activate_REQ	ca_CMAC_DL_CipherActRe q (tsc_CellDedicated, tsc_DL_DPCH1, p_CipherMode, p_ActTime, p_IncrDcr)		start, restart or stop cipherin g for TM RB
2		CMAC ? CMAC_Ciphering_Activate_CNF	ca_CMAC_CipherActCnf(ts c_CellDedicated, tsc_DL_DPCH1)		

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_CMAC_UL_CipherCfg (p_CipherMode: CipheringModeCommand; p_ActTime: INTEGER;

p_IncrDcr : Increment_Mode)

Group : BasicM_Security_Steps/

Objective: Configure ciphering on the MAC layer for UL RBs.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		CMAC ! CMAC_Ciphering_Activate_REQ	ca_CMAC_UL_CipherActRe q (tsc_CellDedicated, tsc_UL_DPCH1, p_CipherMode, p_ActTime, p_IncrDcr)		start, restart or stop cipherin g			
2		CMAC ? CMAC_Ciphering_Activate_CNF	ca_CMAC_CipherActCnf (tsc_CellDedicated, tsc_UL_DPCH1)					
Doto	Dotailed Comments:							

Detailed Comments:

 $\begin{tabular}{lll} \textbf{Test Step Name} &: ts_CRLC_DL_CipherCfgRB (& p_CipherMode: CipheringModeCommand; p_RbType: RB_ConfigType: ;p_IncMode: RLC_IncMode) \end{tabular}$

Group : BasicM_Security_Steps/

Objective : Configure ciphering for RLC layer for configured AM/UM RAB's

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[(p_RbType = cell_DCH_64kPS_RAB_SRB) OR			
		(p_RbType = cell_FACH_PS) OR (p_RbType = cell_Two_DTCH_CS_PS) OR (p_RbType = cell_Four_DTCH_CS_PS) OR (p_RbType = cell_PDCP_AM_RAB) OR (p_RbType = cell_PDCP_UM_RAB) OR (p_RbType= cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_CTCH) OR (p_RbType = cell_FACH_3_SCCPCH_3_FACH_CTCH) OR (p_RbType = cell_DCH_DSCH_PS) OR (p_RbType = cell_DCH_DSCH_CS_PS) OR (p_RbType = cell_DCH_DSCH_CS_PS) OR			
		cell_FACH_2SCCPCH_StandAlonePCH) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
2		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
3		[(p_RbType = cell_PDCP_UM_RAB)]			
4		+ It_RLC_Activate (tsc_RB21, tcv_RLC_SeqNumDL_RB21)			
5		[(p_RbType = cell_PDCP_AM_UM_RAB)]			
6		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
7		+ It_RLC_Activate (tsc_RB21, tcv_RLC_SeqNumDL_RB21)			
8		[(p_RbType = cell_DCH_2AM_PS) OR (p_RbType = cell_DCH_2_PS_Call)]			
9		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
10		+ lt_RLC_Activate (tsc_RB22, tcv_RLC_SeqNumDL_RB22)			
11		[(p_RbType = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)OR			
		(p_RbType= cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (p_RbType = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a) OR (p_RbType = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			
12		+ It_RLC_Activate (tsc_RB20, tcv_RLC_SeqNumDL_RB20)			
13		+ It_RLC_Activate (tsc_RB24, tcv_RLC_SeqNumDL_RB24)			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
14		[TRUE]						
		It_RLC_Activate (p_rbld : INTEGER ; p_SeqNum : RLC_SequenceNumber)						
15		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActRe q (tsc_CellDedicated , ps_domain , p_rbld , p_CipherMode, p_SeqNum , p_IncMode)		configur e cipherin g for signaling radio bearers			
16		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(ts c_CellDedicated)					
Deta	retailed Comments :							

 $\textbf{Test Step Name} \quad : \ \, ts_CRLC_DL_CipherCfgSRB \ \, (p_CipherMode: CipheringModeCommand; p_IncMode: CipheringModeCommand; p_In$

RLC_IncMode)

Group : BasicM_Security_Steps/

Objective : Configure ciphering for RLC layer for RB1, RB2, RB3 and RB4

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Label	Behaviour Description	Constraints Ref	Verdict	Comments
	+ lt_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1)			
	+ It_RLC_Activate (tsc_RB2 , tcv_RLC_SeqNumDL_RB2+2)			
	+ lt_RLC_Activate(tsc_RB3, tcv_RLC_SeqNumDL_RB3)			
	+ It_RLC_Activate(tsc_RB4, tcv_RLC_SeqNumDL_RB4)			
	It_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber)			
	CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_DL_CipherActRe q (tsc_CellDedicated ,tcv_CellIndInfo. recentSecureDomain, p_rb, p_CipherMode, p_RLC_Seq,p_IncMode)		configur e cipherin g for signaling radio bearers
	CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(ts c_CellDedicated)		
	Label	+ It_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1) + It_RLC_Activate (tsc_RB2, tcv_RLC_SeqNumDL_RB2+2) + It_RLC_Activate (tsc_RB3, tcv_RLC_SeqNumDL_RB3) + It_RLC_Activate (tsc_RB4, tcv_RLC_SeqNumDL_RB4) It_RLC_Activate (p_rb:INTEGER;p_RLC_Seq: RLC_SequenceNumber) CRLC! CRLC_Ciphering_Activate_REQ	+ It_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1) + It_RLC_Activate (tsc_RB2, tcv_RLC_SeqNumDL_RB2+2) + It_RLC_Activate (tsc_RB3, tcv_RLC_SeqNumDL_RB3) + It_RLC_Activate (tsc_RB4, tcv_RLC_SeqNumDL_RB4) It_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber) CRLC ! CRLC_Ciphering_Activate_REQ ca_CRLC_DL_CipherActRe q (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_rb, p_CipherMode, p_RLC_Seq,p_IncMode)	+ It_RLC_Activate (tsc_RB1, tcv_RLC_SeqNumDL_RB1) + It_RLC_Activate (tsc_RB2, tcv_RLC_SeqNumDL_RB2+2) + It_RLC_Activate (tsc_RB3, tcv_RLC_SeqNumDL_RB3) + It_RLC_Activate (tsc_RB4, tcv_RLC_SeqNumDL_RB4) It_RLC_Activate (p_rb : INTEGER ; p_RLC_Seq : RLC_SequenceNumber) CRLC ! CRLC_Ciphering_Activate_REQ ca_CRLC_DL_CipherActRe q (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_rb, p_CipherMode, p_RLC_Seq,p_IncMode)

 $\textbf{Test Step Name} \quad : \ ts_CRLC_DL_Integrity \ (\quad p_Integrity Protection Modeln fo: Integrity Protection Modeln fo: Integri$

Group : BasicM_Security_Steps/
Objective : To start the integrity protection

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_DL_IntegrityActi vateReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_IntegrityProtectionModel nfo)		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivate Cnf (tsc_CellDedicated)		

Detailed Comments:

Test Step Dynamic Behaviour

 $\textbf{Test Step Name} \hspace{0.2cm} : \hspace{0.2cm} ts_CRLC_UL_CipherCfg \hspace{0.1cm} (\hspace{0.1cm} p_RB_ActivationTimeInfoList \hspace{0.1cm} : \hspace{0.1cm} RB_ActivationTimeInfoList \hspace{0.1c$

RLC_IncMode)

Group : BasicM_Security_Steps/

Objective: Configure ciphering for RLC layer

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_UL_CipherActRe q (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, p_RB_ActivationTimeInfoLis t ,p_IncMode)		configur e cipherin g for signaling radio bearers
2		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(ts c_CellDedicated)		

Detailed Comments:

 $\textbf{Test Step Name} \quad : \ ts_CRLC_UL_CipherCfg_RAB \ (\ p_CN_Domain : CN_DomainIdentity; \ p_RB_ActivationTimeInfoList \) \\$

: RB_ActivationTimeInfoList ;p_IncMode : RLC_IncMode)

Group : BasicM_Security_Steps/

Objective: Configure ciphering for RLC layer

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Ciphering_Activate_REQ	ca_CRLC_UL_CipherActRe q (tsc_CellDedicated , p_CN_Domain, p_RB_ActivationTimeInfoLis t ,p_IncMode)		configur e cipherin g for signaling radio bearers
2		CRLC ? CRLC_Ciphering_Activate_CNF	ca_CRLC_CipherActCnf(ts c_CellDedicated)		

Detailed Comments:

Test Step Dynamic Behaviour

 $\textbf{Test Step Name} \quad : \ ts_CRLC_UL_Integrity \ (\ p_Integrity ProtActivationInfo : Integrity ProtActivationInfo) \\$

Group : BasicM_Security_Steps/
Objective : To start the integrity protection

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr L	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActi vateReq (tsc_CellDedicated , tcv_CellIndInfo. recentSecureDomain, c_RestRB_IntegrityProtActi vationInfoList(p_IntegrityPr otActivationInfo.rrc_Messag eSequenceNumberList.[0], p_IntegrityProtActivationInf o.rrc_MessageSequenceNum berList.[1], p_IntegrityProtActivationInf o.rrc_MessageSequenceNum berList.[3], p_IntegrityProtActivationInf o.rrc_MessageSequenceNum berList.[4]))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivate Cnf (tsc_CellDedicated)		

 $\begin{array}{ll} \textbf{Test Step Name} & : \ \text{ts_RRC_Security (} \\ & \ \text{p_CellId} : \ \text{INTEGER;} \\ \end{array}$

p_CellId : INTEGER;
p_KC : KeyCiphering;
p_IK : IntegrityKey;

p_IK: IntegrityKey; p_GSM_ck: GSM_CipheringKey;

p_NewKey : BOOLEAN;

p_CN_Domain : CN_DomainIdentity)

Group : BasicM_Security_Steps/

Objective : Configure and Activate (or deactivate) ciphering for all concerned RBs

Default : RRC_Def1

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ lt_RRC_InitVariables			
3		+ ts_SS_DownloadSecurityKey (p_CellId,			
		p_KC, p_IK, p_GSM_ck, p_CN_Domain)			
4		+ It_ActivateSecurity_DL_SS			To Start Integrity
					on the
					UL RB2
5		+lt_RB2_UL_IntegrityActivate			
6		+ It_StartSecurity_UE			
7		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo.			
		recentSecureDomain = ps_domain)) OR			
		((tcv_CellIndInfo.cs_cipheringStarted =			
		TRUE) AND(tcv_CellIndInfo. recentSecureDomain = cs_domain))]			
8		+ ts_CRLC_ResumeSecurity (p_CellId			
)			
9		[TRUE]			
		It_RB2_UL_IntegrityActivate			
10		[tcv_Int_ModifyFlag]			If Start
					of Integrity
					Set DL
					RRC_M SN to 0,
					else
					skipt it.
11		+			
		ts_RB2_UL_IntegrityActivate(tcv_RRC_MSN_R B2_UL)			
12		[NOT tcv_Int_ModifyFlag]			If Start
					of
					Integrity Set DL
					RRC_M
					SN to 0,
					else skipt it.
13		+ ts_RB2_UL_IntegrityActivate(0)			
		It_ActivateSecurity_DL_SS			
14		+ It_InitialiseRRC_MSN			

		Test Step Dynamic B	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
15		+ ts_CRLC_DL_Integrity(tcv_CellIndInfo.dL_Integrity)			
16		[((tcv_CellIndInfo.ps_cipheringStarted = TRUE) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)) OR ((tcv_CellIndInfo.cs_cipheringStarted = TRUE) AND(tcv_CellIndInfo. recentSecureDomain =cs_domain))]			
17		+ ts_CRLC_GetRLC_SeqNumSecurity (p_CellId)			
18		+ lt_AssignRB_ActivationTimeInfoList			
19		+ ts_CRLC_SuspendSecurity (p_CellId)			Suspend SRBs 1, 3 and 4
20		+ ts_CRLC_DL_CipherCfgSRB (tcv_CellIndInfo.dL_CipherMode,notInc)			Configur e cipherin g for RLC (RBs 1, 2, 3 and 4)
21		+ ts_CRLC_DL_CipherCfgRB (tcv_CellIndInfo.dL_CipherMode, tcv_TmpCellInfo.cellConfig,notInc)			
22		+ ts_CMAC_CipherCfg (p_CellId ,TRUE , tcv_CellIndInfo.dL_CipherMode ,incPerCFN_Cycle)			
23		[TRUE]			If no New Cipherin g config
		It_InitialiseRRC_MSN			
24		[NOT tcv_Int_ModifyFlag]			If Start of Integrity Set DL RRC_M SN to 0, else skipt it.
25		+ ts_SetDL_RRC_MessageSN (p_CellId)			""
26		[tcv_Int_ModifyFlag]			
		lt_StartSecurity_UE			
27		+ It_SendSecurityModeCommand			
28		[px_CipheringOnOff]			Cipherin g and Integrity

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
29	TSP1	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.ul_Int egProtActivationInfo, tcv_CellIndInfo.uL_CipherMode := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.rb_U L_CiphActivationTimeInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCm pl (tcv_RRC_Ti,?))	(P)	UL cipherin g informati on is present		
30		+ ts_CRLC_UL_CipherCfg (tcv_CellIndInfo.uL_CipherMode ,notInc)					
31		+ ts_CRLC_UL_Integrity (tcv_CellIndInfo.uL_Integrity)					
32	TSF1	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti,?))	(F)			
33		[NOT (px_CipheringOnOff)]			Integrity only no cipherin g		
34	TSP2	AM?RLC_AM_DATA_IND (tcv_CellIndInfo.uL_Integrity := RLC_AM_DATA_IND.aM_message.uL_DCCH_ Message.message.securityModeComplete.ul_Int egProtActivationInfo)	car_RRC_SecModeCmpl (tsc_CellDedicated, tsc_RB2, cbr_108_RRC_SecModeCm pl (tcv_RRC_Ti , OMIT))	(P)	No UL Cipherin g informati on		
35		+ ts_CRLC_UL_Integrity (tcv_CellIndInfo.uL_Integrity)					
36	TSF2	AM?RLC_AM_DATA_IND	car_RRC_SecModeFail (tsc_CellDedicated, tsc_RB2, cr_108_SecModeFail (tcv_RRC_Ti,?))	(F)			
		lt_SendSecurityModeCommand					
37		[pc_UMTS_GSM]			Branchin g if GSM Support ed		
38		[px_CipheringOnOff]			Cipherin g ON and integrity ON		

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
39		[((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain = cs_domain)) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain = cs_domain)]			Cipherin g on TM RAB present, hence include Cipherin g activatio n time		
40		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist, tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7)))))		Cipherin g for signallin g RBs 1 to 4		
41	<u> </u>	[TRUE]					

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
42		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo,		Cipherin g for signallin g RBs 1 to 4		
			cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist, OMIT, p_CN_Domain, tcv_CellIndInfo.dL_Integrity				
			tcv_CellIndInfo.cipheringAlg orithmCapability,cs_UE_Sys SpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7)))))				
43		[NOT (px_CipheringOnOff)]			Integrity ON and cipherin g OFF		
44		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (
			tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (
			tcv_RRC_Ti, p_CN_Domain,				
			tcv_CellIndInfo.dL_Integrity				
			tcv_CellIndInfo.cipheringAlg orithmCapability, cs_UE_SysSpecCap (INT_TO_BIT (tcv_UE_SystemSpecificCa p,7))				
45		[NOT pc_UMTS_GSM]			Branchin g if GSM Not Support ed		

Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
46		[px_CipheringOnOff]			Cipherin g ON and integrity ON		
47		[((tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig =cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS) OR ((tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) AND (tcv_CellIndInfo. recentSecureDomain = cs_domain)) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain = cs_domain)]			Cipherin g on TM RAB present, hence include Cipherin g activatio n time		
48		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist, tcv_CipherActTime, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT)))		Cipherin g for signallin g RBs 1 to 4		
49		[TRUE])))				

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
50		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo,		Cipherin g for signallin g RBs 1 to 4		
			cs_RRC_SecModeCmdCiph Int (tcv_RRC_Ti, tcv_CellIndInfo.dL_CipherM ode, tcv_RB_ActivationTimeInfoL ist, OMIT, p_CN_Domain,				
			tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.cipheringAlg orithmCapability,OMIT)))				
51		[NOT (px_CipheringOnOff)]			Integrity ON and cipherin g OFF		
52		AM!RLC_AM_DATA_REQ	cas_RRC_SecModeCmd (tsc_CellDedicated, tsc_RB2, cs_108_RRC_SecModeCmd (tcv_CellIndInfo.dl_Integrity CheckInfo, cs_RRC_SecModeCmdInt (tcv_RRC_Ti, p_CN_Domain, tcv_CellIndInfo.dL_Integrity , tcv_CellIndInfo.dc_Integrity ,				
53		lt_RRC_InitVariables + lt_InitCipherMode					
54		+ lt_InitIntegrity					
55		+ ts_InitSystemSpecificCap					
56 57		+ ts_SaveCellInfo(p_CellId) [p_NewKey = TRUE]			Authenti cation was done, reset HFN		
58		(tcv_HFN := '000000000000000000'B)					

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
59		[p_CN_Domain = cs_domain]			
60		(tcv_CellIndInfo.start_CS := '00000000000000000000000000000000000			
61		[p_CN_Domain = ps_domain]			
62		(tcv_CellIndInfo.start_PS := '00000000000000000000000000000000000			
63		[p_NewKey = FALSE]			
64		[p_CN_Domain = cs_domain]			
65		(tcv_HFN := tcv_CellIndInfo.start_CS)			
66		[p_CN_Domain = ps_domain]			
67		(tcv_HFN := tcv_CellIndInfo.start_PS)			
		It_InitCipherMode			
68		[px_CipheringOnOff = TRUE]			
69		[pc_UEA1_Supp]			
70		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea1), tcv_CellIndInfo.cipheringAlgorithmCapability := '00000000000000011'B)			Swithch On cipherin g
71		[p_CN_Domain = cs_domain]			
72		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
73		[p_CN_Domain = ps_domain]			
74		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
75		[NOT (pc_UEA1_Supp)]			
76		(tcv_CellIndInfo.dL_CipherMode := cs_CipheringModeCmdOn (uea0), tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000000001'B)			Swithch On cipherin g
77		[p_CN_Domain = cs_domain]			
78		(tcv_CellIndInfo.cs_cipheringStarted := TRUE)			
79		[p_CN_Domain = ps_domain]			
80		(tcv_CellIndInfo.ps_cipheringStarted := TRUE)			
81		[NOT (px_CipheringOnOff)]			
82		(tcv_CellIndInfo.cs_cipheringStarted := FALSE , tcv_CellIndInfo.ps_cipheringStarted := FALSE)			
83		[pc_UEA1_Supp]			
84		(tcv_CellIndInfo.cipheringAlgorithmCapability := '0000000000000011'B)			
85		[NOT (pc_UEA1_Supp)]			
86		(tcv_CellIndInfo.cipheringAlgorithmCapability := '000000000000001'B)			
		lt_InitIntegrity			
87		(tcv_CellIndInfo.recentSecureDomain:= p_CN_Domain)			
88		[tcv_CellIndInfo.integrityStarted]			
89		+ts_GetRRC_MessageSN (p_CellId)			

		Test Step Dynamic B	ehaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
90		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectModify_P(tcv_RRC_MSN_RB0 , tcv_RRC_MSN_RB1 , tcv_RRC_MSN_RB2, tcv_RRC_MSN_RB3, tcv_RRC_MSN_RB4) , tcv_Int_ModifyFlag := TRUE)			Modify integrity
91		[NOT tcv_CellIndInfo.integrityStarted]			
92		(tcv_CellIndInfo.dL_Integrity := cs_IntegrityProtectStart (px_FRESH), tcv_CellIndInfo.integrityStarted := TRUE, tcv_CellIndInfo.dl_IntegrityCheckInfo := cs_IntegrityCheckInfo0, tcv_Int_ModifyFlag := FALSE)			Start integrity
		It_AssignRB_ActivationTimeInfoList			
93		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR			
		(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS) OR			
		(tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)) AND (p_CN_Domain = ps_domain)]			
94		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20))			
95		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) AND (p_CN_Domain = ps_domain)]			
96		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_21 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB21))			
97		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) AND (p_CN_Domain = ps_domain)]			

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
98		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20_21 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20, tcv_RLC_SeqNumDL_RB21))							
99		[((tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call))AND (p_CN_Domain = ps_domain)]							
100		(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs_20_22 (tcv_RLC_SeqNumDL_RB1, tcv_RLC_SeqNumDL_RB2+2, tcv_RLC_SeqNumDL_RB3, tcv_RLC_SeqNumDL_RB4, tcv_RLC_SeqNumDL_RB20, tcv_RLC_SeqNumDL_RB22))							
101		[TRUE]							
102		<pre>(tcv_RB_ActivationTimeInfoList := cs_RB_ActTimeInfoListSRBs (tcv_RLC_SeqNumDL_RB1 , tcv_RLC_SeqNumDL_RB2 +2, tcv_RLC_SeqNumDL_RB3 , tcv_RLC_SeqNumDL_RB4))</pre>							

Detailed Comments: 1. this step is necessary if (ciphering is tested and shall be switch on) OR (ciphering is tested and shall be switch off and was previously switched on) OR integrity is tested

Test	Step	Dvna	mic	Beh	aviour
	p	-,	••••		a u.

Test Step Name : ts_SS_ResetSecurityKey
Group : BasicM_Security_Steps/

Objective: To download all security keys to CMAC (for DCH cell configurations only) and CRLC.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_CellIndInfo:=c_CellIndInfoDef)			
2		[pc_UEA1_Supp]			
3		(tcv_CellIndInfo.cipheringAlgorithmCapability := '00000000000000011'B)			
4		[NOT (pc_UEA1_Supp)]			
5		(tcv_CellIndInfo.cipheringAlgorithmCapability := '00000000000000001'B)			

 $\begin{tabular}{ll} \textbf{Test Step Name} &: ts_SS_DownloadSecurityKey (p_CellId : INTEGER; p_KC : KeyCiphering; p_IK : IntegrityKey; p_GSM_ck : GSM_CipheringKey; p_CN_Domain : CN_DomainIdentity) \\ \end{tabular}$

Group : BasicM_Security_Steps/

Objective : To download all security keys to CMAC (for DCH cell configurations only) and CRLC.

Default : SS_Def

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_CipheringOnOff]			
3		[(tcv_TmpCellInfo.cellConfig =			Cell
		cell_FACH_NoConn) OR			FACH
		(tcv_TmpCellInfo.cellConfig = cell_FACH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_NoDedicated) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_PS			
) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_BMC_NoConn) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2_PRACH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2_SCCPCH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2SCCPCH_StandAlonePCH_NoC			
		onn) OR (tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2SCCPCH_StandAlonePCH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2SCCPCH_StandAlonePCH_PS			
)OR (tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No			
		Conn) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_3_FACH_CTCH_No			
		Conn)OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR			
		j ,			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_3_FACH_CTCH)OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_3_FACH_2a_CTCH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2SCCPCH_StandAlonePCH_2a)O			
		R			

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
4 5		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)] + lt_DownloadKeyCRLC (tcv_HFN, p_KC, p_IK) [(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR			Cell DCH no TM RAB				
		cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init)]							
6		+ lt_DownloadKeyCRLC (tcv_HFN, p_KC,p_IK)							
7		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			cell DCH with TM RAB				
8		+ It_DownloadKeyCRLC (tcv_HFN,p_KC,p_IK)							
9		+ lt_DownloadKeyCMAC (tcv_HFN, p_KC)							

		Test Step Dynamic B	ehaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
10		[TRUE]			
11		[NOT px_CipheringOnOff]			
12		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR			Cell FACH
		(tcv_TmpCellInfo.cellConfig = cell_FACH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_NoDedicated) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS			
) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2_PRACH_NoConn) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2_SCCPCH) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoC			
		onn) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2SCCPCH_StandAlonePCH_PS) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_4_FACH_Cnfg1_No Conn) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_4_FACH_Cnfg2_No Conn) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_3_FACH_CTCH_No Conn)OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_FACH_3_SCCPCH_3_FACH_CTCH)OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)			
		OR			1
		(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a)O R			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]			
13		+ It_DownloadKeyCRLC (tcv_HFN,OMIT,p_IK)			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
14		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS_Init) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS_Init)]			Cell DCH no TM RAB			
15		+ It_DownloadKeyCRLC (tcv_HFN ,OMIT, p_IK)						
16		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)]			cell DCH with TM RAB			
17		+ lt_DownloadKeyCRLC (tcv_HFN,OMIT, p_IK)						
18		[TRUE] It_DownloadKeyCMAC (p_HFN : B20; p_KC_LT : KeyCiphering)						
19		CMAC ! CMAC_SecurityMode_Config_REQ	ca_CMAC_SecurityModeCf gReq (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC_LT, OMIT, OMIT)		Downloa d security keys for MAC			
20		CMAC ? CMAC_SecurityMode_Config_CNF	ca_CMAC_SecurityModeCf gCnf (tsc_CellDedicated)					
		lt_DownloadKeyCRLC (p_HFN : B20; p_KC_LT : KeyCiphering; p_IK_LT : IntegrityKey)						

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
21		CRLC ! CRLC_SecurityMode_Config_REQ	ca_CRLC_SecurityModeCfg Req (tsc_CellDedicated , p_CN_Domain, p_HFN , p_KC_LT, p_IK_LT, OMIT)		Downloa d security keys for RLC. CRLC is configur ed with cellId -1 (tsc_Cell Dedicate d)			
22		CRLC ? CRLC_SecurityMode_Config_CNF	ca_CRLC_SecurityModeCfg Cnf (tsc_CellDedicated)					
Deta	iled Com	nments :	•		•			

 $\textbf{Test Step Name} \quad : \ ts_SS_SecurityDownloadStart \ (\ p_domain : CN_DomainIdentity \ ; \ p_StartValue : B20 \)$

Group: BasicM_Security_Steps/

Objective : To download a new START value In the cell Independent Record

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		[p_domain = cs_domain]						
2		(tcv_CellIndInfo.start_CS := p_StartValue)						
3		[p_domain = ps_domain]						
4		(tcv_CellIndInfo.start_PS := p_StartValue)						
Deta	Detailed Comments :							

Test Step Name : ts_SetDL_RRC_MessageSN (p_ActCell : INTEGER)

Group : BasicM_Security_Steps/

Objective : To Set the Message sequence number in DL to all 0 for RB0 to RB4

Default : SS_Def

Comments: This step to be used when Integrity is to be started

Description :

CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ (p_ActCell, tsc_RB0, 0)		
CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (p_ActCell, tsc_RB0)		
CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB1, 0)		
CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB1)		
CRLC! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB2, 0)		
CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB2)		
CRLC ! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB3, 0)		
CRLC ?CRLC_SetRRC_MessageSN_CNF	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB3)		
CRLC! CRLC_SetRRC_MessageSN_REQ	ca_DL_CRLC_SetRRC_MS N_REQ(tsc_CellDedicated, tsc_RB4, 0)		
CRLC ?CRLC_SetRRC_MessageSN_CN F	ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB4)		
	CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ! CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC ! CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ! CRLC_SetRRC_MessageSN_CN	tsc_RB0, 0) CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC ! CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ! CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ! CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC ?CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB3, 0) ca_CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB3) CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB4, 0) CRLC ?CRLC_SetRRC_MessageSN_CN NF (tsc_CellDedicated, tsc_RB4, 0) CRLC ?CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB4, 0) CRLC ?CRLC_SetRRC_MSN_C NF (tsc_CellDedicated, tsc_RB4, 0)	tsc_RB0, 0) CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC ! CRLC ! CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC ! CRLC CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC CRLC CRLC ?CRLC_SetRRC_MessageSN_REQ CRLC CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC CRLC ?CRLC_SetRRC_MessageSN_CNF CRLC ! CRLC CRLC SetRRC_MessageSN_REQ CRLC SetRRC_MessageSN_REQ CRLC SetRRC_MSN_C CRLC CRLC CRLC SetRRC_MessageSN_REQ CRLC SetRRC_MSN_C CRLC SetRRC_MS CRLC SetRRC_

 $\textbf{Test Step Name} \quad : \ \, \text{ts}_\text{RB2}_\text{UL}_\text{IntegrityActivate} \\ (\text{p}_\text{RRCSN}: \ \, \text{RRC}_\text{MessageSequenceNumber})$

Group : BasicM_Security_Steps/

Objective :

Default : SS_Def

Comments : Description :

	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Integrity_Activate_REQ	ca_CRLC_UL_IntegrityActi vateReq (tsc_CellDedicated , tcv_CellIndInfo.recentSecur		
			eDomain, c_RB2_IntegrityProtActivati onInfoList(p_RRCSN))		
2		CRLC ?CRLC_Integrity_Activate_CNF	ca_CRLC_IntegrityActivate Cnf (tsc_CellDedicated)		

 $\textbf{Test Step Name} \quad \textbf{:} \quad ts_CMAC_CipherCfg \ (\ p_CellId : INTEGER; p_CalcNewActTime : BOOLEAN; p_CipherMode: \\ \quad \quad \quad CipheringModeCommand; \ p_IncrDcr : Increment_Mode \)$

: BasicM_Security_Steps/ Group

Objective : To Configuare the MAC Layer with the

Default Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[((tcv_TmpCellInfo.cellConfig =			
		cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig			
		=cell_DCH_64kCS_RAB_SRB) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_DCH_57_6kCS_RAB_SRB) OR			
		(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_Four_DTCH_CS) OR			
		(tcv_TmpCellInfo.cellConfig =cell_Two_DTCH_PS_CS) OR			
		(tcv_TmpCellInfo.cellConfig			
		=cell_Four_DTCH_PS_CS) OR			
		(tcv_TmpCellInfo.cellConfig			
		=cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig			
		=cell_Four_DTCH_CS_PS) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_DCH_DSCH_CS_PS)) AND(tcv_CellIndInfo. recentSecureDomain			
		=cs_domain)]			
3		+lt_CalcActivationTime			
4		+ts_CMAC_DL_CipherCfg (p_CipherMode, tcv_CipherActTime, p_IncrDcr)			
5		<pre>+ts_CMAC_UL_CipherCfg (p_CipherMode, tcv_CipherActTime, p_IncrDcr)</pre>			
6		[TRUE]		(P)	No TM
O		[TROE]		('')	RAB
					configur
					ed
		lt_CalcActivationTime			
7		[p_CalcNewActTime = TRUE]			
8		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(p_CellId, tsc_DL_DPCH1)		
9		CPHY?CPHY Frame Number CNF	car_GetFrameNum(
5		(tcv_FrameNumber :=	p_CellId, tsc_DL_DPCH1)		
		CPHY_Frame_Number_CNF.frameNumber)	· · /		
10		(tcv_CipherActTime := (256 +			Calculate
		tcv_FrameNumber (tcv_FrameNumber			the
		MOD 8 +8)) MOD 256)			Cipherin
					g Activatio
		[n Time
11		[p_CalcNewActTime = FALSE]			

 $\textbf{Test Step Name} \quad : \ \, ts_GetRRC_MessageSN(p_CellId:INTEGER)$

Group : BasicM_Security_Steps/

Objective: To Calculate the Message sequence numbers for RB0 to RB4 and store in TCV's.

Default :
Comments :
Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comment
1		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB0)		
2		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB0 := CRLC_RRC_MessageSN_CNF.count_I_LSB_D L)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB0)		
3		CRLC !CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB1)		
4		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB1 := CRLC_RRC_MessageSN_CNF.count_I_LSB _DL)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB1)		
5		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB2)		
6		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB2 := CRLC_RRC_MessageSN_CNF.count_I_L SB_DL, tcv_RRC_MSN_RB2_UL := CRLC_RRC_MessageSN_CNF.count_I_L SB_UL)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB2)		
7		CRLC ! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB3)		
8		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB3 := CRLC_RRC_MessageSN_CNF.count_ I_LSB_DL)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB3)		
9		CRLC! CRLC_RRC_MessageSN_REQ	cas_CRLC_RRC_MessageS N_REQ (tsc_CellDedicated, tsc_RB4)		
10		CRLC ? CRLC_RRC_MessageSN_CNF (tcv_RRC_MSN_RB4 := CRLC_RRC_MessageSN_CNF.cou nt_I_LSB_DL)	car_CRLC_RRC_MessageS N_CNF (tsc_CellDedicated, tsc_RB4)		

 $\textbf{Test Step Name} \quad : \ ts_CMAC_UL_DL_CipherCfg \ (\ p_CipherMode: CipheringModeCommand; \ p_ActTime: INTEGER; \\ \quad p_IncrDcr : Increment_Mode \)$

Group : BasicM_Security_Steps/

Objective : Configure ciphering on the MAC layer for UL and DLRBs.

: SS_Def Default

Comments Description

		Verdict	Comments
p_ActTime, p_li	CipherCfg (p_CipherMode,		

Test Step Name : ts_CRLC_ReconfRLC_Size (p_urnti:BOOLEAN)

Group : BasicM_SS_Configuration_Steps/

: To Reconfigure RLC size to allow U–RNTI in MAC header or C–RNTI in MAC header depending on parameter if it is TRUE allow U–RNTI in MAC header and if it is false allow C–RNTI in MAC header Objective

Default

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[p_urnti=TRUE]			
2		CRLC! CRLC_Config_REQ	cad_RB_UM_ReconfInfo (tsc_CellDedicated , tsc_RB1, {uLlogicalChannelIdentity tsc_UL_DCCH1, dLlogicalChannelIdentity tsc_DL_DCCH1})		cofigure radio bearers: RB1 (UM + DCCH) and (UM
					+ DCCH)
					Payload size=120
3		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB1)		
4		[p_urnti=FALSE]			
5		CRLC ! CRLC_Config_REQ	ca_RB_UM_ReconfInfo (tsc_CellDedicated , tsc_RB1, {uLlogicalChannelIdentity tsc_UL_DCCH1, dLlogicalChannelIdentity tsc_DL_DCCH1})		cofigure radio bearers: RB1 (UM + DCCH) and (UM + DCCH) Payload size=136
6		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf((default)
			tsc_CellDedicated, tsc_RB1)		

Test Step Name: ts_CMAC_New_RNTI_Reconf (p_urnti:BOOLEAN; p_CellId : INTEGER; p_U_RNTI : U_RNTI; p_C_RNTI : BITSTRING)

Group : BasicM_SS_Configuration_Steps/

Objective : Reconfigure MAC when a new U_RNTI or C_RNTI is assigned to UE.

Default : SS_Def

Comments : U-RNTI and C-RNTI are not required on DPCH.

U-RNTI and C-RNTI is necessary when DCCH/DTCH mapped on S-CCPCH.

C-RNTI is necessary when DCCH/DTCH mapped on PRACH.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		+ ts_CRLC_ReconfRLC_Size (p_urnti)			
3		+ It_CMAC_Reconf (p_urnti)			
		It_CMAC_Reconf (p_urnti: BOOLEAN)			
4		[p_urnti]			
5		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId , tsc_S_CCPCH1, c_UE_Info(p_U_RNTI, OMIT), c_TrChInfoPCH_FACH_PS		SS has valid U-RNTI, C-RNTI is not valid
			c_TrLogMappingPCH_FAC H_PS)		
6		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId , tsc_S_CCPCH1		
7		[NOT p_urnti]			
8		[(tcv_TmpCellInfo.cellConfig = cell_FACH) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn)]			
9		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId , tsc_PRACH1, c_UE_Info (OMIT, p_C_RNTI), cb_TrChInfoRACH1, c_TrLogMappingRACH_DT CH)		SS has valid C-RNTI, U-RNTI is not valid Only C-RNTI is required on PRACH
10		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId , tsc_PRACH1)		
11		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId , tsc_S_CCPCH1, c_UE_Info(OMIT, p_C_RNTI), c_TrChInfoPCH_FACH_PS		
			c_TrLogMappingPCH_FAC H_PS)		

Continued from previous page

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
12		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId , tsc_S_CCPCH1)				
13		[TRUE]					
Deta	Detailed Comments :						

Test Step Name : ts_CMAC_Pag1_Cfg (p_CellId: INTEGER)

Group : BasicM_SS_Configuration_Steps/
Objective : Configure paging on the MAC layer.

Default : SS_Def

Comments: This step shall be used when UE in idle mode.

The DRX cycle length to use is the shortest of the CN domain specific Drx cycle length.

The test case variable tcv_dRX_CycleLengthPaging is assigned to: the smallest value of CN Drx cycle

length for the CN domain the UE is attached to.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		$[px_RAT = fdd]$			
3		+ It_CalculateDrxCycleLength			
4		CMAC! CMAC_PAGING_Config_REQ	ca_CMAC_PagingCfgReq(p _CellId, tsc_S_CCPCH1, fdd, c_MAC_PagingCfg (o_GetPI(px_IMSI_Def, 18), tcv_dRX_CycleLengthPagin g))		
5		CMAC ? CMAC_PAGING_Config_CNF	ca_CMAC_PagingCfgCnf(p _CellId, tsc_S_CCPCH1)		
6	ERR1	$[px_RAT = tdd]$		I	
7	ERR2	[TRUE]		I	
		lt_CalculateDrxCycleLength			
8		[pc_CS AND pc_PS]			0.
9		[tcv_TmpCellInfo.dRX_CycleLength.cN_CS_DRX _CycleLength <= tcv_TmpCellInfo.dRX_CycleLength.cN_PS_DRX _CycleLength]			1.
10		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_CS_DR X_CycleLength)			
11		[TRUE]			2.
12		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_PS_DR X_CycleLength)			
13		[pc_CS AND NOT (pc_PS)]			3.
14		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_CS_DRX _CycleLength)			
15		[pc_PS AND NOT (pc_CS)]			4.
16		(tcv_dRX_CycleLengthPaging := tcv_TmpCellInfo.dRX_CycleLength.cN_PS_DRX _CycleLength)			

Detailed Comments: 0. UE supports CS and PS

1. CN Drx Cycle length for CS is smaller than PS, then CN Drx Cycle length for CS is used

2. CN Drx Cycle length for CS is smaller than PS, then CN Drx Cycle length for PS is used

3. UE supports only CS, the CN Drx cycle length for CS is used

4. UE supports only PS, the CN Drx cycle length for PS is used

Test Step Name : ts_CMAC_Rel (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)

Group : BasicM_SS_Configuration_Steps/
Objective : To request to release the Radio Link

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CMAC ! CMAC_Config_REQ	cas_MAC_Rel(p_CellId, p_PhyCH)		
2		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId,p_PhyCH)		

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_CPHY_ActTime (p_CellId: INTEGER; p_PhysicalChannelIdentity; PhysicalChannelIdentity;

p_ttiValue : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To calculate the activation time based on CHY frame number

Default : SS_Def

Comments : p_ttiValue : is equal to tti/10

The following tcv are assigned: tcv_FrameNumber, tcv_ActTime

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_Frame_Number_REQ	cas_GetFrameNum(p_CellId, p_PhysicalChannelIdentity)		
2		CPHY ? CPHY_Frame_Number_CNF (tcv_FrameNumber := CPHY_Frame_Number_CNF.frameNumber)	car_GetFrameNum(p_CellId, p_PhysicalChannelIdentity)		
3		(tcv_ActTime := (256 + tcv_FrameNumber- (tcv_FrameNumber MOD 8 +8)) MOD 256, tcv_TGCFN := (tcv_FrameNumber+(256-p_ttiValue)) MOD 256)			

Test Step Name : ts_CPHY_TrChRelDCH_NoSHO (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)

Group : BasicM_SS_Configuration_Steps/
Objective : To request to release the Radio Link

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY ! CPHY_TrCH_Release_REQ	ca_PHY_RelReqDCH_NoS HO (p_CellId , p_PhyCH)		
2		CPHY ? CPHY_TrCH_Release_CNF	ca_PHY_RelCnf (p_CellId , p_PhyCH)		

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_CPHY_TrChRelNonDch (p_CellId : INTEGER; p_PhyCH : PhysicalChannelIdentity)

Group : BasicM_SS_Configuration_Steps/
Objective : To request to release the Radio Link

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
1		CPHY ! CPHY_TrCH_Release_REQ	ca_PHY_RelReqNonDch (p_CellId , p_PhyCH)			
2		CPHY ? CPHY_TrCH_Release_CNF	ca_PHY_RelCnf (p_CellId , p_PhyCH)			
Data illad Communità						

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_CRLC_Rel (p_CellId : INTEGER; p_RB_Id : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective: To release RLC entity.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_CRLC_RB_RelReq (p_CellId, p_RB_Id)		release radio bearer
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, p_RB_Id)		

Test Step Name : ts_CRLC_RelReconfSRB (p_CellId : INTEGER)

Group: BasicM_SS_Configuration_Steps/

Objective : To release RLC counter sequence number for SRB 1 to 4, by first releasing them and then setting

them up again.

Default : SS Def

Comments : This step is used only in conjonction with the RRC Connestion Release step. The configuration for

SRBs 1 to 4 is the same as the one used for cell_DCH and cell_FACH.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			
2		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
3		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
4		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4			
)			
5		+ ts_SS_RB1_ToRB4_Cfg			

Test Step Name : ts_CRLC_ResumeSecurity (p_CellId : INTEGER)

Group: BasicM_SS_Configuration_Steps/

Objective: resume radio bearers for the security procedure

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Swithch On cipherin g
2		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB1)		
3		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB1)		
4		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB3)		
5		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB3)		
6		CRLC! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB4)		
7		CRLC ? CRLC_Resume_CNF (tcv_RB_SigResumed := TRUE)	car_ResumeRB(tsc_CellDedicated, tsc_RB4)		
8		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAloneP CH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CT CH) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS))AND (tcv_CellIndInfo.cellConfig = cell_DCH_CSL_CS_PS))AND (tcv_CellIndInfo.CellCS_DCDC_DCS_PS))AND (tcv_CellIndInfo.CellCS_DCS_DCS_DCS_DCS_DCS_DCS_DCS_DCS_DCS_D	and Danuma DD/tag CallDadi		
9		CRLC! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB20)		
10		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB20)		

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
11		[tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB]			
12		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB21)		
13		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB21)		
14		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)]			
15		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB20)		
16		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB20)		
17		CRLC! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB21)		
18		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB21)		
19		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)]			
20		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB20)		
21		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB20)		
22		CRLC ! CRLC_Resume_REQ	cas_ResumeRB(tsc_CellDedicated, tsc_RB22)		
23		CRLC ? CRLC_Resume_CNF	car_ResumeRB(tsc_CellDedicated, tsc_RB22)		
24		[TRUE]			
Deta	iled Com	ments :			

Test Step Name : ts_CRLC_SuspendSecurity (p_CellId : INTEGER)

Group: BasicM_SS_Configuration_Steps/

Objective: suspend radio bearers for the security procedure

Default : SS_Def_Special

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			Swithch On cipherin g
2		CRLC ! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB1, tcv_RLC_SeqNumDL_RB1)		2
3		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB1)		
4		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB3, tcv_RLC_SeqNumDL_RB3)		2
5		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB3)		
6		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB4, tcv_RLC_SeqNumDL_RB4		2
7		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB4)		
8		[((tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAloneP CH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cn fg2) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_S_SCCPCH_4_FACH_Cn fg2) OR (tcv_TmpCellInfo.cellConfig = cell_FA			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
		CH_3_SCCPCH_3_FACH_CTCH) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
9		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2
10		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		
11		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
12		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated, tsc_RB21, tcv_RLC_SeqNumDL_RB21)		2
13		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB21)		
14		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			
15		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated, tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2
16		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)		
17		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB21, tcv_RLC_SeqNumDL_RB21)		2
18		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB21)		
19		[((tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2_PS_Call)) AND (tcv_CellIndInfo. recentSecureDomain =ps_domain)]			

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	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
20		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB20, tcv_RLC_SeqNumDL_RB20)		2				
21		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB20)						
22		CRLC! CRLC_Suspend_REQ	cas_RLC_SuspendRB (tsc_CellDedicated , tsc_RB22, tcv_RLC_SeqNumDL_RB22)		2				
23		CRLC ? CRLC_Suspend_CNF	car_SuspendRB (tsc_CellDedicated , tsc_RB22)						
24		[TRUE]							

Detailed Comments : 1. Get the RLC sequence number 2. suspend the SRB at the current RLC sequence number

Test Step Name : ts_ReconfigFACH_ToNoDedicated (p_CellId : INTEGER)

Group: BasicM_SS_Configuration_Steps/

Objective: To reconfig the cell from cell_FACH to cell_FACH_NoDedicated.

Default : SS_Def

Comments : In cell_FACH_NoDedicated, no DCCH/DTCH are configured: no C-RNTI nor U-RNTI are

downloaded to CMAC.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		$[px_RAT = fdd]$			
3		+ It_RelBCCH_FACH			
4		CMAC! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_S_CCPCH1, c_UE_Info(OMIT, OMIT), c_TrChInfoPCH_FACH, c_TrLogMappingPCH_FAC H_CellDCH)		map PCCH to PCH, CCCH to FACH
5		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		
6		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_PRACH1, c_UE_Info(OMIT, OMIT), cb_TrChInfoRACH1, cb_TrLogMappingRACH2)		mapping CCCH to RACH
7		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_PRACH1)		
8	ERR1	$[px_RAT = tdd]$		1	
9	ERR2	[TRUE]		I	
		lt_RelBCCH_FACH			
10		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_PS)]			
11		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
12		[TRUE]			
Detai	iled Com	ments :			

Test Step Name : ts_SS_1DCH_DCCH_Cfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : to configure physical channel DPCH1and connect DCH5 to the physical channel,then map DCCH1-4

on to the DCH5 transport channel. Used for setting up stand-alone UL:13.6 DL:13.6 kbps SRBs

Default : SS Def

Comments: The transport channel DCH5 carries only dedicated control channels.

MAC-d is configured with cellId -1 (tsc_CellDedicated).

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		$[px_RAT = fdd]$			
3		(tcv_TGCFN := 0)			
4		CPHY!CPHY_RL_Setup_REQ	ca_DL_DPCH_Info (p_CellId, tsc_DL_DPCH1, cb_DL_DPCH_SRB_Stand AloneDPCH_Offset (tcv_TmpCellInfo.dl_DPCH_ 2ndScrCode))		1.
5		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_DL_DPCH1)		
6		CPHY!CPHY_TrCH_Config_REQ	ca_DCH_148_TTI_10_DL_I nfoActNow (p_CellId, tsc_DL_DPCH1)		2.
7		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
8		CMAC! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_DL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoDL_13_6_Stand Alone, c_TrLogMappingDL_4DCC H)		3. C-RNTI and U-RNTI are not needed on DPCH
9		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated, tsc_DL_DPCH1)		
10		CPHY!CPHY_RL_Setup_REQ	ca_UL_DPCH_Info(p_CellI d, tsc_UL_DPCH1, c_UL_DPCH_13_6_StandA lone(tcv_TmpCellInfo.uL_Scrambl ingCode))		1.
11		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_UL_DPCH1)		
12		CPHY!CPHY_TrCH_Config_R EQ	ca_DCH_148_TTI_10_UL_I nfoActNow (p_CellId, tsc_UL_DPCH1)		2.
13		CPHY?CPHY_TrCH_Config_ CNF	ca_TrChCfgCnf (p_CellId, tsc_UL_DPCH1)		
14		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoUL_13_6_Stand Alone, c_TrLogMappingUL_4DCC H)		3. C-RNTI and U-RNTI are not needed on DPCH

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	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
15		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (tsc_CellDedicated, tsc_UL_DPCH1)						
16	ERR1	$[px_RAT = tdd]$		1					
17	ERR2	[TRUE]		1					

Detailed Comments : 1. configure physical channel DPCH1.
2. connect DCH5 to DPCH1.
3. map logical channels: DCCH1-4 to DCH5. MAC-d is to be configured with cellId -1.

 $\begin{tabular}{ll} \textbf{Test Step Name} &: ts_SS_2DCH_Modify (p_CellId:INTEGER; p_UL_TrChConfig: CphyTrchConfigReq; p_UL_TrChInfo, p_DL_TrChInfo: TrCHInfo; \\ & p_DL_TrChInfo: TrCHInfo; \\ \end{tabular}$

p_UL_TrLogMapping, p_DL_TrLogMapping: TrCH_LogCHMappingList1; p_ActTime: ActivationTime; p_DL_DPCHInfo : DL_DPCHInfo; p_UL_DPCH_Info : UL_DPCH_Info)

Group : BasicM_SS_Configuration_Steps/

: to modify physical channel DPCH1and connect DCH1and DCH5 to the physical channel, then map Objective

DCCH1-4 on to the DCH5 transport channel and map DTCH1 to the DCH1 transport channel. used

for RLC testing.

: SS_Def Default

Comments : SS is in TM mode different from the mode of UE.

Transport channel configuration is parameter (of type: CphyTrchConfigReq); DPCH is 64 kbps

physical channel.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		$[px_RAT = fdd]$			
3		CPHY!CPHY_RL_Modify_REQ	ca_DL_DPCH_ModifyInfo (p_CellId, tsc_DL_DPCH1, p_DL_DPCHInfo,p_ActTime)		1.
4		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_DL_DPCH1)		
5		CPHY!CPHY_TrCH_Config_REQ	ca_TrChCfgInfo(p_CellId, tsc_DL_DPCH1, c_TrChConfigTypeDCH_No SHO, p_DL_TrChConfig)		3.
6		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_DL_DPCH1)		
7		CMAC! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated , tsc_DL_DPCH1, c_UE_Info(OMIT, OMIT), p_DL_TrCHInfo, p_DL_TrLogMapping,p_Act Time)		4. U-RNTI and C-RNTI are not needed on DPCH
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated , tsc_DL_DPCH1)		
9		CPHY!CPHY_RL_Modify_REQ	ca_UL_DPCH_ModifyInfo(p_CellId, tsc_UL_DPCH1, p_UL_DPCH_Info,p_ActTi me)		1.
10		CPHY?CPHY_RL_Modify_CNF	ca_RL_ModifyCnf(p_CellId, tsc_UL_DPCH1)		
11		CPHY!CPHY_TrCH_Config_RE Q	ca_TrChCfgInfo (p_CellId, tsc_UL_DPCH1, c_TrChConfigTypeDCH_No SHO, p_UL_TrChConfig)		2.
12		CPHY?CPHY_TrCH_Config_C NF	ca_TrChCfgCnf(p_CellId, tsc_UL_DPCH1)		

	Test Step Dynamic Behaviour									
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments					
13		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfo(tsc_CellDedicated, tsc_UL_DPCH1, c_UE_Info(OMIT,OMIT), p_UL_TrCHInfo, p_UL_TrLogMapping,p_Act Time)		4. U-RNTI and C-RNTI are not needed on DPCH					
14		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(tsc_CellDedicated , tsc_UL_DPCH1)							
15	ERR1	$[px_RAT = tdd]$		1						
16	ERR2	[TRUE]		I						

Detailed Comments: 1. configure DPCH1supporting 64 kspb data rate.

2. connect uplink DCH1 and DCH5 to DPCH1.

3. connect downlink DCH1and DCH5 to DPCH1.

4. map logical channels: DCCH1-4 to DCH5, DTCH1 to DCH1 for both uplink and downlink and

send relevant transport channel configuration information to MAC.

Test Step Dynamic Behaviour

Test Step Name : ts_SS_AddDPCH (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective: To reconfigure the cell p_CellId from cell_NoDPCH to cell_DCH_StandaloneSRB_NoConn.

Default : SS_Def

Comments: The following channels need to be created:

physical channels: DPCH; transport channesl: DCH logical channels: DCCH; and

signalling radio bearer: signalling bearer RB1, RB2, RB3, RB4 on DCH.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SS_1DCH_DCCH_Cfg (p_CellId)			
2		+ts_SS_RB1_ToRB4_Cfg			

Test Step Name : ts_SS_BCH_SCH_CPICH_Cfg (p_CellId : INTEGER)

Group: BasicM_SS_Configuration_Steps/

Objective : To configure P-CCPCH, P-SCH, S-SCH and P-CPICH physical channels. To map BCH to

P-PCCPCH, then to map logical channel BCCH to transport channel BCH.

Default : SS Def

Comments : To configre P-CCPCH, P-SCH, S-SCH and P-CPICH physical channels and map BCH to

P-PCCPCH, then to map logical channel BCCH to transport channel BCH.

Description :

1 2 3 4 5 5	Label	Behaviour Description +ts_SetTmpCellInfo (p_CellId) [px_RAT = fdd] CPHY!CPHY_RL_Setup_REQ CPHY?CPHY_RL_Setup_CNF	ca_pCPICH_Info (p_CellId, (tcv_TmpCellInfo.powerpCP ICH))	Verdict	Comments
2 3 4		[px_RAT = fdd] CPHY!CPHY_RL_Setup_REQ	(tcv_TmpCellInfo.powerpCP		95:-
3		CPHY!CPHY_RL_Setup_REQ	(tcv_TmpCellInfo.powerpCP		05:5
4			(tcv_TmpCellInfo.powerpCP		
		CDUV2CDUV DI Cotup CNE	1 , ,		p-CPIC H
5		GENT OF NI_NL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_CPICH)		
		CPHY!CPHY_RL_Setup_REQ	ca_pSCH_Info (p_CellId, (tcv_TmpCellInfo.powerpSC H))		p-SCH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_SCH)		
7		CPHY!CPHY_RL_Setup_REQ	ca_sSCH_Info (p_CellId, (tcv_TmpCellInfo.powersSC H))		s-SCH
8		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_S_SCH)		
9		CPHY!CPHY_RL_Setup_REQ	ca_pCCPCH_Info (p_CellId, (tcv_TmpCellInfo.powerpC CPCH))		p-CCP CH
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_P_CCPCH)		
11		CPHY!CPHY_TrCH_Config_RE Q	ca_BCH_InfoActNow (p_CellId)		BCH connect ed to p-CCP CH
12		CPHY?CPHY_TrCH_Config_C NF	ca_TrChCfgCnf (p_CellId, tsc_P_CCPCH)		
13		CMAC!CMAC_Config_REQ	ca_CMAC_CfgInfo(p_CellId , tsc_P_CCPCH, c_UE_Info (OMIT, OMIT) , c_TrChInfoBCH1, c_TrLogMappingBCH1)		mapping BCCH to BCH. C-RNTI and U-RNTI are not needed on P-CCP CH
14		CMAC?CMAC_Config_CN F	ca_CMAC_CfgCnf (p_CellId, tsc_P_CCPCH)		
15	ERR1	$[px_RAT = tdd]$		1	
16	ERR2	[TRUE]		1	
Detaile	ed Com	ments :			

Test Step Name : ts_SS_CellCfg (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : To setup the cell parameter in CPHY, if the cell 'p_CellId' is the first one to be created, then CPHY

shall be initialised using CHY_INIT_REquest ASP.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
2	ERR	+ts_SetTmpCellInfo (p_CellId) [tcv_TmpCellInfo.cellConfig <> cell_NotConfigured]		I	Fetch table correpo nding to the cell Fatal error: cell already
3		[tcv_TmpCellInfo.cellConfig = cell_NotConfigured]			configur ed Cell not yet configur ed
4		+ lt_CellIsAlreadyStarted			
5		[px_RAT = fdd]			
6		CPHY!CPHY_Cell_Config_REQ	ca_CellCfgReq(p_CellId, tcv_TmpCellInfo.tCell, tcv_TmpCellInfo.frequencyIn fo, tcv_TmpCellInfo.priScrmCo de, tcv_TmpCellInfo.attenuation Level, tcv_TmpCellInfo.sfnOffset, tcv_TmpCellInfo.cellTxPowe rLevel)		
7		CPHY?CPHY_Cell_Config_CNF	ca_CellCfgCnf(p_CellId)		
8		+ ts_SaveCellInfo (p_CellId)			
9	ERR2	[px_RAT = tdd]		ļ	
10	ERR3	[TRUE]		1	
		lt_CelllsAlreadyStarted			
11		+ ts_CountConfiguredCell			
12		[tcv_NumCfgCell = 0]			1.
13		+ts_MM_PwrOrUSIM_Off(tsc_USIM_NeedRm v)			1. Deactiva te the UE
14		[tcv_DefaultRadioCnf = TRUE]			3.
15		CPHY!CPHY_Ini_REQ	cas_InitReqDef		
16		CPHY ? CPHY_Ini_CNF	car_IniCnf		
17		(tcv_TmpCellInfo.tCell := 0)			
18		[tcv_DefaultRadioCnf = FALSE]			4.
19		CPHY!CPHY_Ini_REQ	cas_InitReqNonDef		
20		CPHY ? CPHY_Ini_CNF	car_IniCnf		
21		(tcv_TmpCellInfo.tCell := 0)			

Continued from previous page

Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
22		[tcv_NumCfgCell <> 0]			2.		
Detailed Comments: 1. The cell 'p_CellId' is the first one to be created 2. The cell 'p_CellId' is not the first one to be created 3. CPHY_Init_Request is sent with a defaultRadioEnvironment value 4. CPHY_Init_Request is sent with a nonDefaultMultiCell value							

Test Step Name : ts_SS_CreateCellDCH (p_CellId : INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : This test Step sets up a cell with stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH which consists of

the following: For a first cell:

physical channels: p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH, PRACH and DPCH;

transport channesl: BCH, FACH, PCH, RACH, DCH; logical channels: BCCH, CCCH, PCCH, DCCH; and

signalling radio bearer RB0 on FACH and RACH; signalling bearer RB1, RB2, RB3, RB4 on DCH.

For cells other than the first cell

physical channels: p-SCH, s-SCH, p-CPICH, p-CCPCH, s-CCPCH, PRACH (no DPCH)

transport channesl: BCH, FACH, PCH, RACH (no DCH) logical channels: BCCH, CCCH, PCCH (no DCCH)

signalling radio bearer RB0 on FACH and RACH (not RB1 RB2 RB3 RB4 on DCH)

Default : InitOtherwiseFail

Comments : Cell configuration supporting UL:3.4 DL:3.4 kbps stand–alone signalling RB.

CRLC is configured with cellId –1 (tsc_CellDedicated)

CMAC for DCCH (MAC-d) is configured with cellId -1 (tsc_CellDedicated).

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SS_CellCfg(p_CellId)			
2		+ts_SS_BCH_SCH_CPICH_Cfg(p_CellId)			
3		+ts_SS_PCH_FACH_CCCH_Cfg(p_CellId)			
4		+ts_SS_RACH_CCCH_Cfg(p_CellId)			
5		+ ts_CountConfiguredCell			
6		[tcv_NumCfgCell = 0]			First cell
					to be created
7		+ts_SS_1DCH_DCCH_Cfg(p_CellId)			Created
8		+ts_SS_RB_BCCH_BCH_Cfg(p_CellI			
		d)			
9		+ts_SS_RB_PCCH_Cfg(p_CellId)			
10		+ts_SS_RB0_Cfg (p_CellId)			
11		+ts_SS_RB1_ToRB4_Cfg			
12		(
		tcv_TmpCellInfo.DL_DPCH_S HO := TRUE,			
		tcv_TmpCellInfo.UL_DPCH_S			
		HO := TRUE, tcv_TmpCellInfo.cellConfig :=			
		cell_DCH_StandAloneSRB_No			
		Conn)			
13		+ ts_SaveCellInfo (p_CellId)			1.
14		[tcv_NumCfgCell <> 0]			Next cell
					to be created
15					orcaica
		ts_SS_RB_BCCH_BCH_Cfg(p_CellId)			
16		+ ts_SS_RB_PCCH_Cfg(p_CellId)			
17		+ ts_SS_RB0_Cfg(p_CellId)			
18		+ ts_SetCellCfg (p_CellId, cell_NoDPCH)			1.

Detailed Comments: 1. Set the cell configuration in the CellInfoCfg record

 $\textbf{Test Step Name} \quad : \ \mathsf{ts_SS_PCH_FACH_CCCH_Cfg} \ (\ \mathsf{p_CellId} : \mathsf{INTEGER} \)$

Group : BasicM_SS_Configuration_Steps/

: To configure a secondary CCPCH (tsc_S_CCPCH1), then connect PCH and FACH to the secondary CCPCH .(34.108 cl. 4.2.1), finally to map PCCH to PCH and CCCH to FACH. Objective

Default : SS_Def

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1	Labei	+ts_SetTmpCellInfo (p_CellId)	Constidints vei	VEIUICE	Comments			
2		FIS_SetTripCellinio (p_Cellid) [px_RAT = fdd]						
3		CPHY!CPHY_RL_Setup_REQ	ca_sCCPCH_Info(p_CellId, tsc_s_CCPCH1, tsc_s_CCPCH1, tsc_s_CCPCH_2ndScrCod e, tsc_s_CCPCH1_ChC, tcv_TmpCellInfo.slotFormat sCCPCH1, (tcv_TmpCellInfo.powersCC PCH1), tcv_TmpCellInfo.timingsCC PCH1)		s-CCP CH1			
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_S_CCPCH1)					
5		CPHY!CPHY_TrCH_Config_REQ	ca_PCH_2_FACH_InfoAct Now (p_CellId, tsc_S_CCPCH1)		connect PCH and FACH to s-CCP CH1			
6		CPHY ? CPHY_TrCH_Config_CNF	ca_TrChCfgCnf(p_CellId, tsc_S_CCPCH1)					
7		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_S_CCPCH1, c_UE_Info (OMIT, OMIT), c_TrChInfoPCH_FACH, c_TrLogMappingPCH_FAC H_CellDCH)		map PCCH to PCH. U-RNTI and C-RNTI are not needed (no DCCH/ DTCH)			
8		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)					
9		CPHY!CPHY_RL_Setup_REQ	ca_PICH_Info(p_CellId, c_PichInfo, (tcv_TmpCellInfo.powerPIC H),tsc_S_CCPCH1)		PICH			
10		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf(p_CellId, tsc_PICH1)					
11	ERR1	$[px_RAT = tdd]$		1				
12	ERR2	[TRUE]		I				
Detai	Detailed Comments :							

Test Step Name : ts_SS_PrepareCellRRC_ConnEst (

p_CellId: INTEGER)

Group: BasicM_SS_Configuration_Steps/

Objective : To reconfigure the cell if it is not ready for an RRC connection establishment.

4 cases are handled:

1> the cell is already configure (cell_DCH_StandAloneSRB_NoConn OR cell_FACH_NoConn OR

cell_FACH_BMC_NoConn OR cell_FACH_2PRACH_NoConn OR

cell_FACH_2_SCCPCH_NoConn)

2> the cell is configured to cell_NoDPCH, then remove the DPCH from the 'old' cell and configure

the DPCH in the cell p_CellId

3> the cell is configured to cell_FACH_NoDedicated , then reconfigure the old cell where the 4> the configuration of the cell to not allow an RRC connection establishment \rightarrow error case

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
1 2		+ ts_Set ImpCellInfo (p_CellId) [(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_3_FACH_CTCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_NoConn)]			0

		Test Step Dynamic B	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
3		[(tcv_TmpCellInfo.cellConfig = cell_NoDPCH) OR (tcv_CellInfoA.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kPS_RAB_SRB)]			1
4		+ It_ReconfOldDPCH_Cell			
5		+ ts_SS_AddDPCH(p_CellId)			
6		(tcv_TmpCellInfo.cellConfig := cell_DCH_StandAloneSRB_NoConn, tcv_TmpCellInfo.DL_DPCH_SHO := TRUE, tcv_TmpCellInfo.UL_DPCH_SHO := TRUE			
7		+ ts_SaveCellInfo (p_CellId)			
8		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated]			2
9		+ It_ReconfOldFACH_Cell			
10		+ ts_SS_ReconfNoDedicatedToCellFACH (p_CellId)			
11		+ ts_SetCellCfg (p_CellId, cell_FACH_NoConn)			
12	ERR	[TRUE]		I	Program ming error
		lt_ReconfOldFACH_Cell			
13		[(tcv_CellInfoA.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoA.cellConfig = cell_FACH) OR (tcv_CellInfoA.cellConfig = cell_FACH_PS)]			
14		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellA)			
15		(tcv_CellInfoA.cellConfig := cell_FACH_NoDedicated)			
16		[(tcv_CellInfoB.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoB.cellConfig = cell_FACH) OR (tcv_CellInfoB.cellConfig = cell_FACH_PS)]			
17		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellB)			
18		(tcv_CellInfoB.cellConfig := cell_FACH_NoDedicated)			
19		[(tcv_CellInfoC.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoC.cellConfig = cell_FACH) OR (tcv_CellInfoC.cellConfig = cell_FACH_PS)]			
20		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellC			
21		(tcv_CellInfoC.cellConfig := cell_FACH_NoDedicated)			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
22		[(tcv_CellInfoD.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoD.cellConfig = cell_FACH) OR (tcv_CellInfoD.cellConfig = cell_FACH_PS)]			
23		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellD)			
24		(tcv_CellInfoD.cellConfig := cell_FACH_NoDedicated)			
25		[(tcv_CellInfoE.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoE.cellConfig = cell_FACH) OR (tcv_CellInfoE.cellConfig = cell_FACH_PS)]			
26		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellE)			
27		(tcv_CellInfoE.cellConfig := cell_FACH_NoDedicated)			
28		[(tcv_CellInfoF.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoF.cellConfig = cell_FACH) OR (tcv_CellInfoF.cellConfig = cell_FACH_PS)]			
29		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellF)			
30		(tcv_CellInfoF.cellConfig := cell_FACH_NoDedicated)			
31		[(tcv_CellInfoG.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoG.cellConfig = cell_FACH) OR (tcv_CellInfoG.cellConfig = cell_FACH_PS)]			
32		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellG)			
33		(tcv_CellInfoG.cellConfig := cell_FACH_NoDedicated)			
34		[(tcv_CellInfoH.cellConfig = cell_FACH_NoConn) OR (tcv_CellInfoH.cellConfig = cell_FACH) OR (tcv_CellInfoH.cellConfig = cell_FACH_PS)]			
35		+ ts_ReconfigFACH_ToNoDedicated (tsc_CellH)			
36		(tcv_CellInfoH.cellConfig := cell_FACH_NoDedicated)			
37	ERR1	[TRUE]		ı	
		lt_ReconfOldDPCH_Cell			

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
38		[(tcv_CellInfoA.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoA.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoA.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoA.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoA.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoA.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoA.cellConfig = cell_PDCP_UM_RAB) OR					
		(tcv_CellInfoA.cellConfig =					
20		cell_PDCP_AM_UM_RAB)]					
39 40		+ ts_SS_ReIDPCH (tsc_CellA) (tcv_CellInfoA.cellConfig := cell_NoDPCH, tcv_CellInfoA.DL_DPCH_SHO := FALSE, tcv_CellInfoA.UL_DPCH_SHO := FALSE)					
41		[(tcv_CellInfoB.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoB.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoB.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoB.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoB.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoB.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoB.cellConfig = cell_PDCP_AM_UM_RAB)]					
42 43		+ ts_SS_ReIDPCH (tsc_CellB) (tcv_CellInfoB.cellConfig := cell_NoDPCH , tcv_CellInfoB.DL_DPCH_SHO := FALSE, tcv_CellInfoB.UL_DPCH_SHO := FALSE)					

		Test Step Dynamic E	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		[(tcv_CellInfoC.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoC.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoC.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoC.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoC.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoC.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoC.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoC.cellConfig = c			
		cell_PDCP_AM_UM_RAB)]			
45		+ ts_SS_ReIDPCH (tsc_CellC)			
46		(tcv_CellInfoC.cellConfig := cell_NoDPCH, tcv_CellInfoC.DL_DPCH_SHO := FALSE, tcv_CellInfoC.UL_DPCH_SHO := FALSE)			
47		[(tcv_CellInfoD.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoD.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoD.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoD.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoD.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoD.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoD.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoD.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoD.cellConfig = cell_PDCP_AM_UM_RAB)]			
48 49		+ ts_SS_ReIDPCH (tsc_CellD) (tcv_CellInfoD.cellConfig := cell_NoDPCH, tcv_CellInfoD.DL_DPCH_SHO := FALSE, tcv_CellInfoD.UL_DPCH_SHO := FALSE)			

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
50		[(tcv_CellInfoE.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoE.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoE.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoE.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoE.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoE.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoE.cellConfig = cell_PDCP_UM_RAB)					
		cell_PDCP_AM_UM_RAB)]					
51		+ ts_SS_ReIDPCH (tsc_CellE)					
52		(tcv_CellInfoE.cellConfig := cell_NoDPCH, tcv_CellInfoE.DL_DPCH_SHO := FALSE, tcv_CellInfoE.UL_DPCH_SHO := FALSE)					
53		[(tcv_CellInfoF.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoF.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoF.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoF.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoF.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoF.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoF.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoF.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoF.cellConfig = cell_PDCP_AM_UM_RAB)]					
54 55		+ ts_SS_ReIDPCH (tsc_CellF) (tcv_CellInfoF.cellConfig := cell_NoDPCH, tcv_CellInfoF.DL_DPCH_SHO := FALSE, tcv_CellInfoF.UL_DPCH_SHO := FALSE)					

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
56		[(tcv_CellInfoG.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoG.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoG.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoG.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoG.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoG.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoG.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoG.cellConfig =					
57		cell_PDCP_AM_UM_RAB)]					
57 58		+ ts_SS_ReIDPCH (tsc_CellG) (tcv_CellInfoG.cellConfig := cell_NoDPCH, tcv_CellInfoG.DL_DPCH_SHO := FALSE, tcv_CellInfoG.UL_DPCH_SHO := FALSE)					
59		[(tcv_CellInfoH.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_CellInfoH.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoH.cellConfig = cell_DCH_Speech) OR (tcv_CellInfoH.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_CellInfoH.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_CellInfoH.cellConfig = cell_PDCP_AM_RAB) OR (tcv_CellInfoH.cellConfig = cell_PDCP_UM_RAB) OR (tcv_CellInfoH.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_CellInfoH.cellConfig = cell_PDCP_AM_UM_RAB)]					
60 61		+ ts_SS_ReIDPCH (tsc_CellH) (tcv_CellInfoH.cellConfig := cell_NoDPCH, tcv_CellInfoH.DL_DPCH_SHO := FALSE, tcv_CellInfoH.UL_DPCH_SHO := FALSE)					

Continued from previous page

	Test Step Dynamic Behaviour									
Nr	Nr Label Behaviour Description Constraints Ref Verdict Comment									
62		[TRUE]								
Deta	Detailed Comments: 0. No reconfiguration of the cell is needed before RRC connection establishment 1. Reconfigure the cell p_CellId to cell_DCH_StandAloneSRB_NoConn and reconfigure the cell set to cell_DCH_StandAloneSRB_NoConn to cell_NoDPCH 2. Reconfigure the cell p_CellId to cell_FACH_NoConn and reconfigure the cell set to cell_FACH_NoConn to cell_FACH_NoDedicated									

Test Step Name : ts_SS_RACH_CCCH_Cfg (p_CellId : INTEGER)

Group: BasicM_SS_Configuration_Steps/

Objective : To configure AICH and PRACH physical channels and connect RACH onto PRACH, then map one

logical channel (CCCH) to RACH

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_SetTmpCellInfo (p_CellId)			
2		$[px_RAT = fdd]$			
3		CPHY!CPHY_RL_Setup_REQ	ca_AichInfo (p_CellId, tsc_AICH1, c_AICH_Info, tcv_TmpCellInfo.powerAIC H)		AICH
4		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_AICH1)		
5		CPHY!CPHY_RL_Setup_REQ	ca_PRACH_Info (p_CellId, tsc_PRACH1, tsc_PRACH1_Signatures, tsc_PRACH1_ScrC, tcv_TmpCellInfo.puncLimit, tcv_TmpCellInfo.sf_PRACH, tcv_SubChNum)		PRACH
6		CPHY?CPHY_RL_Setup_CNF	ca_RL_SetupCnf (p_CellId, tsc_PRACH1)		
7		CPHY!CPHY_TrCH_Config_REQ	cab_RACH_InfoActNow (p_CellId, tsc_PRACH1)		connect RACH to PRACH
8		CPHY?CPHY_TrCH_Config_CNF	ca_TrChCfgCnf (p_CellId, tsc_PRACH1)		
9		CMAC ! CMAC_Config_REQ	ca_CMAC_CfgInfo (p_CellId, tsc_PRACH1, c_UE_Info (OMIT, OMIT), cb_TrChInfoRACH1, cb_TrLogMappingRACH2)		mapping CCCH to RACH. C-RNTI and U-RNTI are not needed on
10		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf (p_CellId, tsc_PRACH1)		
11	ERR1	$[px_RAT = tdd]$		1	
12	ERR2	[TRUE]		I	
Detai	iled Com	ments :			

Test Step Name : ts_SS_RB0_Cfg(p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/

Objective : to setup radio bearers : RB0 (the downlink is UM + CCCH + FACH + sCCPCH1 and uplink is TM +

CCCH + RACH + PRACH). The configuration is adapted from 34.108 cl. 6.10.2.4.3 and 6.10.2.4.4

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_UM_DL_Info(p_Cell Id, tsc_RB0, { dLlogicalChannelIdentity tsc_DL_CCCH5})		cofigure radio bearers (downlin k): RB0 (UM + CCCH + FACH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB0)		
3		CRLC! CRLC_Config_REQ	ca_RB_TM_UL_Info(p_CellI d, tsc_RB0, 166, {uLlogicalChannelIdentity tsc_UL_CCCH5})		cofigure radio bearers (uplink): RB0 (TM + CCCH + RACH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB0)		

Test Step Name : ts_SS_RB1_ToRB4_Cfg

Group: BasicM_SS_Configuration_Steps/

Objective : To setup radio bearers : RB1, RB2, RB3, RB4. default values from 34.123-1

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_UM_Info (tsc_CellDedicated , tsc_RB1, {uLlogicalChannelIdentity tsc_UL_DCCH1, dLlogicalChannelIdentity tsc_DL_DCCH1})		cofigure radio bearers: RB1 (UM + DCCH) and (UM + DCCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB1)		Booting
3		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB2, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DCCH2, dLlogicalChannelIdentity tsc_DL_DCCH2}, 128)		cofigure radio bearers: RB2 (AM + DCCH) and (AM + DCCH)
4		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB2)		,
5		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB3, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DCCH3, dLlogicalChannelIdentity tsc_DL_DCCH3},128)		cofigure radio bearers: RB3 (AM + DCCH) and (AM + DCCH)
6		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB3)		
7		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_SRB (tsc_CellDedicated, tsc_RB4, tcv_TimerPollProhibit, tcv_TimerPoll, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DCCH4, dLlogicalChannelIdentity tsc_DL_DCCH4},128)		cofigure radio bearers: RB4(AM + DCCH) and (AM + DCCH)
8		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB4)		
Detai	led Com	ments :			

Test Step Name : ts_SS_RB20_AM_PS_Cfg (p_Payloadsize: INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : setup radio bearers : RB20. default values from 34.108 cl. 6.10.2.4.4 and 6.10.2.4.3.3

Default : SS_Def

Comments : CRLC is configured with cellId -1 (tsc_CellDedicated)

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_AM_Info_RAB (tsc_CellDedicated, tsc_RB20, tcv_TimerPollProhibit, tcv_PollSDU, tcv_PollWindow, {uLlogicalChannelIdentity tsc_UL_DTCH1, dLlogicalChannelIdentity tsc_DL_DTCH1},p_Payload size)		cofigure radio bearers : RB20 (AM + DTCH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf (tsc_CellDedicated, tsc_RB20)		

Test Step Dynamic Behaviour

Test Step Name: ts_SS_RB_BCCH_BCH_Cfg(p_CellId: INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective: to setup the radio bearer (RB_BCCH) which is used for sending system information blocks.

Default : SS_Def

Detailed Comments:

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC!CRLC_Config_REQ	ca_RB_BCCH_Info(p_CellI d, tsc_RB_BCCH, {dLlogicalChannelIdentity tsc_BCCH1})		configur e radio bearer (RB_BC CH) for BCCH on TM + BCCH + BCH, used for sending system informati on blocks
2		CRLC?CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_BCCH)		
Deta	iled Com	ments :			

Test Step Name: ts_SS_RB_BCCH_FACH_Cfg (p_CellId: INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : setup radio bearers : RB9 (downlink only) this bearer is for BCCH-FACH (TM + BCCH + FACH +

sCCPCH1). The configuration is adapted from 34.108 cl. 6.10.2.4.3.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_TM_DL_InfoNoSeg (p_CellId, tsc_RB_BCCH_FACH, 166, {dLlogicalChannelIdentity tsc_BCCH6})		configur e radio bearers (downlin k): RB9 (TM + BCCH + FACH)
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_BCCH_FACH)		

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_SS_RB_PCCH_Cfg(p_CellId: INTEGER)

Group : BasicM_SS_Configuration_Steps/

Objective : to setup radio bearer (RB_PCCH) used for paging message sending

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CRLC ! CRLC_Config_REQ	ca_RB_PCCH_Info(p_CellI d, tsc_RB_PCCH, {dLlogicalChannelIdentity tsc_PCCH1})		configur e radio bearer(R B_PCC H) on TM + PCCH + PCH, used for sending paging message
2		CRLC ? CRLC_Config_CNF	ca_CRLC_CfgCnf(p_CellId, tsc_RB_PCCH)		

Detailed Comments:

 $\textbf{Test Step Name} \hspace{0.2cm} : \hspace{0.1cm} ts_SS_ReconfigRAB_ToSRB \hspace{0.1cm} (\hspace{0.1cm} p_CellId: \hspace{0.1cm} INTEGER \hspace{0.1cm})$

Group: BasicM_SS_Configuration_Steps/

Objective: To reconfigure SS from a configuration including RABS to cell_DCH.

Default : SS_Def

Comments :
Description :

ı	Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
I	1		+ ts_SetTmpCellInfo (p_CellId)			
	2		+ ts_SS_ReIDPCH (p_CellId)			
	3		+ ts_SS_1DCH_DCCH_Cfg (p_CellId)			
	4		+ ts_SS_RB1_ToRB4_Cfg			
ı						

Detailed Comments:

 $\textbf{Test Step Name} \hspace{0.2cm} : \hspace{0.1cm} ts_SS_ReconfNoDedicatedToCellFACH \hspace{0.1cm} (\hspace{0.1cm} p_CellId : INTEGER \hspace{0.1cm})$

Group: BasicM_SS_Configuration_Steps/

Objective: To reconfig the cell from cell_FACH_NoDedicated to cell_FACH.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		$[px_RAT = fdd]$			
3		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_S_CCPCH1, c_UE_Info(tcv_TmpCellInfo.uRNTI, tcv_TmpCellInfo.cRNTI), c_TrChInfoPCH_FACH_PS , c_TrLogMappingPCH_FAC H_PS)		map PCCH to PCH, and map CCCH, BCCH, DTCH and DCCH's to FACH
4		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_S_CCPCH1)		
5		CMAC ! CMAC_Config_REQ	ca_CMAC_ReconfigInfoAct Now (p_CellId, tsc_PRACH1, c_UE_Info(OMIT, tcv_TmpCellInfo.cRNTI), cb_TrChInfoRACH1, c_TrLogMappingRACH_DT CH)		CCCH, DCCH1, DCCH2, DCCH3, DCCH4 to RACH
6		CMAC ? CMAC_Config_CNF	ca_CMAC_CfgCnf(p_CellId , tsc_PRACH1)		
7		+ lt_RB_BCCH_FACH_Cfg			
8	ERR1	$[px_RAT = tdd]$		1	
9	ERR2	[TRUE]		1	
		lt_RB_BCCH_FACH_Cfg			
10		[tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated]			
11		+ts_SS_RB_BCCH_FACH_Cfg(p_CellId)			Config BCCH on FACH
12		[TRUE]			
Deta	iled Com	ments :			

Test Step Name : ts_SS_Rel (p_CellId:INTEGER)
Group : BasicM_SS_Configuration_Steps/

Objective: To release all channels that are configured in the SS.

Default : SS_Def

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
1 2		+ ts_SetTmpCellInfo.cellConfig = cell_DCH_StandAloneSRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_Speech) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_2PS_Call) OR			
		(tcv_TmpCellInfo.cellConfig =			
		cell_DCH_MAC_SRB_NoConn)]			
3		+ ts_SS_ReIDPCH (p_CellId)			1.
4		+ It_ReleaseCommonCh			
5 6		+ It_Release_BCCH			
7		[(tcv_TmpCellInfo.cellConfig = cell_NoDPCH)]			
8		+ It_ReleaseCommonCh			
9		+ It_Release_BCCH			
10		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
11		[(tcv_TmpCellInfo.cellConfig = cell_FACH_PS) OR (tcv_TmpCellInfo.cellConfig = cell_FACH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_NoConn)]			
12		+ lt_RelSRB1_4			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
13		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
14		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
15		+ lt_ReleaseCommonCh			
16		+ lt_Release_BCCH			
17		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
18		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB_NoConn)]			
19		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
20		+ ts_CRLC_Rel(tsc_CellDedicated, tsc_RB2)			
21		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_DCCH_FACH_MAC)			
22		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
23		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
24		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
25		+ lt_ReleaseCommonCh			
26		+ It_Release_BCCH			
27		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
28		[(tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_MAC_SRB0_NoConn)]			
29		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
30		+ ts_CRLC_Rel(tsc_CellDedicated, tsc_RB2)			
31		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
32		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
33		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
34		+ ts_CRLC_Rel (p_CellId, tsc_RB_CCCH_FACH_MAC)			
35		+ It_ReleaseCommonCh			
36		+ It_Release_BCCH			
37		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
38		[(tcv_TmpCellInfo.cellConfig = cell_FACH_BMC) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_BMC_NoConn)]			
39		+ lt_RelSRB1_4			
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		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
40		+ ts_CRLC_Rel (p_CellId , tsc_RB30)			
41		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
42		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
43		+ ts_CRLC_Rel(p_CellId, tsc_RB_PCCH)			
44		+ lt_ReleaseCommonCh			
45		+ lt_Release_BCCH			
46		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
47		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_PRACH)]			
48		+ lt_RelSRB1_4			
49		+ ts_CRLC_Rel (p_CellId , tsc_RB_2ndCCCH)			
50		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
51		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
52		+ It_ReleaseCommonCh			
53		+ ts_CMAC_Rel (p_CellId, tsc_PRACH2)			
54		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH2)			
55		+ ts_SS_StopRL (p_CellId , tsc_PRACH2)			
56		+ ts_SS_StopRL (p_CellId , tsc_AICH2)			
57		+ lt_Release_BCCH			
58		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
59		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2_SCCPCH)]			
60		+ It_RelSRB1_4			
61		+ ts_CRLC_Rel (p_CellId , tsc_RB30)			
62		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
63		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
64		+ ts_CRLC_Rel (p_CellId, tsc_RB31)			
65		+ ts_CRLC_Rel (p_CellId, tsc_RB_2ndPCCH)			
66		+ It_ReleaseCommonCh			
67		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
68		+ ts_CPHY_TrChRelNonDch (p_CellId,tsc_S_CCPCH2)			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
69		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
70		+ ts_SS_StopRL (p_CellId , tsc_PICH2)			
71		+ lt_Release_BCCH			
72		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
73		[(tcv_TmpCellInfo.cellConfig = cell_FACH_NoDedicated)]			
74		+ It_ReleaseCommonCh			
75		+ lt_Release_BCCH			
76		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
77		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS)]			
78		+ lt_RelSRB1_4			
79		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
80		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
81		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
82		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
83		<pre>+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)</pre>			
84		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
85		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
86		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
87		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
88		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
89		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
90		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
91		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
92		+ ts_CPHY_TrChRelNon Dch (p_Cellld , tsc_S_CCPCH2)			

		Test Step Dynamic I	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
93		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
94		+ lt_Release_BCCH			
95		+ ts_SetCellCfg (p_CellId, cell_NotConfigure d)			
96		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_2a_No Conn) OR (tcv_TmpCellInfo.cellConfig =			
		cell_FACH_2SCCPCH_StandAlonePCH_2a) OR			
		(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_PS_2a)]			
97		+ lt_RelSRB1_4			
98		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
99		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
100		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
101		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
102		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
103		+ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
104		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
105		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
106		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
107		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
108		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
109		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
110		+ ts_SS_StopRL (p_CellId, tsc_PICH1)			
111		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
112		+ ts_CPHY_TrChReIN onDch (p_CeIIId , tsc_S_CCPCH2)			

		Test Step Dynamic B	ehaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
113		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
114		+ It_Release_BCCH			
115		+ ts_SetCellCfg (p_CellId, cell_NotConfigu red)			
116		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1_NoC onn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2_NoC onn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_Cnfg2)]			
117		+ lt_RelSRB1_4			
118		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
119		+ ts_CRLC_Rel (p_CellId, tsc_RB29)			
120		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
121		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
122		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
123		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
124		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
125		+ ts_CPHY_TrChRelNonDch (p_CellId, tsc_PRACH1)			
126		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
127		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
128		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
129		+ ts_CPHY_TrChRelNonDc h (p_CellId , tsc_S_CCPCH1)			
130		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
131		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
132		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			

		Test Step Dynamic Be	ehaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
133		+ ts_CPHY_TrChRel NonDch (p_CellId , tsc_S_CCPCH2)			
134		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)			
135		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH 3)			
136		+ ts_CPHY_TrC hRelNonDch (p_CellId , tsc_S_CCPC H3)			
137		+ ts_SS_Stop RL (p_CellId			
		tsc_S_CCP CH3)			
138		+ It_Release_ BCCH			
139		+ ts_SetCe IlCfg (p_CellId, cell_Not Configur ed)			
140		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH_NoCo nn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_CTCH)]			
141		+ It_RelSRB1_4			
142		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
143 144		+ ts_CRLC_Rel (p_CellId, tsc_RB30) + ts_CRLC_Rel (p_CellId, tsc_RB29)			
144		+ ts_CRLC_Rel (p_Cellid, tsc_RB29) + ts_CRLC_Rel (p_Cellid , tsc_RB_BCCH_FACH)			
146		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
147		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
148		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
149		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
150		+ts_CPHY_TrChRelNonDch (p_CellId, tsc_PRACH1)			

		Test Step Dynamic Bo	ehaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
151		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
152		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
153		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
154		+ ts_CPHY_TrChRelNonD ch (p_CellId , tsc_S_CCPCH1)			
155		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
156		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
157		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)			
158		+ts_CPHY_TrCh RelNonDch(p_CellId, tsc_S_CCPCH2)			
159		ts_SS_StopRL (p_CellId , tsc_S_CCPCH 2)			
160		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPC H3)			
161		+ ts_CPHY_Tr ChRelNonDc h(p_CellId, tsc_S_CCP			
162		CH3) + ts_SS_Sto pRL (p_CellId , tsc_S_CC PCH3)			
163		+ It_Releas e_BCCH			
164		+ ts_Set CellCfg (p_CellI d, cell_No			
		tConfig ured)			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
165		[tcv_TmpCellInfo.cellConfig = cell_Two_DTCH]						
166		+ It_RelSRB1_4						
167		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)						
168		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)						
169		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)						
170		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)						
171		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_DL_DPCH1)						
172		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)						
173		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)						
174		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)						
175		+ lt_ReleaseCommonCh						
176		+ lt_Release_BCCH						
177		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)						
178		[tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS]						
179		+ lt_RelSRB1_4						
180		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)						
181		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)						
182		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)						
183		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB13)						
184		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)						
185		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)						
186		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)						
187		+						
		ts_CPHY_TrChReIDCH_NoSHO (p_CellId , tsc_UL_DPCH1)						
188		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)						
189		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)						
190		+ It_ReleaseCommonCh						
191		+ lt_Release_BCCH						
192		+ ts_SetCellCfg(p_CellId, cell_NotConfigured)						

		Test Step Dynamic I	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
193		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_PS_CS)]			
194		+ lt_RelSRB1_4			
195		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
196		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
197		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
198		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
199		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_DL_DPCH1)			
200		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId, tsc_UL_DPCH1)			
201		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
202		+ ts_SS_StopRL(p_CellId, tsc_UL_DPCH1)			
203		+ It_ReleaseCommonCh			
204		+ lt_Release_BCCH			
205		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
206		[(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS) OR (tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_PS_CS)]			
207		+ lt_RelSRB1_4			
208		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
209		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
210		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
211		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
212		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
213		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
214		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
215		+ts_CPHY_TrChRelDCH_NoSH O(p_CellId,tsc_UL_DPCH1)			
216		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
217		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
218		+ lt_ReleaseCommonCh			2.
219		+ It_Release_BCCH			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
220		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
221		[(tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_PS)]			
222		+ lt_RelSRB1_4			
223		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
224		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
225		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
226		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_DL_DPCH1)			
227		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)			
228		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
229		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
230		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_PDSCH1)			
231		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_DL_PDSCH1)			
232		+ ts_SS_StopRL (p_CellId , tsc_DL_PDSCH1)			
233		+ It_ReleaseCommonCh			
234		+ It_Release_BCCH			
235		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
236		[(tcv_TmpCellInfo.cellConfig = cell_DCH_DSCH_CS_PS)]			
237		+ lt_RelSRB1_4			
238		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
239		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
240		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
241		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
242		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
243		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
244		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
245		+ ts_CPHY_TrChReIDCH_NoSHO (p_CeIlld , tsc_UL_DPCH1)			

		Test Step Dynamic E	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
246		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
247		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
248		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_PDSCH1)			
249		+ ts_CPHY_TrChRelNonDc h (p_CellId , tsc_DL_PDSCH1)			
250		+ ts_SS_StopRL(p_CellId, tsc_DL_PDSCH1)			
251		+ lt_ReleaseCommonCh			
252		+ lt_Release_BCCH			
253		+ ts_SetCellCfg (p_CellId, cell_NotConfigured)			
254		[(tcv_TmpCellInfo.cellConfig = cell_FACH_2SCCPCH_StandAlonePCH_NoConn) OR (tcv_TmpCellInfo.cellConfig =			
255		cell_FACH_2SCCPCH_StandAlonePCH)]			
255 256		+ It_RelSRB1_4 + ts_CRLC_Rel (tsc_CellDedicated,			
257		tsc_RB20) + ts_CRLC_Rel (tsc_CellDedicated,			
237		tsc_RB24)			
258		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
259		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH2)			
260		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
261		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
262		+ts_CPHY_TrChRelNonDch (p_CellId,tsc_PRACH1)			
263		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
264		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
265		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
266		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_S_CCPCH1)			
267		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
268		+ ts_SS_StopRL (p_CellId, tsc_PICH1)			

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
269		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)					
270		+ ts_CPHY_TrChReIN onDch (p_CeIIId , tsc_S_CCPCH2)					
271		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH2)					
272		+ ts_SS_StopRL (p_CellId , tsc_PICH2)					
273		+ It_ReleaseComm onCh					
274		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPC H2)					
275		+ ts_CPHY_Tr ChRelNonDc h (p_CellId ,					
276		tsc_S_CCP CH2) + ts_SS_Sto pRL (p_CellId ,					
277		tsc_S_CC PCH2) + ts_SS_S topRL(p_CellId,					
278		tsc_PIC H2) +					
210		t_Relea se_BC CH					
279		+ ts_Se tCellC fg (p_Cell ld, cell_N otCo nfigur					

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
280		[(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1_N oConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2)]					
281		+ lt_RelSRB1_4					
282		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)					
283		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)					
284		+ ts_CRLC_Rel (p_CellId, tsc_RB29)					
285		+ ts_CRLC_Rel(p_CellId, tsc_RB_BCCH_FACH)					
286		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)					
287		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)					
288		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.		
289		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)					
290		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)					
291		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)					
292		+ ts_SS_StopRL (p_CellId , tsc_AlCH1)					
293		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)					
294		+ ts_CPHY_TrChRelNonD ch (p_CellId , tsc_S_CCPCH1)					
295		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)					
296		+ ts_SS_StopRL(p_CellId, tsc_PICH1)					
297		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)					
298		+ ts_CPHY_TrChR elNonDch (p_CellId , tsc_S_CCPCH2)					
299		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH 2)					

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
300		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPC H3) + ts_CPHY_Tr ChRelNonDc h (p_CellId ,			
302		tsc_S_CCP CH3) + ts_SS_Sto pRL (p_CellId , tsc_S_CC PCH3)			
303		+ It_Releas e_BCCH			
304		+ ts_Set CellCfg (p_CellI d, cell_No tConfig			
305		ured) [(tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH_N oConn) OR (tcv_TmpCellInfo.cellConfig = cell_FACH_3_SCCPCH_3_FACH_2a_CTCH)]			
306		+ lt_RelSRB1_4			
307		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
308		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB24)			
309		+ ts_CRLC_Rel (p_CellId, tsc_RB30)			
310 311		+ ts_CRLC_Rel (p_CellId, tsc_RB29) + ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH)			
312		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH_FACH_RAB)			
313		+ ts_CRLC_Rel (p_CellId , tsc_RB_PCCH)			
314		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
315		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
316		+ts_CPHY_TrChRelNonDch(p_CellId,tsc_PRACH1)			
317		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
318		+ ts_SS_StopRL (p_CellId , tsc_AICH1)						
319		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)						
320		+ ts_CPHY_TrChRelNon Dch (p_CellId , tsc_S_CCPCH1)						
321		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)						
322		+ ts_SS_StopRL (p_CellId , tsc_PICH1)						
323		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH2)						
324		+ts_CPHY_TrC hRelNonDch(p_CellId , tsc_S_CCPCH 2)						
325		+ ts_SS_StopR L (p_CellId , tsc_S_CCPC H2)						
326		+ ts_CMAC_R el (p_Cellid, tsc_S_CCP CH3)						
327		+ ts_CPHY_ TrChRelNo nDch(p_CellId, tsc_S_CC PCH3)						
328		+ ts_SS_S topRL (p_CellId,						
329		tsc_S_C CPCH3) + It_Relea se_BC						

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
330		+ ts_Se tCellC fg (p_Cell Id, cell_N otCo nfigur ed)			
331		[TRUE]			
		lt_Release_BCCH			
332		+ ts_CRLC_Rel (p_CellId , tsc_RB_BCCH)			
333		+ ts_CMAC_Rel (p_CellId, tsc_P_CCPCH)			
334		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_P_CCPCH)			
335		+ ts_SS_StopRL (p_CellId, tsc_S_SCH)			
336		+ ts_SS_StopRL (p_CellId, tsc_P_SCH)			
337		+ ts_SS_StopRL (p_CellId , tsc_P_CCPCH)			
338		+ ts_SS_StopRL (p_CellId, tsc_P_CPICH)			
339		CPHY! CPHY_Cell_Release_REQ	ca_CPHY_Cell_Release_RE Q(p_CellId)		
340		CPHY ? CPHY_Cell_Release_CNF	ca_CPHY_Cell_Release_CN F(p_CellId)		
		lt_ReleaseCommonCh			
341		+ ts_CRLC_Rel (p_CellId, tsc_RB0)			2.
342		+ ts_CMAC_Rel (p_CellId, tsc_PRACH1)			
343		+ ts_CPHY_TrChRelNonDch (p_CellId , tsc_PRACH1)			
344		+ ts_SS_StopRL (p_CellId , tsc_AICH1)			
345		+ ts_SS_StopRL (p_CellId , tsc_PRACH1)			
346		+ ts_CRLC_Rel (p_CellId, tsc_RB_PCCH)			3.
347		+ ts_CMAC_Rel (p_CellId, tsc_S_CCPCH1)			
348		+ ts_CPHY_TrChRelNonDch (p_CellId, tsc_S_CCPCH1)			
349		+ ts_SS_StopRL (p_CellId , tsc_PICH1)			
350		+ ts_SS_StopRL (p_CellId , tsc_S_CCPCH1)			
		lt_RelSRB1_4			
351		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.
352		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)			
353		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)			
354		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			

Detailed Comments : 1. Release DPCH 2. Release PRACH 3. Release S-CCPCH

Test Step Name : ts_SS_ReIDPCH (p_CellId : INTEGER)
Group : BasicM_SS_Configuration_Steps/
Objective : To release the DPCH channel.

Default : SS_Def

Comments: The following channels need to be removed:

physical channels: DPCH; transport channesl: DCH logical channels: DCCH; and

signalling radio bearer: signalling bearers on DCH radio access bearer on DCH.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[(tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB_NoConn) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_StandAloneSRB)]			
3		+ It_RelSRB1_4			
4		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
5		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
6		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId, tsc_DL_DPCH1)			
7		+ ts_CPHY_TrChRelDCH_NoSHO (p_Cellid, tsc_UL_DPCH1)			
8		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
9		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
10		[(tcv_TmpCellInfo.cellConfig = cell_DCH_Speech)]			
11		+ lt_RelSRB1_4			
12		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
13		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
14		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
15		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
16		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
17		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId, tsc_DL_DPCH1)			
18		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId , tsc_UL_DPCH1)			
19		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
20		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
21		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kCS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_57_6kCS_RAB_SRB)]			

	Test Step Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
22		+ lt_RelSRB1_4					
23		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)					
24		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)					
25		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)					
26		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)					
27		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)					
28		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)					
29		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)					
30		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_RAB)]					
31		+ lt_RelSRB1_4					
32		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)					
33		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)					
34		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)					
35		+ ts_CPHY_TrChReIDCH_NoSHO(p_CellId,tsc_DL_DPCH1)					
36		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)					
37		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)					
38		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)					
39		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_UM_RAB)]					
40		+ lt_RelSRB1_4					
41		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB21)					
42		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)					
43		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)					
44		+ ts_CPHY_TrChReIDCH_NoSHO(p_CellId,tsc_DL_DPCH1)					
45		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)					
46		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)					
47		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)					
48		[(tcv_TmpCellInfo.cellConfig = cell_PDCP_AM_UM_RAB)]					

	v 1	Test Step Dynamic E	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
49		+ lt_RelSRB1_4			
50		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
51		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB21)			
52		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
53		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
54		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
55		+ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)			
56		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
57		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
58		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis) OR (tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis)]			
59		+ lt_RelSRB1_4			
60		+ lt_ReleaseRLC_RB			
61		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
62		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
63		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
64		+ ts_CPHY_TrChRelDCH_NoSHO (p_CellId, tsc_UL_DPCH1)			
65		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
66		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
67		[(tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB) OR (tcv_TmpCellInfo.cellConfig = cell_DCH_MAC_SRB_NoConn)]			
68		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			
69		+ ts_CRLC_Rel(tsc_CellDedicated, tsc_RB2)			
70		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_DCCH_DCH_MAC)			
71		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)			
72		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			

Test Step Dynamic Behaviour					
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
73		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
74		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_DL_DPCH1)			
75		+ ts_CPHY_TrChReIDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
76		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
77		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
78		[(tcv_TmpCellInfo.cellConfig = cell_DCH_2AM_PS) OR (tcv_TmpCellInfo.cellConfig			
79		=cell_DCH_2_PS_Call)] + lt_RelSRB1_4			
80		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
81		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB22)			
82		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
83		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
84		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_DL_DPCH1)			
85		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)			
86		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
87		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
88		[(tcv_TmpCellInfo.cellConfig = cell_Two_DTCH_CS_PS)]			
89		+ It_RelSRB1_4			
90		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
91		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
92		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
93		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
94		+ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_DL_DPCH1)			
95		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)			
96		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
97		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
98		[(tcv_TmpCellInfo.cellConfig = cell_Four_DTCH_CS_PS)]			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
99		+ lt_RelSRB1_4			
100		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB10)			
101		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB11)			
102		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB12)			
103		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB20)			
104		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
105		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
106		+ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_DL_DPCH1)			
107		+			
		ts_CPHY_TrChRelDCH_NoSHO (p_CellId , tsc_UL_DPCH1)			
108		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
109		+ ts_SS_StopRL(p_CellId, tsc_UL_DPCH1)			
110		[(tcv_TmpCellInfo.cellConfig = cell_DCH_64kPS_RAB_SRB_HS)]			
111		+ lt_RelSRB1_4			
112		+ts_CRLC_Rel (tsc_CellDedicated, tsc_RB25)			
113		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_DL_DPCH1)			
114		+ ts_CMAC_Rel (tsc_CellDedicated, tsc_UL_DPCH1)			
115		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_DL_DPCH1)			
116		+ ts_CPHY_TrChRelDCH_NoSHO(p_CellId,tsc_UL_DPCH1)			
117		+ ts_SS_StopRL (p_CellId , tsc_DL_DPCH1)			
118		+ ts_SS_StopRL (p_CellId , tsc_UL_DPCH1)			
119	ERR	[TRUE]		I	
		It_ReleaseRLC_RB			
120		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_15Lis)]			
121		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_15_RLC)			
122		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_AM_RAB_7Lis)]			
123		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_AM_7_RLC)			
124		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_15Lis)]			
125		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_15_RLC)			

	Test Step Dynamic Behaviour								
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments				
126		[(tcv_TmpCellInfo.cellConfig = cell_RLC_DCH_UM_RAB_7Lis)]							
127		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB_UM_7_RLC)							
		lt_RelSRB1_4							
128		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB1)			1.				
129		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB2)							
130		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB3)							
131		+ ts_CRLC_Rel (tsc_CellDedicated, tsc_RB4)							

Test Step Name: ts_SS_StopRL(p_CellId: INTEGER; p_PhyCH: PhysicalChannelIdentity)

Group: BasicM_SS_Configuration_Steps/

Objective: To stop transmission and receiving on the specified physical channel

Default : SS_Def

Comments: To release (stop transmission and receiving) the specified physical channel

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		CPHY!CPHY_RL_Release_REQ	ca_RL_RelReq(p_CellId, p_PhyCH)					
2		CPHY?CPHY_RL_Release_CNF	ca_RL_RelCnf(p_CellId, p_PhyCH)					
Dotai	Detailed Comments :							

 $\textbf{Test Step Name} \quad : \ ts_InitializeSIB11_SIB12 \ (\ p_CellID : INTEGER \)$

Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To assign tcv_SIB11 and tcv_SIB12

Default : InitOtherwiseFail

Comments : Description :

3	Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
PLMN Isst case Isst panel Iss	1		+ ts_SetTmpCellInfo (p_CellID)			
1	2		[tcv_NumOfPLMN = 1]			Default I
1						PLMN test case
1	3		+lt_10r2PLMN			
Section Sect	4		[tcv_NumOfPLMN = 2]			2 PLMN test case
Test case Test	5					
Section Sect	6		[tcv_NumOfPLMN = 3]			3 PLMN test case
step not designed for this It_1Or2PLMN	7		_			
[p_CellID = tsc_CellA] (tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoA, tcv_CellInfoB, tcv_SIB12 := cb_SIB12_Def) [p_CellID = tsc_CellB] (tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoB, tcv_CellInfoA, tcv_CellInfoC, tcv_CellInfoB, tcv_CellInfoH, tcv_CellInfoB, t	8		[TRUE]		(1)	step not designed
10			lt_1Or2PLMN			
tcv_CellinfoB, tcv_CellinfoC, tcv_CellinfoG, tcv_CellinfoH, tcv_CellinfoD, tcv_CellinfoE, tcv_CellinfoF), tcv_SiB12 := cb_SiB12_Def) [p_CelliD = tsc_CellB] (tcv_SiB11 := cb_SiB11_Def (tcv_CellinfoB, tcv_CellinfoB, tcv_CellinfoH, tcv_CellinfoC, tcv_CellinfoG, tcv_CellinfoF), tcv_CellinfoF), tcv_SiB12 := cb_SiB12_Def) [p_CelliD = tsc_CellC] (tcv_SiB11 := cb_SiB11_Def (tcv_CellinfoC, tcv_CellinfoB, tcv_Cel	9		[p_CellID = tsc_CellA]			
12 (tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoB, tcv_CellInfoA, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoF), tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def) 13 (p_CellID = tsc_CellC] 14 (tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoC, tcv_CellInfoA, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoB, tcv_CellInfoB, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def) 15 (p_CellID = tsc_CellD] 16 (tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoD, tcv_CellInfoB, tcv_CellInfoE, tcv_CellInfoB, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoB,	10		tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF),			
tcv_CellInfoA, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoE, tcv_CellInfoF), tcv_CellInfoF, tcv_CellInfoF, tcv_CellInfoF, tcv_SIB12 := cb_SIB12_Def) 13	11		[p_CellID = tsc_CellB]			
(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoC, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def) [p_CellID = tsc_CelID] (tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoE, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2) [p_CellID = tsc_CelIE] (tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoD, tcv_CellInfoC, tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoC, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoC, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoC, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoB, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoC, tcv_CellInfoB, tcv_C	12		tcv_CellInfoA, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF),			
tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def) [p_CellID = tsc_CellD] (tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2) [p_CellID = tsc_CellE] (tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)	13		[p_CellID = tsc_CellC]			
(tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2) [p_CellID = tsc_CellE] (tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)	14		tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoG, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF),			
tcv_CellInfoE, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2) [p_CellID = tsc_CellE] (tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)	15		[p_CellID = tsc_CellD]			
(tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)	16		tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH),			
tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)	17		[p_CellID = tsc_CellE]			
19 In CellD = tsc CellEl	18		tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH),			
10	19		[p_CellID = tsc_CellF]			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		(tcv_SIB11 := cb_SIB11_Freq2 (tcv_CellInfoF, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
21		[p_CellID = tsc_CellG]			
22		(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoG, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoH, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
23		[p_CellID = tsc_CellH]			
24		(tcv_SIB11 := cb_SIB11_Def (tcv_CellInfoH, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)			
25		[TRUE]		I	no such cell
		lt_3PLMN			
26		[p_CellID = tsc_CellA]			
27		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Def)			
28		[p_CellID = tsc_CellB]			
29		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoB, tcv_CellInfoA, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Def)			
30		[p_CellID = tsc_CellC]			
31		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoC, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Def)			
32		[p_CellID = tsc_CellD]			
33		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2(tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
34		[p_CellID = tsc_CellE]			
35		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoE, tcv_CellInfoD, tcv_CellInfoF, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			
36		[p_CellID = tsc_CellF]			
37		(tcv_SIB11 := cb_SIB11_Freq3_PLMN1Or2 (tcv_CellInfoF, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoG, tcv_CellInfoH), tcv_SIB12 := cb_SIB12_Freq2)			

Continued from previous page

	Test Step Dynamic Behaviour									
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments					
38		[p_CellID = tsc_CellG]								
39		(tcv_SIB11 := cb_SIB11_Freq3_PLMN3 (tcv_CellInfoG, tcv_CellInfoH,tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)								
40		[p_CellID = tsc_CellH]								
41		(tcv_SIB11 := cb_SIB11_Freq3_PLMN3 (tcv_CellInfoH, tcv_CellInfoG, tcv_CellInfoA, tcv_CellInfoB, tcv_CellInfoC, tcv_CellInfoD, tcv_CellInfoE, tcv_CellInfoF), tcv_SIB12 := cb_SIB12_Def)								
42		[TRUE]		1	no such cell					
Deta	Detailed Comments :									

 $\textbf{Test Step Name} \quad : \ ts_InitializeSIB2AndSIB18 (\ p_CellInfo: CellInfoCfg)$

Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To initialize tcv_SIB2 and tcv_SIB18

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB2 := c_SIB2_Def (p_CellInfo))			
2		[tcv_NumOfPLMN = 1]			Default I
2		(tour CID40 CID40 Def/o Cellinfo))			PLMN test case
3		(tcv_SIB18 := c_SIB18_Def(p_CellInfo))			O DI MAN
4		[tcv_NumOfPLMN = 2]			2 PLMN Test Case
5		+ It_Init2PLMN			
6		[tcv_NumOfPLMN = 3]			3 PLMN Test case
7		+ It_Init3PLMN			
8		[TRUE]		(1)	The test step not designed for this
		lt_Init2PLMN			
9		[(p_CellInfo.cellId = tsc_CellA) OR (p_CellInfo.cellId = tsc_CellB) OR (p_CellInfo.cellId = tsc_CellC) OR (p_CellInfo.cellId = tsc_CellG) OR (p_CellInfo.cellId = tsc_CellH)]			PLMN Group 1 cells, Hence MCC and MNC of Cell D used
10		(tcv_SIB18 :=			
11		c_SIB18_2PLMN(tcv_CellInfoD)) [TRUE]			PLMN
					Group 2 cells, Hence MCC and MNC of Cell A used
12		(tcv_SIB18 := c_SIB18_2PLMN(tcv_CellInfoA))			
		It_Init3PLMN			

	Test Step Dynamic Behaviour							
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
13		[(p_CellInfo.cellId = tsc_CellA) OR (p_CellInfo.cellId = tsc_CellB) OR (p_CellInfo.cellId = tsc_CellC)]			PLMN Group 1 cells, Hence MCC and MNC of Cell D and G used			
14		(tcv_SIB18 := c_SIB18_3PLMN(tcv_CellInfoD, tcv_CellInfoG))						
15		[(p_CellInfo.cellId = tsc_CelID) OR (p_CellInfo.celIId = tsc_CelIE) OR (p_CellInfo.celIId = tsc_CelIF)]			PLMN Group 2 cells, Hence MCC and MNC of Cell A and G used			
16		(tcv_SIB18 := c_SIB18_3PLMN(tcv_CellInfoA, tcv_CellInfoG))						
17		[TRUE]			PLMN Group 3 cells, Hence MCC and MNC of Cell A and D used			
18		(tcv_SIB18 := c_SIB18_3PLMN(tcv_CellInfoA, tcv_CellInfoD))						
Deta	iled Com	iments :						

Test Step Name : ts_SendDefSysInfo (p_CellId: INTEGER)
Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To broadcast default system infomation.

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_UTRAN_GERAN_ParaInit(p_CellId)			ts_SetT
					mpCellIn fo done
					already
					in
					ts_UTR AN_GE
					RAN_Pa
					ralnit
2		+ts_CellDependentPara(p_CellId)			
3		+ts_InitializeSIB2AndSIB18(tcv_TmpCellInfo)			
4		+ ts_InitializeSIB11_SIB12 (p_CellId)			
5 6		[px_RAT = fdd] +ts_SendNoSegDefSchedul(p_CellId)			
7		+ts_SendSIB1 (cb_SIB1_Def(
,		tcv_TmpCellInfo),			
		p_CellId, tsc_Now)			
8		+ts_SendSIB2 (tcv_SIB2 , p_CellId, tsc_Now)			
9		+ts_SendSIB3(tcv_SIB3,			
		p_CellId, tsc_Now)			
10		+ts_SendSIB4(tcv_SIB4, p_CellId, tsc_Now)			
11		+ts_SendSIB5(cb_SIB5_Def(tcv			
		_TmpCellInfo), p_CellId, tsc_Now)			
12		+ts_SendSIB6(cb_SIB6_Def(tc v_TmpCellInfo), p_CellId, tsc_Now)			
13		+ts_SendSIB7(c_SIB7_Def, p_CellId, tsc_Now)			
14		+ts_SendSIB11(tcv_SIB11, p_CellId, tsc_Now)			
15		+ts_SendSIB12(tcv_SIB12, p_CellId, tsc_Now)			
16		+ts_SendSIB18(tcv_SIB18, p_CellId, tsc_Now)			
17		+ts_SendSB1_DefSch edul(tcv_SB1, p_CellId, tsc_Now)			
18		+ts_SendMIB(tcv_MI B, p_CellId, tsc_Now)			
19	ERR1	[px_RAT = tdd]		1	
20	ERR2	TRUE]		ı	
Detai	iled Com	ments :			

Test Step Name : ts_SendNoSegDefSchedul(p_CellId : INTEGER)

Group: BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the system information message with NoSegment to SS on the frames on which there is no

any SIB/MIB/SB scheduled

Default : InitOtherwiseFail

Comments : Current scheduling assumption:

Repetition period: 64 frames;

Not scheduled positions: frame 54 (SIB_POS 27). Above unscheduled positions can be used for other SIBs later, if so this test Step shall be modified

accordingly.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ts_Scheduling(p_CellId, 6, 27, tsc_Now)			pos = 27
2		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
3		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		

Test Step Name: ts_SendSB1_DefSchedul (p_SB: SysInfoTypeSB1; p_CellId: INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/
Objective : To deliver the SysInfoTypeSB1 to SS

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation (o_SIB_PER_Encoding (sB1 : p_SB)))			1.
2		[tcv_Segs.segCount =1]			
3		+ts_Scheduling(p_CellId, 4, 1, p_Timing)			3.
4		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
5		+lt_CompleteSIB(schedulingBlock1)			4.
6		+ts_ChangeSB1_ValueTag			
7		(tcv_MIB.sibSb_ReferenceList.[0].sched uling := c_SB1_Schedul1, tcv_SB1_ValueTagChanged := FALSE)			
8		[tcv_Segs.segCount <>1]		1	2.
		It_CompleteSIB(p_SIBType : SIB_Type)			
9		[LENGTH_OF(tcv_Segs.seg1) = 226]			
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
11		[LENGTH_OF(tcv_Segs.seg1) <> 226]			
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments: 1. Unaligned PER encoding of the SB1 then segmentation.

- 2. The result of segmentation shall be one segment for the SB1 (current assumption).
- 3. Send the scheduling info to SS.(one segment; REP=16; POS=1).
- 4. Construct the system information message containing the first segment of SB1 and send it to

SS.

Test Step Name : ts_SendSIB1 (p_SIB: SysInfoType1; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the SIBType1 to SS

Default : InitOtherwiseFail

Comments : SIB1 is concatenated with SIB2.

system information on air changes imediatly if p_Timing => 512. change of system information on air

starts at the frame number = p_Timing.

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		<pre>(tcv_SIB1 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB1: p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB2 : tcv_SIB2))</pre>			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 11, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType 1, tcv_Segs.seg1, systemInformationBlockType 2, tcv_Segs.seg2))		4.
7		(tcv_MIB.sibSb_ReferenceList.[1].sibSb_T ype.sysInfoType1 := (tcv_MIB.sibSb_ReferenceList.[1].sibSb_T ype.sysInfoType1) MOD 256 + 1)			
8		+ts_ChangeMIB_ValueTag			

- **Detailed Comments**: 1. Save the new SIB1 value to tcv_SIB1, unaligned PER encoding of the SIB1 and SIB2.
 - 2. The concatenated SIB1 and SIB2 is too long .
 - 3. Send the scheduling info to SS. one segment: REP=64, POS=11.
 - 4. Construct the system information message containing completeList of SIB1+SIB2 and send it to SS.

 $\textbf{Test Step Name} \quad : \ ts_SendSIB11(p_SIB: \ SysInfoType11; \ p_CellId: \ INTEGER; \ p_Timing: \ INTEGER)$

Group : BasicM_SysInfoHandling_Steps/Default/

Objective: To deliver the SIBType11 to SS

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (1.
		sIB11: p_SIB)))			
2		[tcv_Segs.segCount >3]		1	2.
3		[tcv_Segs.segCount <=3]			
4		[tcv_Segs.segCount = 1]			
5		<pre>(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysl nfoType11 := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysl nfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB11_Schedul1)</pre>			
6		+ts_ChangeSB1_ValueTag			
7		+ts_Scheduling(p_CellId, 6, 29, p_Timing)			3.
8		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
9		+lt_CompleteSIB(systemInformationBl ockType11)			4.
10		+ts_Scheduling(p_CellId, 6, 30, p_Timing)			5.
11		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
13		+ts_Scheduling(p_CellId, 6, 31, p_Timing)			8.
14		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
15		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
16		[tcv_Segs.segCount = 2]			
17		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysl nfoType11 := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysl nfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB11_Schedul2)			
18		+ts_ChangeSB1_ValueTag			
19		+ts_Scheduling(p_CellId, 6, 31, p_Timing)			8.
20		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
21		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
22		+ts_Scheduling(p_CellId, 6, 29, p_Timing)			3.

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
23		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType11, 2, tcv_Segs.seg1))		4.
25		+ts_Scheduling(p_CellId, 6, 30, p_Timing)			5.
26		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		[LENGTH_OF(tcv_Segs.seg 2) <= 214]			
28		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType11, 1, tcv_Segs.seg2))		7.
29		[TRUE]			
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType11, 1, tcv_Segs.seg2))		7.
31		[tcv_Segs.segCount = 3]			
32		(tcv_SB1.sib_ReferenceList.[2].sib_Type.sysl nfoType11 := (tcv_SB1.sib_ReferenceList.[2].sib_Type.sysl nfoType11) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[2].scheduling := c_SIB11_Schedul3)			
33		+ts_ChangeSB1_ValueTag			
34		+ts_Scheduling(p_CellId, 6, 30, p_Timing)			5.
35		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
36		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType11, 1, tcv_Segs.seg2))		7.
37		+ts_Scheduling(p_CellId, 6, 29, p_Timing)			3.
38		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
39		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType11, 3, tcv_Segs.seg1))		4.
40		+ts_Scheduling(p_CellId, 6, 31, p_Timing)			8.
41		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		[LENGTH_OF(tcv_Segs.seg 3) <= 214]			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
43		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType11, 2, tcv_Segs.seg3))		9.
44		[TRUE]			
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType11, 2, tcv_Segs.seg3))		9.
		It_CompleteSIB(p_SIBType : SIB_Type)			
46		[LENGTH_OF(tcv_Segs.seg1) = 226]			
47		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
48		[TRUE]			
49		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

- **Detailed Comments**: 1. Unaligned PER encoding of the SIB11 then segmentation.
 - 2. The result of segmentation shall be one or two or three segments for the SIB11 (current
 - 3. Send the scheduling info to SS. one segment: REP=64, POS=29.
 - 4. Construct the system information message containing first segment of SIB11 and send it to
 - 5. Send the scheduling info to SS. one segment: REP=64, POS=30.
 - 6. Send no segment system information message to SS.
 - 7. Construct the system information message containing the second segment of SIB11 and send it to SS.
 - 8. Send the scheduling info segment to SS. one segment: REP=64, POS=31.
 - 9. Construct the system information message containing the third segment of SIB11 and send it to SS.

Test Step Name : ts_SendSIB12(p_SIB: SysInfoType12; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective: To deliver the SIBType12 to SS

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB12 : p_SIB)))			1.
2		[tcv_Segs.segCount >3]			2.
3		[tcv_Segs.segCount <=3]			
4		[tcv_Segs.segCount = 1]			
5		(tcv_SB1.sib_ReferenceList.[3].sib_Type.sysl nfoType12 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.sysl nfoType12) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[3].scheduling := c_SIB12_Schedul1)			
6		+ts_ChangeSB1_ValueTag			
7 8		+ts_Scheduling(p_CellId, 6, 13, p_Timing) CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		3.
9		<pre>+lt_CompleteSIB(systemInformationBl ockType12)</pre>	·		4.
10		<pre>+ts_Scheduling(p_CellId, 6, 14, p_Timing)</pre>			5.
11		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
13		+ts_Scheduling(p_CellId, 6, 15, p_Timing)			8.
14		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
15		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
16		[tcv_Segs.segCount = 2]			
17		(tcv_SB1.sib_ReferenceList.[3].sib_Type.sysl nfoType12 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.sysl nfoType12) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[3].scheduling := c_SIB12_Schedul2)			
18		+ts_ChangeSB1_ValueTag			
19		+ts_Scheduling(p_CellId, 6, 15, p_Timing)			8.
20		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
21		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
22		+ts_Scheduling(p_CellId, 6, 13, p_Timing)			3.

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
23		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType12, 2, tcv_Segs.seg1))		4.
25		+ts_Scheduling(p_CellId, 6, 14, p_Timing)			5.
26		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		[LENGTH_OF(tcv_Segs.seg 2) <= 214]			
28		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType12, 1, tcv_Segs.seg2))		7.
29		[TRUE]			
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType12, 1, tcv_Segs.seg2))		7.
31		[tcv_Segs.segCount = 3]			
32		(tcv_SB1.sib_ReferenceList.[3].sib_Type.sysl nfoType12 := (tcv_SB1.sib_ReferenceList.[3].sib_Type.sysl nfoType12) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[3].scheduling := c_SIB12_Schedul3)			
33		+ts_ChangeSB1_ValueTag			
34		+ts_Scheduling(p_CellId, 6, 14, p_Timing)			5.
35		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
36		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType12, 1, tcv_Segs.seg2))		7.
37		+ts_Scheduling(p_CellId, 6, 13, p_Timing)			3.
38		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
39		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType12, 3, tcv_Segs.seg1))		4.
40		+ts_Scheduling(p_CellId, 6, 15, p_Timing)			8.
41		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		[LENGTH_OF(tcv_Segs.seg 3) <= 214]			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
43		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType12, 2, tcv_Segs.seg3))		9.
44		[TRUE]			
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType12, 2, tcv_Segs.seg3))		9.
46		[TRUE]			
		It_CompleteSIB(p_SIBType : SIB_Type)			
47		[LENGTH_OF(tcv_Segs.seg1) = 226]			
48		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
49		[TRUE]			
50		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

- **Detailed Comments**: 1. Unaligned PER encoding of the SIB12 then segmentation.
 - 2. The result of segmentation shall be one or two or three segments for the SIB12 (current assumption).
 - 3. Send the scheduling info segment to SS. one segment: REP=64, POS=13.
 - 4. Construct the system information message containing the first segment of SIB12 and send it
 - 5. Send the scheduling info segment to SS. one segment: REP=64, POS=14.
 - 6. Send no segment system information message to SS.
 - 7. Construct the system information message containing the second segment of SIB12 and send
 - 8. Send the scheduling info to SS. one segment: REP=64, POS=15 .
 - 9. Construct the system information message containing the third segment of SIB12 and send it to SS.

Test Step Name : ts_SendSIB18 (p_SIB: SysInfoType18; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the SIB18 to SS

Default : InitOtherwiseFail

Comments : SIB18 is concatenated with SIB7, default scheduling described in 3GPP TS 34.123–3 clause 8.4.3

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB18 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB18 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB7 : tcv_SIB7))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		1	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 18, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg2, systemInformationBlockType 18, tcv_Segs.seg1))		4.
7		(tcv_SB1.sib_ReferenceList.[4].sib_Type.s ysInfoType18 := (tcv_SB1.sib_ReferenceList.[4].sib_Type.s ysInfoType18) MOD 4 + 1)	, ,		
8		+ts_ChangeSB1_ValueTag			

- Detailed Comments: 1. save the new value of SIB18, unaligned PER encoding of the SIB7 and SIB18.
 - 2. The concatenated SIB7 and SIB18 is too long.
 - 3. Send the scheduling info to SS. one segment: REP=64, POS=18.
 - 4. Construct the system information message containing SIB18 + SIB7 and sent to SS.

Test Step Name : ts_SendSIB2 (p_SIB: SysInfoType2; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the SIB2 to SS

Default : InitOtherwiseFail

Comments : SIB2 is concatenated with SIB1

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB2 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB2 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB1 : tcv_SIB1))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 11, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		TM!RLC_TR_DATA_REQ	ca_TR_DataReq (p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2 (systemInformationBlockType 1, tcv_Segs.seg2, systemInformationBlockType 2, tcv_Segs.seg1))		4.
7		(tcv_MIB.sibSb_ReferenceList.[2].sibSb_T ype.sysInfoType2 := (tcv_MIB.sibSb_ReferenceList.[2].sibSb_T ype.sysInfoType2) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			

- Detailed Comments: 1. Save the new SIB2 value to tcv_SIB2, unaligned PER encoding of the SIB1 and SIB2.
 - 2. The concatenated SIB1 and SIB2 is too long.
 - 3. Send the scheduling info to SS. one segment, REP=64, POS=11.
 - 4. Construct the system information message containing SIB2 + SIB1 and send it to SS.

 $\textbf{Test Step Name} \quad : \ ts_SendSIB3(p_SIB: \ SysInfoType3; \ p_CellId: \ INTEGER; \ p_Timing: \ INTEGER)$

Group: BasicM_SysInfoHandling_Steps/Default/

Objective: To deliver the SIB3 to SS

Default : InitOtherwiseFail

Comments : SIB3 is concatenated with SIB7.

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB3 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB3 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB7 : tcv_SIB7))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		1	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 10, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg2, systemInformationBlockType 3, tcv_Segs.seg1))		4.
7		(tcv_MIB.sibSb_ReferenceList.[3].sibSb_T ype.sysInfoType3 := (tcv_MIB.sibSb_ReferenceList.[3].sibSb_T ype.sysInfoType3) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			

Detailed Comments: 1. Save the new value of SIB3 to tcv_SIB3, unaligned PER encoding of the SIB3 and SIB7.

- 2. The concatenated SIB3 and SIB7 is too long.
- 3. Send the scheduling info to SS. one segment; REP=64, POS=10.
- 4. Construct the system information message containing SIB3 + SIB7 and send it to SS.

 $\textbf{Test Step Name} \quad : \ ts_SendSIB4(p_SIB: \ SysInfoType4; \ p_CellId: \ INTEGER; \ p_Timing: \ INTEGER)$

Group : BasicM_SysInfoHandling_Steps/Default/

Objective : To deliver the SIB4 to SS

Default : InitOtherwiseFail

Comments : SIB4 is concatenated with SIB7

Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_SIB4 := p_SIB, tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB4 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB7 : tcv_SIB7))			1.
2		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		1	2.
3		[TRUE]			
4		+ts_Scheduling(p_CellId, 6, 26, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType		4.
			7, tcv_Segs.seg2, systemInformationBlockType 4, tcv_Segs.seg1))		
7		(tcv_MIB.sibSb_ReferenceList.[4].sibSb_T ype.sysInfoType4 := (tcv_MIB.sibSb_ReferenceList.[4].sibSb_T ype.sysInfoType4) MOD 4 + 1)			
8		+ts_ChangeMIB_ValueTag			

- Detailed Comments: 1. Save the new value of SIB3 to tcv_SIB3, unaligned PER encoding of the SIB3 and SIB7.
 - 2. The concatenated SIB4 and SIB7 is too long.
 - 3. Send the scheduling info to SS. one segment; REP=64, POS=10.
 - 4. Construct the system information message containing SIB4 + SIB7 and send it to SS.

Test Step Name : ts_SendSIB5 (p_SIB: SysInfoType5; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/Default/

Objective: To deliver the SIBType5 to SS

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation			1.
		(o_SIB_PER_Encoding (sIB5 : p_SIB)))			
2		[tcv_Segs.segCount >4]			2.
3		[tcv_Segs.segCount <=4]			
4		[tcv_Segs.segCount = 1]			
5		+ts_Scheduling(p_CellId, 6, 19, p_Timing)			3.
6		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
7		+lt_CompleteSIB(systemInformationBlock Type5)			4.
8		+ts_Scheduling(p_CellId, 6, 21, p_Timing)			5.
9		CMAC?CMAC_SYSINFO_Config_C NF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
10		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
11		+ts_Scheduling(p_CellId, 6, 22, p_Timing)			8.
12		CMAC?CMAC_SYSINFO_Confi g_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
13		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
14		+ts_Scheduling(p_CellId, 6, 23, p_Timing)			10.
15		CMAC?CMAC_SYSINFO_ Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
16		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
17		(tcv_MIB.sibSb_Referen ceList.[5].sibSb_Type.sys InfoType5 := (tcv_MIB.sibSb_Referen ceList.[5].sibSb_Type.sys InfoType5) MOD 4 + 1, tcv_MIB.sibSb_Referenc eList.[5].scheduling := c_SIB5_Schedul1)			
18		+ts_ChangeMIB_Value Tag			
19		[tcv_Segs.segCount = 2]			
20		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul2)			

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		+ts_ChangeMIB_ValueTag			
22		+ts_Scheduling(p_CellId, 6, 22, p_Timing)			8.
23		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
25		<pre>+ts_Scheduling(p_CellId, 6, 23, p_Timing)</pre>			10.
26		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
28		+ts_Scheduling(p_CellId, 6, 19, p_Timing)			3.
29		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType5, 2, tcv_Segs.seg1))		4.
31		+ts_Scheduling(p_CellId, 6, 21, p_Timing)			5.
32		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
33		[LENGTH_OF(tcv_Seg s.seg2) <= 214]			
34		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType5, 1, tcv_Segs.seg2))		7.
35		[TRUE]			
36		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType5, 1, tcv_Segs.seg2))		7.
37		[tcv_Segs.segCount = 3]			
38		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul3)			
39		+ts_ChangeMIB_ValueTag			
40		+ts_Scheduling(p_CellId, 6, 23, p_Timing)			10.
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
43		+ts_Scheduling(p_CellId, 6, 19, p_Timing)			3.
44		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType5, 3, tcv_Segs.seg1))		4.
46		+ts_Scheduling(p_CellId, 6, 21, p_Timing)			5.
47		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
48		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType5, 1, tcv_Segs.seg2))		7.
49		+ts_Scheduling(p_CellId, 6, 22, p_Timing)			8.
50		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
51		[LENGTH_OF(tcv_Seg s.seg3) <= 214]			
52		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType5, 2, tcv_Segs.seg3))		9.
53		[TRUE]			
54		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType5, 2, tcv_Segs.seg3))		9.
55		[tcv_Segs.segCount = 4]			
56		(tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5 := (tcv_MIB.sibSb_ReferenceList.[5].sibSb_Type .sysInfoType5) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[5].scheduling := c_SIB5_Schedul4)			
57		+ts_ChangeMIB_ValueTag			
58 59		+ts_Scheduling(p_CellId, 6, 19, p_Timing) CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		3.
60		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType5, 4, tcv_Segs.seg1))		4.
61		+ts_Scheduling(p_CellId, 6, 21, p_Timing)			5.
62		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
63		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType5, 1, tcv_Segs.seg2))		7.
64		+ts_Scheduling(p_CellId, 6, 22, p_Timing)			8.
65		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
66		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType5, 2, tcv_Segs.seg3))		9.
67		+ts_Scheduling(p_CellId, 6, 23, p_Timing)			10.
68		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
69		[LENGTH_OF(tcv_Seg s.seg4) <= 214]			
70		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType5, 3, tcv_Segs.seg4))		11.
71		[TRUE]			
72		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType5, 3, tcv_Segs.seg4))		11.
		lt_CompleteSIB(p_SIBType : SIB_Type)			
73		[LENGTH_OF(tcv_Segs.seg1) = 226]			
74		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
75		[TRUE]			
76		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

- **Detailed Comments**: 1. Unaligned PER encoding of the SIB5 then segmentation.
 - 2. The result of segmentation shall be less that 5 segments for the SIB5 (current assumption).
 - 3. Send the scheduling info segment to SS. one segment: REP=64, POS=19.
 - 4. Construct the system information message containing the first segment of SIB5 and send it to
 - 5. Send the scheduling info segment to SS. one segment: REP=64, POS=21.
 - 6. Send no segment system information message to SS.
 - 7. Construct the system information message containing the second segment of SIB5 and send it
 - 8. Send the scheduling info to SS. one segment: REP=64, POS=22.
 - 9. Construct thesystem information message containing the third segment of SIB5 and send it to
 - 10. Send the scheduling info to SS. one segment: REP=64, POS=23.
 - 11. Construct the system information message containing the fourth segment of SIB5 and send it to SS.

 $\textbf{Test Step Name} \quad : \ ts_SendSIB6(p_SIB: \ SysInfoType6; \ p_CellId: INTEGER; \ p_Timing: \ INTEGER)$

Group : BasicM_SysInfoHandling_Steps/Default/

Objective: To deliver the SIBType6 to SS

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB6 : p_SIB)))			1.
2		[tcv_Segs.segCount >4]		1	2.
3		[tcv_Segs.segCount <=4]			
4		[tcv_Segs.segCount = 1]			
5		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl nfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl nfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul1)			
6		+ts_ChangeSB1_ValueTag			
7 8		+ts_Scheduling(p_CellId, 6, 3, p_Timing) CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		3.
9		+lt_CompleteSIB(systemInformationBl ockType6)	·		4.
10		+ts_Scheduling(p_CellId, 6, 5, p_Timing)			5.
11		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
12		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
13		+ts_Scheduling(p_CellId, 6, 6, p_Timing)			8.
14		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
15		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
16		+ts_Scheduling(p_CellId, 6, 7, p_Timing)			10.
17		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
18		TM!RLC_TR_DATA_RE Q	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
19		[tcv_Segs.segCount = 2]			
20		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl nfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl nfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul2)			
21		+ts_ChangeSB1_ValueTag			
22		+ts_Scheduling(p_CellId, 6, 6, p_Timing)			8.

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
23		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
24		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
25		<pre>+ts_Scheduling(p_CellId, 6, 7, p_Timing)</pre>			10.
26		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
27		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
28		+ts_Scheduling(p_CellId, 6, 3, p_Timing)			3.
29		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
30		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType6, 2, tcv_Segs.seg1))		4.
31		+ts_Scheduling(p_CellId, 6, 5, p_Timing)			5.
32		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
33		[LENGTH_OF(tcv_Seg s.seg2) <= 214]			
34		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType6, 1, tcv_Segs.seg2))		7.
35		[TRUE]			
36		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType6, 1, tcv_Segs.seg2))		7.
37		[tcv_Segs.segCount = 3]			
38		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl nfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl nfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul3)			
39		+ts_ChangeSB1_ValueTag			
40		+ts_Scheduling(p_CellId, 6, 7, p_Timing)			10.
41		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
42		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgNoSegment)		6.
43		<pre>+ts_Scheduling(p_CellId, 6, 3, p_Timing)</pre>			3.

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
44		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
45		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType6, 3, tcv_Segs.seg1))		4.
46		+ts_Scheduling(p_CellId, 6, 5, p_Timing)			5.
47		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
48		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType6, 1, tcv_Segs.seg2))		7.
49		+ts_Scheduling(p_CellId, 6, 6, p_Timing)			8.
50		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
51		[LENGTH_OF(tcv_Seg s.seg3) <= 214]			
52		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType6, 2, tcv_Segs.seg3))		9.
53		[TRUE]			
54		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType6, 2, tcv_Segs.seg3))		9.
55		[tcv_Segs.segCount = 4]			
56		(tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl			
		<pre>nfoType6 := (tcv_SB1.sib_ReferenceList.[0].sib_Type.sysl nfoType6) MOD 4 + 1, tcv_SB1.sib_ReferenceList.[0].scheduling := c_SIB6_Schedul4)</pre>			
57		+ts_ChangeSB1_ValueTag			
58		+ts_Scheduling(p_CellId, 6, 3, p_Timing)			3.
59		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
60		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgFirst(systemInf ormationBlockType6, 4, tcv_Segs.seg1))		4.
61		+ts_Scheduling(p_CellId, 6, 5, p_Timing)			5.
62		CMAC?CMAC_SYSINFO_Config _CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
63		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType6, 1, tcv_Segs.seg2))		7.
64		+ts_Scheduling(p_CellId, 6, 6, p_Timing)			5.
65		CMAC?CMAC_SYSINFO_C onfig_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
66		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgSubsequent(sys temInformationBlockType6, 2, tcv_Segs.seg3))		7.
67		+ts_Scheduling(p_CellId, 6, 7, p_Timing)			10.
68		CMAC?CMAC_SYSINF O_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
69		[LENGTH_OF(tcv_Seg s.seg4) <= 214]			
70		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLastShort(syst emInformationBlockType6, 3, tcv_Segs.seg4))		11.
71		[TRUE]			
72		TM!RLC_TR_DATA_ REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgLast(systemInf ormationBlockType6, 3, tcv_Segs.seg4))		11.
		lt_CompleteSIB(p_SIBType : SIB_Type)			
73		[LENGTH_OF(tcv_Segs.seg1) = 226]			
74		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
75		[TRUE]			
76		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

- **Detailed Comments**: 1. Unaligned PER encoding of the SIB6 then segmentation.
 - 2. The result of segmentation shall be one or two or three or four segments for the SIB6 (current assumption).
 - 3. Send the scheduling info to SS. one segment: REP=64, POS=3.
 - 4. Construct the system information message containing the first segment of SIB6 and send it to SS.
 - 5. Send the scheduling infot to SS. one segment: REP=64, POS=5.
 - 6. Send no segment system information message to SS.
 - 7. Construct the system information message containing the second segment of SIB6 and send it to SS.
 - 8. Send the scheduling info to SS. one segment: REP=64, POS=6.
 - 9. Construct the system information message containing the third segment of SIB6 and send it to
 - 10. Send the scheduling info to SS. one segment: REP=64, POS=7.
 - 11. Construct the system information message containing the fourth segment of SIB6 and send it to SS.

 $\textbf{Test Step Name} \quad : \ ts_SendSIB7(p_SIB: \ SysInfoType7; \ p_CellId: \ INTEGER; \ p_Timing: \ INTEGER)$

Group: BasicM_SysInfoHandling_Steps/Default/

Objective: To deliver the SIB7 to SS

Default : InitOtherwiseFail

Comments : single SIB7 or concatenated with SIB3 or SIB4 or SIB18, default scheduling described in 3GPP TS

34.123-3 clause 8.4.3

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (sIB7 : p_SIB)), tcv_SIB7 := p_SIB)			1.
2		[tcv_Segs.segCount <>1]		I	2.
3		[tcv_Segs.segCount =1]			
4		+ts_Scheduling(p_CellId, 6, 2, p_Timing)			3.
5		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
6		+lt_CompleteSIB(systemInformationBlockTy pe7)			4.
7		+lt_ConcatWithSIB3			
8		+lt_ConcatWithSIB18			
9		+lt_ConcatWithSIB4			
		It_CompleteSIB(p_SIBType : SIB_Type)			
10		[LENGTH_OF(tcv_Segs.seg1) = 226]			
11		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpl(p_SIBType, tcv_Segs.seg1))		4.
12		[TRUE]			
13		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.
		It_ConcatWithSIB3			
14		(tcv_Segs.seg1 := o_SIB_PER_Encoding (sIB7 : p_SIB), tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB3 : tcv_SIB3))			5.
15		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		1	6.
16		[TRUE]			
17		+ts_Scheduling(p_CellId, 6, 10, p_Timing)			7.
18		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
19		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg1, systemInformationBlockType 3, tcv_Segs.seg2))		8.
		It_ConcatWithSIB18			
20		(tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB18 : tcv_SIB18))			9.

		Test Step Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
21		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	10.
22		[TRUE]			
23		+ts_Scheduling(p_CellId, 6, 18, p_Timing)			11.
24		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
25		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg1, systemInformationBlockType 18, tcv_Segs.seg2))		12.
		It_ConcatWithSIB4			
26		(tcv_Segs.seg2 := o_SIB_PER_Encoding (sIB4 : tcv_SIB4))			13.
27		[(LENGTH_OF(tcv_Segs.seg1) + LENGTH_OF(tcv_Segs.seg2)) >201]		I	14.
28		[TRUE]			
29		+ts_Scheduling(p_CellId, 6, 26, p_Timing)			15.
30		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf(p_CellId, tsc_RB_BCCH)		
31		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList2(systemInformationBlockType 7, tcv_Segs.seg1, systemInformationBlockType 4, tcv_Segs.seg2))		16.

- Detailed Comments: 1. save the new value of SIB7, unaligned PER encoding of the SIB7 then segmentation.
 - 2. The result of segmentation shall be one segment for the SIB7 (current assumption).
 - 3. Send the scheduling info to SS. one segment: REP=64, POS=2.
 - 4. Construct the system information message containing SIB7 and send it to SS.
 - 5. unaligned PER encoding of the SIB7 and SIB3.
 - 6. concateneted SIB7 and SIB3 is too long.
 - 7. Send the scheduling info to SS. one segment: REP=64, POS=10.
 - 8. Construct the system information message containing SIB7 + SIB3 and send it to SS.
 - 9. unaligned PER encoding of the SIB18.
 - 10. concatenated SIB7 and SIB18 is too long.
 - 11. Send the scheduling info to SS. one segment: REP=64, POS=18.
 - 12. Construct the system information message containing SIB7 + SIB18 and send it to SS.
 - 13. unaligned PER encoding of the SIB4.
 - 14. concatenated SIB7 and SIB4 is too long.
 - 15. Send the scheduling info to SS. one segment: REP=64, POS=26.
 - 16. Construct the system information message containing SIB7 + SIB4 and send it to SS.

In system information broadcasting, SIB7 is concatinated with SIB3, SIB4, and SIB18, the assignment tcv_SIB7 := p_SIB in line 1 is to provide a communication mechanism between ts_SendSIB7 and ts_SendSIB4, ts_SendSIB3, ts_SendSIB18. Normally the ts_SendSIB7 is called in the preamble part of the test case to establish the default system information broadcasting. If in the test body the contents of SIB7 need be changed and afterards SIB3 or SIB4 or SIB18 needs also be changed, the ts_SendSIB7 will be called again with a new SIB7 value and ts_SendSIB3 or ts_SendSIB4 or ts_SendSIB18 will also be called again with new SIB value, in the new call of ts_SendSIB3 or ts_SendSIB4 or ts_SendSIB18 new SIB7 value, which was used in the new call of ts_SendSIB7, shall be used. the assignment tcv_SIB7 := p_SIB in line 1 is to provide this new value for ts_SendSIB3 or ts_SendSIB4 or ts_SendSIB18.

Test Step Name : ts_CellDependentPara (p_CellID : INTEGER)

Group : BasicM_SysInfoHandling_Steps/
Objective : To set cell dependent parameters

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellID)			
2		[p_CellID = tsc_CellA]			
3		(tcv_SIB3.cellIdentity := tsc_CellIdCellA, tcv_SIB4.cellIdentity := tsc_CellIdCellA)			
4		[p_CellID = tsc_CellB]			
5		(tcv_SIB3.cellIdentity := tsc_CellIdCellB, tcv_SIB4.cellIdentity := tsc_CellIdCellB)			
6		[p_CellID = tsc_CellC]			
7		(tcv_SIB3.cellIdentity := tsc_CellIdCellC, tcv_SIB4.cellIdentity := tsc_CellIdCellC)			
8		[p_CellID = tsc_CelID]			
9		(tcv_SIB3.cellIdentity := tsc_CellIdCellD, tcv_SIB4.cellIdentity := tsc_CellIdCellD)			
10		[p_CellID = tsc_CellE]			
11		(tcv_SIB3.cellIdentity := tsc_CellIdCellE, tcv_SIB4.cellIdentity := tsc_CellIdCellE)			
12		[p_CellID = tsc_CellF]			
13		(tcv_SIB3.cellIdentity := tsc_CellIdCellF, tcv_SIB4.cellIdentity := tsc_CellIdCellF)			
14		[p_CellID = tsc_CellG]			
15		(tcv_SIB3.cellIdentity := tsc_CellIdCellG, tcv_SIB4.cellIdentity := tsc_CellIdCellG)			
16		[p_CellID = tsc_CellH]			
17		(tcv_SIB3.cellIdentity := tsc_CellIdCellH, tcv_SIB4.cellIdentity := tsc_CellIdCellH)			
18		[TRUE]		I	no such cell

Test Step Name : ts_ChangeMIB_ValueTag

Group : BasicM_SysInfoHandling_Steps/

Objective: To increment MIBValueTag if tcv_MIB_ValueTagChanged = FALSE.

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_MIB_ValueTagChanged = FALSE]			
2		(tcv_MIB.mib_ValueTag := (tcv_MIB.mib_ValueTag) MOD 8 + 1, tcv_MIB_ValueTagChanged := TRUE)			
3		[tcv_MIB_ValueTagChanged = TRUE]			

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_ChangeSB1_ValueTag

Group : BasicM_SysInfoHandling_Steps/

Objective: To increment SB1ValueTag if tcv_SB1_ValueTagChanged = FALSE.

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_SB1_ValueTagChanged = FALSE]			
2		(tcv_SB1_ValueTag := (tcv_MIB.sibSb_ReferenceList.[0].sibSb_Type.sy sInfoTypeSB1) MOD 4 + 1, tcv_MIB.sibSb_ReferenceList.[0].sibSb_Type.sys InfoTypeSB1 := tcv_SB1_ValueTag, tcv_SB1_ValueTagChanged := TRUE)			
3		+ts_ChangeMIB_ValueTag			
4		[TRUE]			

 $\textbf{Test Step Name} \quad \textbf{:} \ \, \text{ts_Scheduling}(p_CellId: \ \, \text{INTEGER}; \ p_REP: \ \, \text{INTEGER}; \ p_POS: \ \, \text{INTEGER}; \ p_Timing: \ \, \text{INTEGER})$

Group: BasicM_SysInfoHandling_Steps/

Objective :

Default : InitOtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		(tcv_BCCH_ModifyTime := p_Timing)			
2		[p_Timing >= 512]			
3		CMAC!CMAC_SYSINFO_Config_REQ	ca_SchedulNow (p_CellId, p_REP, p_POS)		
4		[p_Timing <= 511]			
5		CMAC!CMAC_SYSINFO_Config_REQ	ca_SchedulLater(p_CellId, p_REP, p_POS, p_Timing)		

Test Step Name: ts_SendMIB(p_MIB: MasterInformationBlock; p_CellId : INTEGER; p_Timing: INTEGER)

Group : BasicM_SysInfoHandling_Steps/

Objective : To deliver the MIB to SS

Default : InitOtherwiseFail

Comments :

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		(tcv_MIB.plmn_Type.gsm_MAP.plmn_Identity.mc c := o_HexToDigitsMCC (tcv_TmpCellInfo.mcc),			
		tcv_MIB.plmn_Type.gsm_MAP.plmn_Identity.mn c := o_HexToDigitsMNC (tcv_TmpCellInfo.mnc))			
3		<pre>(tcv_Segs := o_SIB_Segmentation(o_SIB_PER_Encoding (mIB : tcv_MIB)))</pre>			1.
4		[tcv_Segs.segCount <>1]		1	2.
5		[tcv_Segs.segCount =1]			
6		+ts_Scheduling(p_CellId, 3, 0, p_Timing)			3.
7		CMAC?CMAC_SYSINFO_Config_CNF	ca_SysInfoCfgCnf (p_CellId, tsc_RB_BCCH)		
8		+lt_CompleteSIB(masterInformationBloc k)			4.
9		(tcv_MIB_ValueTagChanged := FALSE)			
		It_CompleteSIB(p_SIBType : SIB_Type)			
10		[LENGTH_OF(tcv_Segs.seg1) = 226]			
11		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmpI (p_SIBType, tcv_Segs.seg1))		4.
12		[TRUE]			
13		TM!RLC_TR_DATA_REQ	ca_TR_DataReq(p_CellId, tsc_RB_BCCH, cs_SIB_MsgCmplList1(p_SIBType, tcv_Segs.seg1))		4.

Detailed Comments: 1. Unaligned PER encoding of the MIB then segmentation.

2. The result of segmentation shall be one segment for the MIB (current assumption).

3. Send the scheduling info to SS.(one segment; REP=8; POS=0)

4. Construct the system information message containing MIB and sent to SS.

Test Step Name : ts_UTRAN_GERAN_ParaInit (p_CellId: INTEGER)

Group : BasicM_SysInfoHandling_Steps/

Objective: Initialize default parameters for different region

Default : InitOtherwiseFail

Comments : currently only UTRAN and UTRAN/GERAN are defined

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		+ ts_SetTmpCellInfo (p_CellId)			
2		[px_UTRAN_GERAN = "UTRAN and GERAN"]			
3		(tcv_SIB3 := cb_SIB3_DefUTRAN_GERAN (tcv_TmpCellInfo), tcv_SIB4 := cb_SIB4_DefUTRAN_GERAN (tcv_TmpCellInfo))			
4		[px_UTRAN_GERAN = "UTRAN only"]			
5		(tcv_SIB3 := cb_SIB3_DefUTRAN (tcv_TmpCellInfo), tcv_SIB4 := cb_SIB4_DefUTRAN (tcv_TmpCellInfo))			
6		[TRUE]		I	

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_AT_TriggerGMM_Attach

Group : BasicM_UT_Steps/

Objective : Trigger UE to start GMM Attach procedure via AT command +CGATT

Default: UT_OtherwiseFail

Comments: (see 3GPP 27.007 / 10.1.9)

Description :

L	Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments	
I	1		Ut! AT_CmdReq	ca_AT_CmdReq ("AT+CGATT=1 <cr>")</cr>			
l	2		Ut ? AT_CmdCnf	ca_AT_CmdCnf			
Detailed Comments :							

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_PwrOff
Group : BasicM_UT_Steps/

Objective: To make the operator power off the UE

Default : UT_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = TRUE]			UE is ON
2		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please power off the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := FALSE)			UE is now OFF
5		[TRUE]			UE is Already OFF

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_PwrOn
Group : BasicM_UT_Steps/

Objective: To make the operator power on the UE

Default : UT_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
1		[tcv_UE_SwitchedOn = FALSE]			UE is OFF		
2		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please power on the UE")				
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf				
4		(tcv_UE_SwitchedOn := TRUE)			UE is now ON		
5		[TRUE]			UE is Already ON		
Deta	Detailed Comments :						

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_SwitchOff
Group : BasicM_UT_Steps/

Objective: To make the operator switch off the UE

Default : UT_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		[tcv_UE_SwitchedOn = TRUE]			UE is ON
2		Ut!MMI_CmdReq	ca_MMI_CmdReq ("Please switch off the UE")		
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		(tcv_UE_SwitchedOn := FALSE)			UE is now OFF
5		[TRUE]			UE is Already OFF

Detailed Comments:

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_UE_SwitchOn
Group : BasicM_UT_Steps/

Objective: To make the operator switch on the UE

Default : UT_OtherwiseFail

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
1		[tcv_UE_SwitchedOn = FALSE]			UE is OFF		
2		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please switch on the UE")				
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf				
4		(tcv_UE_SwitchedOn := TRUE)			UE is now ON		
5		[TRUE]			UE is Already ON		
Deta	Detailed Comments :						

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_USIM_Insert Group : BasicM_UT_Steps/

Objective : To make the operator insert the USIM card

Default : UT_OtherwiseFail

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please insert the USIM card into the UE")					
2		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf					
Detai	Detailed Comments :							

Test Step Dynamic Behaviour

Test Step Name : ts_MMI_USIM_Remove Group : BasicM_UT_Steps/

Objective : To make the operator remove the USIM card

Default : UT_OtherwiseFail

Comments : Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments			
1		Ut! MMI_CmdReq	ca_MMI_CmdReq ("Please remove the USIM card from the UE")					
2		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf					
Deta	Detailed Comments :							

Default Name : InitOtherwiseFail
Group : Init_Defaults/

Objective :

Comments : Handle any irrelevant sync/outsync indications during cell setup

Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
2		RETURN			
3		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
4		RETURN			
5		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
6	DFF1	[tcv_CellIndInfo.integrityStarted]		(F)	
7		RETURN			
8		[NOT tcv_CellIndInfo.integrityStarted]			
9		RETURN			
10		?TIMEOUT			
11		[tcv_TestBody = FALSE]			
12	DFI8	CANCEL		(I)	
13		[tcv_TestBody = TRUE]			
14	DFF8	CANCEL		(F)	

Detailed Comments :

Default Name : NAS_OtherwiseFail
Group : NAS_Defaults/

Objective: To match unexpected events and fail the test case.

Comments : Description :

-	Labol	Robaviour Description	Constraints Ref	Vordict	Comments
Nr	Label	Behaviour Description	Constraints Ref	Verdict	
2		?TIMEOUT t_Guard Ut! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		1. 4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4	5514	[tcv_TestBody = FALSE]		(1)	
5	DFI1	CANCEL		(1)	
6	DEE4	[tcv_TestBody = TRUE]		(F)	
7	DFF1	CANCEL	DO INTERNATIONAL	(F)	
8		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v,?))		6.
9		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		7.
10		RETURN			
11		?TIMEOUT t_TimeoutInDefault			
12		(tcv_TimeoutInDefault := TRUE)			
13		RETURN			
14		?TIMEOUT			
15		[tcv_TestBody = FALSE]			
16	DFI8	CANCEL		(I)	
17		[tcv_TestBody = TRUE]			
18	DFF8	CANCEL		(F)	
19		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUE ST - Extract Attach type requeste d
20		RETURN			
21		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVIC E REQUE ST
22		RETURN	,		
	·		1		

		Default Dynamic E	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
23		Dc ? RRC_DataInd [tcv_GMM_RAU_Expect = TRUE](tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_RAU_Rec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?,?) , c_RAI_Any_v, ?))		ROUTIN G AREA UPDAT E REQUE ST
24		RETURN			
25		Dc ? RRC_DataInd [tcv_GMM_DetachExpect = TRUE](tcv_GMM_DetachExpect := FALSE)	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)		DETAC H REQUE ST
26		RETURN			
27	DFI2	Dc?OTHERWISE [tcv_TestBody = FALSE]		(I)	2.
28		CANCEL			3.
29	DFF2	Dc?OTHERWISE [tcv_TestBody = TRUE]		(F)	5.
30		CANCEL			3.
31		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
32	DFF3	[tcv_CellIndInfo.integrityStarted]		(F)	
33		RETURN			
34 35		[NOT tcv_CellIndInfo.integrityStarted] RETURN			

- **Detailed Comments**: 1. The guard timer times out, inconclusive.
 - 2. If unexpectied data is received in the preambles or postambles, a preliminary inconclusive verdict is assigned, and the test case is terminated.
 - 3. Cancel of all running timers.
 - 4. Depending upon the context appropriate measures may differ: the guard timer duration may be increased, operator action during a test may be speeded up, ...
 - 5. If unexpected data is received in the test body, a preliminary failure verdict is assigned, and the test case is terminated.
 - 6. ATTACH REQUEST with any contents received during MM_TestExecution
 - 7. ATTACH REJECT with cause 'GPRS services not allowed'
 - 8. DETACH REQUEST received during MM_TestExecution
 - 9. DETACH ACCEPT

Default Name : RRC_Def1
Group : RRC_Defaults/

Objective: To match unexpected events and fail the test case.

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		TM?RxStatus [tcv_RLC_IgnoreStatus = TRUE]	car_StatusInd(tsc_RB_AM_ 7_RLC)		
2		RETURN			
3		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUE ST - Extract Attach type requeste d
4		RETURN			
5		Dc ? RRC_DataInd [tcv_GMM_RAU_Expect = TRUE](tcv_TmpRAU_ReqPDU := RRC_DataInd.msg, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_RAU_Rec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cbr_RA_UpdReqAny (c_GMM_UpdateType_v(?,?) , c_RAI_Any_v,		ROUTIN G AREA UPDAT E REQUE ST
			?)		
6		RETURN			
7		Dc ? RRC_DataInd [tcv_GMM_DetachExpect = TRUE](tcv_GMM_DetachExpect := FALSE)	car_PS_UplinkDirectTransfe r (tsc_CellDedicated , tsc_RB3, cr_DetachRequest_MO)		DETAC H REQUE ST
8		RETURN			
9		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2, cr_RRC_RrcStatus)		
10		RETURN			
11		AM?RLC_AM_DATA_IND	car_MeasRepAM(?, tsc_RB2, cr_RRC_MeasRep)		
12		RETURN			
13		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1, cr_RRC_MeasRep)		
14		RETURN			
15		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)		
16		RETURN			
17		CPHY?CPHY_Sync_IND CANCEL t_T312	ca_SyncInd (tsc_UL_DPCH1)		
18		RETURN			
19		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		

		Default Dynamic E	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
20		RETURN			
21		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
22	DFF0	[tcv_CellIndInfo.integrityStarted]		(F)	
23		RETURN			
24		[NOT tcv_CellIndInfo.integrityStarted]			
25		RETURN			
26		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v,?))		
27		Dc!RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		
28		RETURN			
29		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVIC E REQUE ST
30		RETURN			
31		?TIMEOUT t_Guard			
32		Ut! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
33		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
34		[tcv_TestBody = FALSE]			
35	DFI1	CANCEL		(I)	
36		[tcv_TestBody = TRUE]			
37	DFF1	CANCEL		(F)	
38		?TIMEOUT t_TimeoutInDefault			
39 40		(tcv_TimeoutInDefault := TRUE) RETURN			
40 41		?TIMEOUT			
42		[tcv_TestBody = FALSE]			
43	DFI8	CANCEL		(1)	
44		[tcv_TestBody = TRUE]		` '	
45	DFF8	CANCEL		(F)	
46		AM?OTHERWISE [tcv_TestBody = FALSE]			
47	DFI2	CANCEL		(1)	
48		UM?OTHERWISE [tcv_TestBody = FALSE]			
49	DFI3	CANCEL		(1)	
50		TM?OTHERWISE [tcv_TestBody = FALSE]			
51	DFI4	CANCEL		(I)	

		Default Dynamic	Behaviour		
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
52		Dc?RRC_DataInd [tcv_TestBody = FALSE]	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cbr_Deact_PDP_ContextRe q_MO(?))	(1)	2.
53	DFI5	CANCEL			3.
54		AM?OTHERWISE [tcv_TestBody = TRUE]			
55	DFF2	CANCEL		(F)	
56		UM?OTHERWISE [tcv_TestBody = TRUE]			
57	DFF3	CANCEL		(F)	
58		TM?OTHERWISE [tcv_TestBody = TRUE]			
59	DFF4	CANCEL		(F)	
60		Dc?RRC_DataInd [tcv_TestBody = TRUE]	car_PS_UplinkDirectTransfe r (tsc_CellDedicated, tsc_RB3, cbr_Deact_PDP_ContextRe q_MO(?))	(F)	5.
61	DFF5	CANCEL			3.
62		CRLC?OTHERWISE			
63	DFI6	CANCEL		(I)	
64		CMAC?OTHERWISE			
65	DFI7	CANCEL		(1)	
66		CPHY?OTHERWISE			
67	DFI9	CANCEL		(I)	
Deta	iled Com	iments :			

Default Name: RRC_DefConnEst : RRC_Defaults/ Group

: To match unexpected events during an RRC connection establishment i.e to match the repetition of RRC CONNECTION REQUEST. Objective

Comments Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		TM?RLC_TR_DATA_IND	car_RRC_ConnReq(?,		
			tsc_RB0,		
		DETUDN	cr_RRC_RrcConnReqAny)		
2		RETURN	oor DDC Status/2		
ľ		AM?RLC_AM_DATA_IND	car_RRC_Status(?, tsc_RB2,		
			cr_RRC_RrcStatus)		
4		RETURN			
5		CPHY?CPHY_Sync_IND	ca_SyncInd (
		CANCEL t_T312 RETURN	tsc_UL_DPCH1)		
6 7			on OutOfCynalad /		
′		CPHY?CPHY_Out_of_Sync_IND CANCEL t_T312	ca_OutOfSyncInd (tsc_UL_DPCH1)		
8		RETURN	,		
9		AM?RLC_AM_DATA_IND	car_MeasRepAM(?,		
			tsc_RB2,		
40		DETUDN	cr_RRC_MeasRep)		
10 11		RETURN	oor MoooDonLIM/2		
''		UM?RLC_UM_DATA_IND	car_MeasRepUM(?, tsc_RB1,		
			cr_RRC_MeasRep)		
12		RETURN			
13		AM?RLC_AM_DATA_CNF	car_AM_DataCnf(?, tsc_RB2)		
14		RETURN			
15		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
16	DFF0	[tcv_CellIndInfo.integrityStarted]		(F)	
17		RETURN			
18		[NOT tcv_CellIndInfo.integrityStarted]			
19		RETURN			
20		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq =	car_InitDirectTransfer (SERVIC E
		TRUE]	tsc_CellDedicated , tsc_RB3, cr_ServiceRequest		REQUE
			(c_ServiceType_v(?),		ST
			c_MobileIdAny_lv, ?)		
21		 RETURN	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
22		?TIMEOUT t_Guard			
23		Ut!MMI_CmdReq	ca_MMI_CmdReq ("The		4.
		·	guard timer has run out.		
			Please take appropriate measures")		
24		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
25		[tcv_TestBody = FALSE]			
26	DFI1	CANCEL		(I)	
27		[tcv_TestBody = TRUE]			

	Default Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
28	DFF1	CANCEL		(F)			
29		?TIMEOUT t_TimeoutInDefault					
30		(tcv_TimeoutInDefault := TRUE)					
31		RETURN					
32		?TIMEOUT					
33		[tcv_TestBody = FALSE]					
34	DFI8	CANCEL		(I)			
35		[tcv_TestBody = TRUE]					
36	DFF8	CANCEL		(F)			
37		AM?OTHERWISE [tcv_TestBody = FALSE]					
38	DFI2	CANCEL		(I)			
39		UM?OTHERWISE [tcv_TestBody = FALSE]					
40	DFI3	CANCEL		(I)			
41		TM?OTHERWISE [tcv_TestBody = FALSE]					
42	DFI4	CANCEL		(I)			
43		AM?OTHERWISE [tcv_TestBody = TRUE]					
44	DFF2	CANCEL		(F)			
45		UM?OTHERWISE [tcv_TestBody = TRUE]					
46	DFF3	CANCEL		(F)			
47		TM?OTHERWISE [tcv_TestBody = TRUE]					
48	DFF4	CANCEL		(F)			
49		CRLC?OTHERWISE					
50	DFI5	CANCEL		(I)			
51		CMAC?OTHERWISE					
52	DFI6	CANCEL		(I)			
53		CPHY?OTHERWISE					
54	DFI7	CANCEL		(I)			
Deta	Detailed Comments :						

Default Name : UT_OtherwiseFail Group : UT_Defaults/

Objective : To match unexpected events and fail the test case at the UtT PCO.

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		Ut?OTHERWISE			1.
2	DFI1	CANCEL		1	2.
3		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
4	DFF2	[tcv_CellIndInfo.integrityStarted]		(F)	
5		RETURN			
6		[NOT tcv_CellIndInfo.integrityStarted]			
7		RETURN			
8		?TIMEOUT			
9		[tcv_TestBody = FALSE]			
10	DFI8	CANCEL		(I)	
11		[tcv_TestBody = TRUE]			
12	DFF8	CANCEL		(F)	

Detailed Comments : 1. Unexpected UT MMI events, fail. 2. Cancel of all running timers.

Default Name: SS_Def_Special : SS_Defaults/ Group

: To match unexpected events during SS configuration/reconfiguration steps. This default does not send any message. Objective

Comments Description

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		?TIMEOUT t_Guard			
2		Ut! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		[tcv_TestBody = FALSE]			
5	DFI5	CANCEL		(I)	
6		[tcv_TestBody = TRUE]			
7	DFF7	CANCEL		(F)	
8		?TIMEOUT t_TimeoutInDefault			
9		(tcv_TimeoutInDefault := TRUE)			
10		RETURN			
11		?TIMEOUT			
12		[tcv_TestBody = FALSE]			
13	DFI8	CANCEL		(I)	
14		[tcv_TestBody = TRUE]			
15	DFF8	CANCEL		(F)	
16		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
17		RETURN			
18		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
19		RETURN			
20		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVIC E REQUE ST
21		RETURN			
22		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUE ST - Extract Attach type requeste d
23		RETURN			
24		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail		
25	DFF5	[tcv_CellIndInfo.integrityStarted]		(F)	
26		RETURN			
27		[NOT tcv_CellIndInfo.integrityStarted]			
28		RETURN			
29		CPHY?OTHERWISE			

Continued from previous page

	Default Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
30	DFI2	CANCEL		(I)			
31		CMAC?OTHERWISE					
32	DFI3	CANCEL		(I)			
33		CRLC?OTHERWISE					
34	DFI4	CANCEL		(I)			
Deta	Detailed Comments :						

Default Name : SS_Def
Group : SS_Defaults/

Objective: To match unexpected events during SS configuration/reconfiguration steps.

Comments : Description :

Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments
1		?TIMEOUT t_Guard			
2		Ut! MMI_CmdReq	ca_MMI_CmdReq ("The guard timer has run out. Please take appropriate measures")		4.
3		Ut ? MMI_CmdCnf	ca_MMI_CmdCnf		
4		[tcv_TestBody = FALSE]			
5	DFI5	CANCEL		(I)	
6		[tcv_TestBody = TRUE]			
7	DFF7	CANCEL		(F)	
8		?TIMEOUT t_TimeoutInDefault			
9		(tcv_TimeoutInDefault := TRUE)			
10		RETURN			
11		?TIMEOUT			
12		[tcv_TestBody = FALSE]			
13	DFI8	CANCEL		(I)	
14		[tcv_TestBody = TRUE]			
15	DFF8	CANCEL		(F)	
16		CPHY?CPHY_Sync_IND	ca_SyncInd (?)		
17		RETURN			
18		CPHY?CPHY_Out_of_Sync_IND	ca_OutOfSyncInd (?)		
19		RETURN			
20		Dc ? RRC_DataInd[tcv_MM_TestExecution]	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_lv, c_RAI_Any_v,?))		
21		Dc ! RRC_DataReq	ca_PS_DataReq (tsc_CellDedicated, tsc_RB3, cs_AttachRej('07'O))		
22		RETURN			
23		Dc ? RRC_DataInd [tcv_ReceivePS_ServiceReq = TRUE]	car_InitDirectTransfer (tsc_CellDedicated , tsc_RB3, cr_ServiceRequest (c_ServiceType_v(?), c_MobileIdAny_lv, ?))		SERVIC E REQUE ST
24		RETURN	,		

	Default Dynamic Behaviour						
Nr	Label	Behaviour Description	Constraints Ref	Verdict	Comments		
25		Dc ? RRC_DataInd [tcv_GMM_AttachExpect = TRUE] (tcv_TmpAttachReqPDU := RRC_DataInd.msg, tcv_TmpB3:= tcv_TmpAttachReqPDU.attachType.type, tcv_CellIndInfo.start_PS := RRC_DataInd.start , tcv_GMM_AttachRec := TRUE)	car_PS_InitDirectTransfer (tsc_CellDedicated, tsc_RB3, cr_AttachReq (c_AttachTypeAny, c_MobileIdAny_Iv, c_RAI_Any_v, ?))		ATTACH REQUE ST - Extract Attach type requeste d		
26		RETURN					
27		CRLC?CRLC_Integrity_Failure_IND	car_CRLC_IntegrityFail				
28	DFF5	[tcv_CellIndInfo.integrityStarted]		(F)			
29		RETURN					
30		[NOT tcv_CellIndInfo.integrityStarted]					
31		RETURN					
32		CPHY?OTHERWISE					
33	DFI2	CANCEL		(I)			
34		CMAC?OTHERWISE					
35	DFI3	CANCEL		(I)			
36		CRLC?OTHERWISE					
37	DFI4	CANCEL		(I)			
Deta	Detailed Comments :						