Source: **T1**

Title: **CR to TS 34.123-3 v.3.6.1 (prose part less Annex A) for approval**

Agenda item: **5.1.3**

Document for: **Approval**

This document contains the CR to prose part of TS 34.123-3 v.3.6.1, except the CR on Annex A, presented separately. This CR has been agreed by T1 and is put forward to TSG T for approval. The TTCN CRs are presented in other documents.

Doc-2nd-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New
T1-041407	34.123-3	359	-	R99	ASP updating and other corrections	F	3.6.1	3.7.0

3GPP TSG-T WG1 Meeting #24 ***T1-041407(revT1-041010***
Toronto, Canada, 26 – 30 July 2004

CR-Form-v7

CHANGE REQUEST

⌘ **34.123-3** **CR** **359** ⌘ **rev** **-** ⌘ Current version: **3.6.1** ⌘

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

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

Title:	⌘	ASP updating and other corrections
Source:	⌘	MCC task 160
Work item code:	⌘	TEI
Date:	⌘	24/06/2004
Category:	⌘	**F**
Release:	⌘	R99

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

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘

1. **TC need the modification of UE UL power level**
A number of P3 and P4 TCs testing UE internal measurement require the change of the UL Tx power during the test. Currently, the TTCN has no interface to address the SS DL DPCH transmitter power control command, in order to change the corresponding UE UL power level. The following TCs have such requirements.
P3 TC list :8.4.1.27, 8.4.1.37, 8.4.1.38; P4 TC list: 8.4.1.41
It is proposed to use a new ASP's so as to finally bring the UE uplink transmission power to a desired level.

2. **ASP name G_CL2_Release_IND is confused** with CL2. The correct name should be G_L2_Release_IND. The ASP is triggered by the reception of the L2 DISC message on SAPI 0 (ref. 44.006, 8.4.4.2).

3 **Introduction of G_CL2_Release_REQ**
During normal layer 2 operation (ref. 44.006, clause 8.5.7), an entity transmitting a layer 3 message through an I frame will retransmit this message N200 times, or until it receives an acknowledgement of this message.

Certain layer 3 messages however request that the UE transfer to a new channel (e.g. Assignment Command or Handover Command). When the UE receives one of these commands it will immediately transfer to the new channel, without sending a layer 2 acknowledgement of this message to the old channel.

After the UE has successfully transferred to the new channel, a G_CL2_Release_REQ will be sent to the old channel, in order to stop it from repeatedly sending the transfer command. Without this ASP, the old channel will continue to re-transmit this message for N200 times and then send an error indication to the layer 3, indicating that the local end has been released.

4. **Introduction of G_CL2_MeasRptControl_REQ**

	In GSM, Measurement Reports are transmitted constantly by the UE whenever it is assigned to a dedicated channel. By default, these are currently prevented by the SS from being reported to the TTCN at the start of every test. Although these messages are handled in the default behaviour test steps, they could potentially slow down the TTCN, even in test cases where they are not required. Several of the 60.* series test cases however require Measurement Reports to be received from the UE whilst assigned to a GSM channel. The SS will enable the reporting of received Measurement Reports to the TTCN only when the ASP G_CL2_MeasRptControl_REQ is sent to the SS with sendMeasRpts set to TRUE. 5. **Pre- & postambles for GERAN to UTRAN tests** A new annex is introduced in 34.123-1 for the pre- & postamble for UTRAN to GERAN test. The same need is valid to have a similar clause or annex on the pre- & postamble for GERAN to UTRAN test. The best place for these is in 34.123-3 for the TTCN implementation. 6. **Enlarge the attenuation range frome 30db to 40db**. Several prioritised TCs, e.g. 8.2.6.37, 8.2.6.38, need an attenuation range of more than 30 db. The current range of 30db in the attenuation is not sufficient for the test. The SS manufacturers are in the position to extend this range to fulfil the test requirement. 7. Editorial correction for the enumerated type in ASN.1 from the uppercase to the lowercase for the 1st character. 8. Clarification of **the meaning of the sequence number** in ASP. 9. TTCN uses the fixed RB identifiers to facilitate the application of SS codecs. There is a need to have **a mapping table for RB idetifiers** between 34.123-1 and 34.123-3. 10. Several MMI strings for test USIM do not have a clear reference to the test case being performed. The reference needs to be added. 11. A **new pixit** should be added for the **frequency band** used for testing according to 34.108, 5.1.1.
Summary of change: ⌘	1.New ASP CPHY_UL_PowerModify _CNF/REQ is introduced in 7.3.2.2.14a. 2. Rename G_CL2_Release_IND to G_L2_Release_IND and move from clause 7.3.4.3.2.2 to clause 7.3.4.3.1.1 in 34.123-3. 3. New ASP G_CL2_Release_REQ/CNF are added in 7.3.4.3.2.2. 4. New ASP G_CL2_MeasRptControl_REQ/CNF are added in 7.3.4.3.2.2. 5. A new clause Pre-& postambles for GERAN to UTRAN test is introduced in 8.12. 6. Modify the attenuation range from 30 to 40 db in 7.3.2.2.5. 7.1 Editorial change the uppercases to lowercases in a number of ASN.1 enumerated type definitions in 7.3.2.2.1, 7.3.2.2.13, 7.3.2.2.16, 7.3.2.2.17, 7.3.2.2.22a, 7.3.2.2.23, 7.3.2.2.29a, 7.3.2.2.30. 7.2 Editorial correction in 7.3.2.2.8, 7.3.2.2.24, 8.5.4.5. 8. Clarification of the meaning of the sequence number in ASP CRLC_RRC_MessageSN and CRLC_SequenceNumber in 7.3.2.2.27a, 7.3.2.2.29. 9. An RB Id mapping table is inserted in 8.2.4. 10. The test case reference is added in three MMI strings in annex F5. 11. The px_FDD_OperationBand is added in annex B.1.1.
Consequences if not approved: ⌘	A number of prioritised TCs 8.4.1.27, 8.4.1.37, 8.4.1.38, 8.4.1.41 would not be testable. GSM L2 release could not be performed correctly or effectively at SS. Two P4 tests could not be made available for verification because of the attenuation setting.

	The SS performance might be slowed down because of the repeated treatment of the GSM measurement reports which do not belong to the test requirements.

Clauses affected:	⌘	7.3.2.2.1, 7.3.2.2.8, 7.3.2.2.13, 7.3.2.2.16, 7.3.2.2.17, 7.3.2.2.22a, 7.3.2.2.23, 7.3.2.2.24, 7.3.2.2.27a, 7.3.2.2.29, 7.3.2.2.14a, 7.3.4.3.1.1, 7.3.4.3.2.2, 8.2.4, 8.5.4.5, 8.12, F5			
		Y	**N**		
Other specs affected:	⌘			Other core specifications	⌘
				Test specifications	
				O&M Specifications	
Other comments:	⌘				

7.3.2.2.1 CPHY_AICH_AckModeSet

ASN.1 ASP Type Definition	
Type Name	CPHY_AICH_AckModeSet_REQ
PCO Type	CSAP
Comment	To request for setting of AICH Acknowledge Mode
Type Definition	

```
SEQUENCE    {
            cellId              INTEGER(0..63),
            routingInfo         RoutingInfo,
            ratType             RatType,
            aICH_Mode           AICH_Mode
}
```

ASN.1 ASP Type Definition	
Type Name	CPHY_AICH_AckModeSet_CNF
PCO Type	CSAP
Comment	To confirm setting of AICH Acknowledge Mode
Type Definition	

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

ASN.1 Type Definition	
Type Name	AICH_Mode
Comment	Normal operation: The AICH will operate as normal, and will acknowledge or negatively acknowledge on all UE RACH transmission attempts, appropriately. No Acknowledge: The AICH shall not transmit acknowledge or Negative Acknowledge on all UE RACH transmission attempts. Negative Acknowledge: The AICH shall transmit Negative Acknowledge on all UE RACH transmission attempts
Type Definition	

```
ENUMERATED  {
            ~~Normal~~normal     (0),
            noAck   (1),
            negACK  (2)
}
```

7.3.2.2.5 CPHY_Cell_TxPower_Modify

ASN.1 ASP Type Definition	
Type Name	CPHY_Cell_TxPower_Modify_CNF
PCO Type	CSAP
Comment	To confirm to change the DL power
Type Definition	

```
SEQUENCE    {
            cellId              INTEGER(0..63)
}
```

ASN.1 ASP Type Definition	
Type Name	CPHY_Cell_TxPower_Modify_REQ
PCO Type	CSAP
Comment	To request to change the DL power If the Tx attenuation level value is set to 123, the cell becomes a non-suitable off cell (CPICH_Ec ≤ -122 dBm/3.84 MHz of an off cell).
Type Definition	

```
SEQUENCE    {
            cellId                      INTEGER(0..63),
            dLTxAttenuationLevel        INTEGER(0..~~3~~40~~,~~ |123)
}
```

7.3.2.2.8 CPHY_PRACH_Measurement

ASN.1 ASP Type Definition	
Type Name	CPHY_PRACH_Measurement_CNF
PCO Type	CSAP
Comment	To Confirm PRACH Measurement Req
Type Definition	

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

ASN.1 ASP Type Definition	
Type Name	CPHY_PRACH_Measurement_REQ
PCO Type	CSAP
Comment	To request for Start or Stop of PRACH Measurements to be done every PRACH PREAMBLE or MESSAGE received.
Type Definition	

```
SEQUENCE    {
            cellId                  INTEGER(0..63),
            routingInfo             RoutingInfo,
            ratType                 RatType,
            pRACH_MeasurementInd    PRACH_MeasurementInd
}
```

ASN.1 Type Definition	
Type Name	PRACH_MeasurementInd
Comment	1. StartMeas : The SS shall start the sending PRACH parameters Measurement report on CPHY PCO, for each PRACH Preamble or MESSAGE received from the UE by primitive CPHY_PRACH_Measurement_Report_IND on CPHY PCO. 2. StopMeas : The SS shall stop sending of PRACH parameters Measurement report on CPHY PCO, for each PRACH Preamble or MESSAGE received from the UE by primitive CPHY_PRACH_Measurement_Report_IND on CPHY PCO.
Type Definition	

```
ENUMERATED  {
            startMeas (0),
            stopMeas (1)
}
```

ASN.1 ASP Type Definition	
Type Name	CPHY_PRACH_Measurement_Report_IND
PCO Type	CSAP
Comment	SS indicates a PRACH parameters measurement report for each PRACH Preambles or MESSAGE received from the UE
Type Definition	

```
SEQUENCE     {
            cellId                  INTEGER(0..63),
            routingInfo             RoutingInfo,
            ratType                 RatType,
            measurementReport       PRACH_MeasurementReport
}
```

ASN.1 Type Definition	
Type Name	PRACH_MeasurementReport
Comment	
Type Definition	

```
SEQUENCE    {
            usedPRACH_AcessSlot         INTEGER (0..14),
            usedPRACH_Signature         INTEGER (0..15) OPTIONAL
}
```

7.3.2.2.13 CPHY_TrCH_Config

ASN.1 ASP Type Definition	
Type Name	CPHY_TrCH_Config_CNF
PCO Type	CSAP
Comment	To confirm to configure the transport channel
Type Definition	

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

ASN.1 ASP Type Definition	
Type Name	CPHY_TrCH_Config_REQ
PCO Type	CSAP
Comment	To request to configure the transport channel
Type Definition	

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

ASN.1 Type Definition	
Type Name	CphyTrchConfigReq
Comment	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.
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,
        dlTFCS              TFCS    OPTIONAL
}
```

ASN.1 Type Definition	
Type Name	RoutingInfo
Comment	To route between each channels.
Type Definition	

```
CHOICE      {
        physicalChannelIdentity         INTEGER                 {0..31},
        transportChannelIdentity        TransportChannelIdentity,
        logicalChannelIdentity          LogicalChannelIdentity,
        rB_Identity                     INTEGER                 {-31..32},
        cn-DomainIdentity               CN-DomainIdentity
}
```

ASN.1 Type Definition	
Type Name	RatType
Comment	To select route between each channels.
Type Definition	

```
ENUMERATED  {
            fdd (0), tdd (1)
}
```

ASN.1 Type Definition	
Type Name	CommonOrDedicatedTFS
Comment	Transport Format Set
Type Definition	

```
SEQUENCE {
    tti                                 CHOICE {
        tti10                               CommonOrDedicatedTF_InfoList,
        tti20                               CommonOrDedicatedTF_InfoList,
        tti40                               CommonOrDedicatedTF_InfoList,
        tti80                               CommonOrDedicatedTF_InfoList,
        dynamic                         CommonOrDedicatedTF_InfoList_DynamicTTI
    },
    semistaticTF_Information            SemistaticTF_Information
}
```

ASN.1 Type Definition	
Type Name	CommonOrDedicatedTF_InfoList
Comment	Transport Format Set
Type Definition	

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

ASN.1 Type Definition	
Type Name	CommonOrDedicatedTF_Info
Comment	Transport Format Set
Type Definition	

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

ASN.1 Type Definition	
Type Name	CommonOrDedicatedTF_InfoList_DynamicTTI
Comment	Transport Format Set for TDD mode
Type Definition	

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

ASN.1 Type Definition	
Type Name	TrchConfigType
Comment	
Type Definition	

```
CHOICE {
                    nonDch                  NULL,
                    dch                     ENUMERATED {nNormal(0), sSoftHO(1)}}
```

7.3.2.2.14a CPHY_UL_PowerModify

ASN.1 ASP Type Definition	
Type Name	CPHY_UL_PowerModify_CNF
PCO Type	CSAP
Comment	To confirm the increase/decrease in UE uplink DPCH power transmission or send the TPC commands as instructed.

Type Definition

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

ASN.1 ASP Type Definition	
Type Name	CPHY_UL_PowerModify_REQ
PCO Type	CSAP
Comment	To request increase/decrease in the UE uplink DPCH transmission by the delta value given in dB, from the existing transmission level or make UE to transmit at maximum or minimum power level. It is assumed that the UE UL DPCH transmission power level is set to -20dbm by default at beginning of each test. For routing Info the Dl DPCH Physical channel ID shall be used. For IE ul_DPCH_Id, the physical channel ID of associated UL DPCH shall be given. SS can use it or neglect it. Ul_UE_TxPower gives either the value in dB, by which SS shall increase/decrease the uplink transmission power of UE from the existing transmission power, when this primitive is called or Start transmission of TPC commands on DL DPCCH as configured

Type Definition

```
SEQUENCE    {
            cellId                          INTEGER(0..63),
            routingInfo                     RoutingInfo,
            ul_DPCH_Id                      INTEGER (0..31),
            ul_UE_Tx_Power                  Ul_UE_Tx_Power
}
```

ASN.1 Type Definition	
Type Name	Ul_UE_Tx_Power
Comment	Choice delta gives the value in dB, by which the existing UE UL DPCH transmission power level is to be increased or decreased. After reaching the new desired level SS shall make UE to maintain this new transmission power level. WithChoice maxMin, and ENUM 'tpc_Up' selection, SS shall start transmitting TPC commands on the DL DPCCH, as '1' every slot so as to ask UE to increase the transmission power. With Choice maxMin, and ENUM 'tpc_Down' selection, SS shall start transmitting TPC commands on the DL DPCCH, as '0' every slot so as to ask UE to decrease the transmission power. With Choice maxMin, and ENUM 'tpc_Maintain' selection, SS will start transmitting TPC commands on the DL DPCCH, as alternate '0' and '1' in alternate slots so as to maintain the UE uplink transmission power

Type Definition

```
CHOICE      {
        deltaINTEGER        (-64..63)
        maxMin              ENUMERATED{ tpc_Up(0), tpc_Down(1), tpc_Maintain(2) }
}
```

7.3.2.2.16 CMAC_Ciphering_Activate

ASN.1 ASP Type Definition	
Type Name	CMAC_Ciphering_Activate_CNF
PCO Type	CSAP
Comment	To confirm to activate or inactivate the ciphering
Type Definition	

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

ASN.1 ASP Type Definition	
Type Name	CMAC_Ciphering_Activate_REQ
PCO Type	CSAP
Comment	To request to start or restart downlink ciphering or uplink deciphering. The physicalChannelIdentity of DPCH applies to routingInfo. Initialize the 20 MSB of HFN component of COUNT-C to the START value stored. If the value of incHFN is set to "NotInc" the SS initializes the remaining LSBs of HFN component in COUNT-C to zero and the SS shall not increment HFN part of COUNT-C at every CFN cycle. If the value of incHFN is set to “IncPerCFN_Cycle” the SS initializes the remainingLSBs of HFN component in COUNT-C accordingly. If it is absent the SS initialize the LSBs of HFN component in COUNT-C to zero, increments the HFN component in COUNT-C by one and then starts the increment HFN part of COUNT-C at every CFN cycle.
Type Definition	

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

ASN.1 Type Definition	
Type Name	Increment_Mode
Comment	
Type Definition	

```
ENUMERATED {iIncPerCFN_Cycler(0), nNotIncr(1), iIncByOne_IncPerCFN_Cycle(2)}
```

7.3.2.2.17 CMAC_Config

ASN.1 ASP Type Definition	
Type Name	CMAC_Config_CNF
PCO Type	CSAP
Comment	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
}
```

ASN.1 ASP Type Definition	
Type Name	CMAC_Config_REQ
PCO Type	CSAP
Comment	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
            }
}
```

ASN.1 Type Definition	
Type Name	CmacConfigReq
Comment	To request to configure MAC

Type Definition

```
SEQUENCE    {
            activationTime                      SS_ActivationTime,
            uE_Info                                 UE_Info,
            trCHInfo                                TrCHInfo,
            trCH_LogCHMapping                       TrCH_LogCHMappingList1
            -- RACHTrasmissionCtrolElements     TBD,
            -- CPCHTransmissionControlElements  TBD
}
```

ASN.1 Type Definition	
Type Name	UE_Info
Comment	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.

Type Definition

```
SEQUENCE {
        u_RNTI                          U_RNTI      OPTIONAL,
        c_RNTI_DSCH_RNTI                C_RNTI      OPTIONAL
}
```

ASN.1 Type Definition	
Type Name	TrCH_LogCHMappingList1
Comment	maxulTrCH = maxdlTrCH = 16

Type Definition

```
SEQUENCE    {
        ulconnectedTrCHList     SEQUENCE (SIZE (1..maxulTrCH)) OF SEQUENCE {
                trchid                  TransportChannelIdentity,
                trCH_LogCHMappingList   TrCH_LogCHMappingList
                                                                  },  OPTIONAL,
        dlconnectedTrCHList     SEQUENCE (SIZE (1..maxdlTrCH)) OF SEQUENCE {
                trchid                  TransportChannelIdentity,
                trCH_LogCHMappingList   TrCH_LogCHMappingList
                                                                  },  OPTIONAL
}
```

ASN.1 Type Definition	
Type Name	TrCH_LogCHMappingList
Comment	maxLogCHperTrCH = 15

Type Definition

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

ASN.1 Type Definition	
Type Name	TrCHInfo
Comment	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.

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,
        dlTFCS              TFCS    OPTIONAL
}
```

ASN.1 Type Definition	
Type Name	TrCH_LogicalChannelMapping
Comment	

Type Definition

```
SEQUENCE    {
            CHOICE  {
                ul_LogicalChannelMapping            SS_UL_LogicalChannelMapping,
                dl_LogicalChannelMapping            SS_DL_LogicalChannelMapping
                    },
            rB_Identity                 INTEGER     {-31..32}   OPTIONAL,
            cn-DomainIdentity           CN-DomainIdentity       OPTIONAL
}
```

ASN.1 Type Definition	
Type Name	SS_UL_LogicalChannelMapping
Comment	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
}
```

ASN.1 Type Definition	
Type Name	SS_DL_LogicalChannelMapping
Comment	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.

Type Definition

```
SEQUENCE {
    macHeaderManipulation               MAC_HeaderManipulation,
    dlTransportChannelType              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_UL_TransportChannelType
Comment	

Type Definition

```
ENUMELATED {
    dch (0),
    rach (1),
    cpch (2),
    usch (3)
}
```

ASN.1 Type Definition	
Type Name	MAC_LogicalChannelPriority
Comment	

Type Definition

```
INTEGER (1..8)
```

ASN.1 Type Definition	
Type Name	SS_DL_TransportChannelType
Comment	

Type Definition

```
ENUMELATED {
    dch     (0),
    fach    (1),
    bch     (2),
    pch     (3),
    dsch    (4)
}
```

ASN.1 Type Definition	
Type Name	LogicalChannelType
Comment	

Type Definition

```
ENUMERATED {
    bBCCH   (0),
    pPCCH   (1),
    cCCCH   (2),
    cCTCH   (3),
    dDCCH   (4),
    dDTCH   (5),
    sSHCCH  (6)
}
```

ASN.1 Type Definition	
Type Name	MAC_HeaderManipulation
Comment	
Type Definition	
ENUMERATED { nNormalMacHeader (0), oOmitMacHeader (1) }	

7.3.2.2.22a CRLC_Bind_TestData_TTI

ASN.1 ASP Type Definition	
Type Name	CRLC_Bind_TestData_TTI_CNF
PCO Type	CSAP
Comment	To confirm the request of binding subsequent data sending RLC_TR_TestDataReq on the different DL RBs in the same TTI.
Type Definition	
SEQUENCE { cellId INTEGER(-1..63), result ENUMERATED{fFailure(0), sSuccess(1)} }	

ASN.1 ASP Type Definition	
Type Name	CRLC_Bind_TestData_TTI_REQ
PCO Type	CSAP
Comment	To request binding subsequent data sending RLC_TR_TestDataReq on the different DL RBs in the same TTI. On the request, the transmission of the test data is temporarily suppressed on those radio bearers which follow subsequently this CRLC_Bind_TestData_TTI_REQ and have 'numOfDiffRb' different RB IDs. Having received the number 'numOfDiffRb' of RLC_TR_TestDataReq, the SS RLC sends the test data on those RBs in the same TTI according to the allowed DL TFCS.
Type Definition	
SEQUENCE { cellId INTEGER(-1..63), numOfDiffRb INTEGER(2..6) -- Number of different RB IDs }	

7.3.2.2.23 CRLC_Ciphering_Activate

ASN.1 ASP Type Definition	
Type Name	CRLC_Ciphering_Activate_CNF
PCO Type	CSAP
Comment	To confirm to activate or inactivate the ciphering
Type Definition	
SEQUENCE { cellId INTEGER(-1..63) }	

ASN.1 ASP Type Definition	
Type Name	CRLC_Ciphering_Activate_REQ
PCO Type	CSAP
Comment	To request to start orrestart downlink ciphering or uplink deciphering. Each call of the ASP includes one RLC SN in rb-DL-CiphActivationTimeInfo for the corresponding rb-identity. Initialize the 20 MSB of HFN component of COUNT-C to the START value stored. For RLC_UM COUNT-C: - If the value of incHFN is set to “NotInc” the SS initialiszes the remaining LSBs of HFN component in UM COUNT-C to zero. - If the value of incHFN is set to “Inc” the SS initializes the remaining LSBs of HFN component in UM COUNT-C to zero, then increments the HFN by one. For RLC_AM COUNT-C: - If the value of incHFN is set to “NotInc” no further action is needed. - If the value of incHFN is set to “Inc” the SS increments the HFN by one.
Type Definition	

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

ASN.1 Type Definition	
Type Name	CiphActivationInfo
Comment	DL or UL ciphering activation info If 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_CiphActivationTimeInfo RB_ActivationTimeInfoList
}	

ASN.1 Type Definition	
Type Name	RLC_IncMode
Comment	
Type Definition	
ENUMERATED{notInc(0), inc(1)}	

7.3.2.2.24 CRLC_Config

ASN.1 ASP Type Definition	
Type Name	CRLC_Config_CNF
PCO Type	CSAP
Comment	For RLC emulator to confirm that a previous attempt to establish, re_configure or release a radio bearer has been successful.
Type Definition	

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

ASN.1 ASP Type Definition	
Type Name	CRLC_Config_REQ
PCO Type	CSAP
Comment	To request to setup, reconfigure or release RLC entity
Type Definition	

```
SEQUENCE    {
            cellId                      INTEGER(-1..63),
            routingInfo                 RoutingInfo,
            ratType                     RatType,
            configMessage               CrlcConfigReq
}
```

ASN.1 Type Definition	
Type Name	CrlcConfigReq
Comment	To request to setup, re_configure release RLC entity The 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 all protocol parameters, such as the protocol variables, RLC timers and status 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
}
```

ASN.1 Type Definition	
Type Name	RBInfo
Comment	
Type Definition	

```
SEQUENCE {
            sS_rlc_Info             SS_RLC_Info         OPTIONAL,
            rB_LogCH_Mapping        RB_LogCH_Mapping
}
```

ASN.1 Type Definition	
Type Name	RB_LogCH_Mapping
Comment	Provide mapping information between RB, logical channel and CN domain.
Type Definition	

```
SEQUENCE {
    uLlogicalChannelIdentity            LogicalChannelIdentity  OPTIONAL,
    dLlogicalChannelIdentity            LogicalChannelIdentity  OPTIONAL,
    logicalChannelType                  LogicalChannelType      OPTIONAL,
    cn-DomainIdentity                   CN-DomainIdentity       OPTIONAL
}
```

ASN.1 Type Definition	
Type Name	SS_RLC_Info
Comment	UL and DL have been swapped intentionally in this type definition. This is to maximize re-use of the type definitions in 3GPP TS 25.331 [**Error! Reference source not found.**] which are intended to configure a UE, where UL is transmission, and DL is reception. For the SS, UL is reception, and DL is transmission. For example, consider configuring a DL AM RLC entity (transmitter) in the SS. The transmission parameters to be configured include PollingInformation, Transmission-RLC-Discard etc. If the DL-AM-RLC-Mode type definition is used to configure this entity, it is only possible to configure reception parameters such as StatusInformation, and receiving window size. By swapping UL and DL, it is possible to configure the DL AM RLC entity using the existing type definition UL-AM-RLC-Info, which contains all of the required transmission parameters.
Type Definition	

SEQUENCE {
sS_ul_RLC_Mode DL_RLC_Mode OPTIONAL,
sS_dl_RLC_Mode SS_DL_RLC_Mode OPTIONAL
}	

ASN.1 Type Definition	
Type Name	SS_DL_RLC_Mode
Comment	
Type Definition	

SEQUENCE {
dl_PayloadSize PayloadSize OPTIONAL,
dl_RLCModeInfo UL_RLC_Mode
}	

ASN.1 Type Definition	
Type Name	PayloadSize
Comment	
Type Definition	
INTEGER (0..4992)	

7.3.2.2.27a CRLC_RRC_MessageSN

ASN.1 ASP Type Definition	
Type Name	CRLC_RRC_MessageSN_CNF
PCO Type	CSAP
Comment	To return the ~~requested~~ counter I value~~content~~s (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
}	

ASN.1 Type Definition	
Type Name	COUNT_I_MSB
Comment	28 bits long
Type Definition	
INTEGER (0..268435455)	

ASN.1 Type Definition	
Type Name	RRC_SequenceNumber
Comment	4 bits long
Type Definition	
INTEGER (0..15)	

ASN.1 ASP Type Definition	
Type Name	CRLC_RRC_MessageSN_REQ
PCO Type	CSAP
Comment	To request the SS to return the~~current~~ ~~content~~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
}
```

7.3.2.2.29 CRLC_SequenceNumber

ASN.1 ASP Type Definition	
Type Name	CRLC_Sequence_Number_CNF
PCO Type	CSAP
Comment	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
}
```

ASN.1 ASP Type Definition	
Type Name	CRLC_SequenceNumber_REQ
PCO Type	CSAP
Comment	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
}
```

7.3.2.2.29a CRLC_SendContinuousData_TTI

ASN.1 ASP Type Definition	
Type Name	CRLC_SendContinuousData_CNF
PCO Type	CSAP
Comment	Confirm sending data in every TTI on each requested RB
Type Definition	

```
SEQUENCE    {
            cellId                  INTEGER(-1..63),
            result                  ENUMERATED{fFailure(0), sSuccess(1)}
}
```

ASN.1 ASP Type Definition	
Type Name	CRLC_SendContinuousData_REQ
PCO Type	CSAP
Comment	To request sending data in every TTI on each RB identified. After the CMAC_Restriction_REQ, the TFC under test will be the one corresponding to the maximum CTFC value in the Restricted list, so that SS can select the number of Transport blocks and the size of Transport blocks on individual Transport channels derived from this CTFC. SS shall take care about all kind of discard info in all RLC modes and the final goal is that the DL TFCs under test shall be selected in downlink for sending data on the request RBs in each TTI.
Type Definition	

```
SEQUENCE    {
            cellId                  INTEGER(-1..63),
            rabTxInfo               RabTxInfo
}
```

ASN.1 Type Definition	
Type Name	RabTxInfo
Comment	Provide test data, number of RBs, and RB Tx info of each RB (RB id, SDU size and number of SDUs) to be transmitted in consecutive TTIs
Type Definition	

```
SEQUENCE {
        testData                BIT STRING (SIZE (8..163840)),
        rbTxInfoList            SEQUENCE (SIZE (1..6)) OF RbTxInfo
}
```

ASN.1 Type Definition	
Type Name	RbTxInfo
Comment	Info on RB id and the actual DL test data size (SDU_Size * number of SDUs). The actual test data is extracted from the first (SDU_Size * number of SDUs) bits in the raw testData buffer. SS shall transmit the actual test data in every TTI. The value nomOfSdu = T / TTI , whereby T=1200 is the duration of the data transmitting in the RAB test, taking into account the test tolerance (+50 %) of the UE loop back delay (< 800 ms).
Type Definition	

```
SEQUENCE {
        rB_Identity             INTEGER     (-31..32),
        sduSize                 INTEGER     (1..163840),
        nomOfSdu                INTEGER     (0..255) -- 0 is set for no data on this RB
}
```

7.3.2.2.30 CRLC_Status

ASN.1 ASP Type Definition	
Type Name	CRLC_Status_IND
PCO Type	CSAP
Comment	To report the occurrence of certain events to RRC. Note: the possible event types to be defined for this ASP is FFS.
Type Definition	

```
SEQUENCE    {
            cellId                  INTEGER(-1..63),
            routingInfo             RoutingInfo,
            ratType                 RatType,
            statusInd               CrlcStatusInd
}
```

ASN.1 Type Definition	
Type Name	CrlcStatusInd
Comment	
Type Definition	

```
ENUMERATED  {
            dDataLinkFailure    (0)
            mMaxRESET       (1),
            sSDUDiscarded   (2)
            -- __ More event types are to be added here
}
```

7.3.4.3.1.1 ASPs for data transmission and reception through GERAN L2

ASP Name	G_L2_DATA_REQ	
PCO Type	G_DSAP	
Comments	The ASP is used to send L3 signalling message on the signalling channels or user data on the traffic channels to the UE/MS in acknowledged mode.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
sAPI	SAPI	0 or 3
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
rfn	RFN	The reduced frame number of the first frame on which this message is sent. This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
msg	PDU	Signalling message or user data to be sent
Detailed Comments	Parameter rfn is only used in the test cases that require L3 message to be sent on specified frame number.	

ASP Name	G_L2_DATA_IND	
PCO Type	G_DSAP	
Comments	The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in acknowledged mode.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
sAPI	SAPI	0 or 3
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
rfn	RFN	The reduced frame number of the first frame carrying the message
msg	PDU	Signalling message or user data received
Detailed Comments		

ASP Name	G_L2_L2Estab_IND		
PCO Type	G_DSAP		
Comments	The ASP is used to receive an indication of that L2 multiple frame operation on the specified channel has been established.		
Parameter Name		**Parameter Type**	**Comments**
cellId		CellId	
physicalChId		PhysicalChId	Channel identifier
g_LogicChType		G_LogicChType	
subChannel		SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4, This field shall be coded as 15 if it is not applicable.
sAPI		SAPI	0,3
establish_mode		OCTETSTRING[1]	
rfn		RFN	The reduced frame number of the first frame carries the L2 SABM frame
msg		PDU	this field is present only when the establish mode is CoRes (collision resolution)
Detailed Comments	see 3GPP TS 44.006 [**Error! Reference source not found.**] clauses 7.1.1 and 7.1.3		

ASP Name	G_L2_UNITDATA_REQ		
PCO Type	G_DSAP		
Comments	The ASP is used to send L3 signalling message on the signalling channels or send user data on the traffic channels to the UE/MS in unacknowledged mode.		
Parameter Name		**Parameter Type**	**Comments**
cellId		CellId	
sAPI		SAPI	0 or 3
physicalChId		PhysicalChId	Channel identifier
g_LogicChType		G_LogicChType	
subChannel		SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
rfn		RFN	The reduced frame number of the first frame on which this message is sent. This field is not applicable and the SS shall ignore it if the field t2 of rfn is coded as '11111'B.
msg		PDU	Signalling message or user data to be sent
Detailed Comments	Parameter fn is only used in the test cases that require specific L3 message to be sent on specified frame number.		

ASP Name	G_L2_UNITDATA_IND		
PCO Type	G_DSAP		
Comments	The ASP is used to receive a L3 signalling message on the signalling channels or user data on the traffic channels from the UE/MS in unacknowledged mode.		
Parameter Name		**Parameter Type**	**Comments**
cellId		CellId	
sAPI		SAPI	0 or 3
physicalChId		PhysicalChId	Channel identifier
g_LogicChType		G_LogicChType	
subChannel		SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
rfn		RFN	The reduced frame number of the first frame carrying the message
msg		PDU	Signalling message or user data received
Detailed Comments			

ASP Name	G_L2_ACCESS_IND		
PCO Type	G_DSAP		
Comments	The ASP is used to receive a random access or handover access burst on the specified channel.		
Parameter Name		**Parameter Type**	**Comments**
cellId		CellId	
physicalChId		PhysicalChId	Channel identifier
g_LogicChType		G_LogicChType	RACH, FACCH, SDCCH/8, SDCCH/4. RACH is used for random access burst; others are used for handover access burst
subChannel		SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8, SDCCH/4. This field is not applicable and the SS shall ignore it if this field is coded as 15.
rfn		RFN	The reduced frame number of the first frame carrying the burst
burst		PDU	Random access burst or handover access burst
Detailed Comments			

ASP Name	G_L2_Paging_REQ		
PCO Type	G_DSAP		
Comments	The ASP is used to send a paging message on the specified paging group of the specified paging channel to the UE/MS, when the UE/MS is in idle mode or the UE/MS not supporting SPLIT_PG_CYCLE on CCCH is in GPRS attached mode and PCCCH is absent.		
Parameter Name		**Parameter Type**	**Comments**
cellId		CellId	
sAPI		SAPI	0
physicalChId		PhysicalChId	Channel identifier of the right CCCH_GROUP
g_LogicChType		G_LogicChType	PCH
pagingGroup		PAGING_GROUP	
pagingMode		PagingMode	0-normal paging; 1-extended paging; 2-paging reorganization.
msg		PDU	Paging message
Detailed Comments	The SS is required to send valid layer 3 messages continuously on all paging subchannels on CCCH where paging can appear. For "normal paging" the SS send the paging message in the specified pagingGroup; For "extended paging" " the SS send the paging message in the specified pagingGroup and in the "next but one" position on the PCH, following the block corresponding to pagingGroup; For "paging reorganization" the SS send the paging message in all paging subchannels. The required 51-multiframe occurs when: pagingGroup div (N div BS_PA_MFRMS) = (FN div 51) mod (BS_PA_MFRMS) The index to the required paging block in the 51-multiframe determined above: Paging block index = pagingGroup mod (N div BS_PA_MFRMS) N = (9-BS_AG_BLKS_RES) * BS_PA_MFRMS CCCH not combined or N = (3-BS_AG_BLKS_RES) * BS_PA_MFRMS CCCH + SDCCH combined		

ASP Name	G_L2_PagingGPRS_REQ		
PCO Type	G_DSAP		
Comments	The ASP is used to send a paging message on the specified paging group of the specified paging channel to the UE/MS, when the UE/MS supporting SPLIT_PG_CYCLE on CCCH is in GPRS attached mode and PCCCH absent.		
Parameter Name		**Parameter Type**	**Comments**
cellId		CellId	
sAPI		SAPI	0
physicalChId		PhysicalChId	Channel identifier of the right CCCH_GROUP
g_LogicChType		G_LogicChType	PCH
pagingGroup		PAGING_GROUP	
pagingMode		PagingMode	0-normal paging; 1-extended paging; 2-paging reorganization.
msg		PDU	Paging message
Detailed Comments	The SS is required to send valid layer 3 messages continuously on all paging subchannels on CCCH where paging can appear. For "normal paging" the SS send the paging message in the specified pagingGroup; For "extended paging" " the SS send the paging message in the specified pagingGroup and in the "next but one" position on the PCH, following the block corresponding to pagingGroup; For "paging reorganization" the SS send the paging message in all paging subchannels. The required 51-multiframe occurs when: pagingGroup div (M div 64) = (FN div 51) mod 64 The index to the required paging block in the 51-multiframe determined above: Paging block index = pagingGroup mod (M div 64) M = (9-BS_AG_BLKS_RES) × 64 CCCH not combined or M = (3-BS_AG_BLKS_RES) × 64 CCCH + SDCCH combined		
NOTE: This ASP may not be implemented if the MS/UE does not support SPLIT_PG_CYCLE on CCCH.			

Type Name	CellId
Type Definition	INTEGER
Type Encoding	
Comments	

Type Name	SAPI
Type Definition	INTEGER
Type Encoding	
Comments	Service access point identifier for GERAN L2 and LLC

Type Name	PhysicalChId
Type Definition	INTEGER(0..31)
Type Encoding	
Comments	Physical channel identifier in GERAN

Type Name	G_LogicChType
Type Definition	INTEGER
Type Encoding	
Comments	GERAN logical channel type: 0-BCCH; 1-RACH; 2-PCH; 3-AGCH; 4-SDCCH/4; 5-SACCH/C4; 6-SDCCH/8; 7-SACCH/C8; 8-TCH/F; 9-FACCH/F; 10-SACCH/TF; 11-TCH/H; 12-FACCH/H; 13-SACCH/TH; 14-PBCCH; 15-PRACH; 16-PPCH; 17-PAGCH; 18-PDTCH/F; 19-PACCH/F; 20-PTCCH/F; 21-E-TCH/F; 22-E-IACCH/F; 23-E-FACCH/F; 24-SACCH/M; 25-SACCH/MD

Type Name	SubChannelNumber
Type Definition	INTEGER
Type Encoding	
Comments	Subchannel number for TCH/H, FACCH/H, SACCH/TH, SDCCH/4, SDCCH/C4, SDCCH/8 and SDCCH/C8. For TCH/H, FACCH/H and SACCH/TH value is (0..1); For SDCCH/8 and SACCH/C8 value is (0..7); For SDCCH/4 and SACCH/C4 value is (0..3).

Type Name	PAGING_GROUP
Type Definition	INTEGER
Type Encoding	
Comments	3GPP TS 05.02 or 3GPP TS 45.002 [**Error! Reference source not found.**] clauses 6.5.2 and 6.5.6

Type Name	PagingMode
Type Definition	INTEGER
Type Encoding	
Comments	0 - normal paging; 1 - extended paging; 2 - paging reorganization.

Type Name	RFN		
Encoding Variation			
Comments	The reduced frame number, its range is 0 -- 42431 (FN modulo 42432) about 195.8 s		
Element Name	**Type Definition**	**Field Encoding**	**Comments**
t1_	BITSTRING[5]		(FN div 1326) mod 32
t3	BITSTRING[6]		FN mod 51
t2	BITSTRING[5]		FN mod 26
Detailed Comments	see 3GPP TS 04.18 or 3GPP TS 44.018 [**Error! Reference source not found.**] clause 10.5.2.38. The reduced frame number, FN modulo 42432 can be calculated in the following formula: 51 × ((t3 - t2) mod 26) + t3 + 1326 × t1_. RFN is used for starting time and TBF starting time.		

ASP Name	G_L2_Release_CNF	
PCO Type	G_DSAP	
Comments	This ASP from L2, indicates that the multiple frame operation release was successful. This means that the UA message was received in response to L2 DISC command.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
sAPI	SAPI	0 or 3
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	BITSTRING[1]	0 = normal release; 1 = local release.
Detailed Comments		

ASP Name	G_L2_Release_REQ	
PCO Type	G_DSAP	
Comments	This ASP requests L2 to send Layer 2 DISC command on the indicated SAPI.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
sAPI	SAPI	0 or 3
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	For SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3). This field is not applicable and the SS shall ignore it if this field is coded as 15.
releaseMode	BITSTRING[1]	0 = normal release; 1 = local release.
Detailed Comments		

ASP Name	G_L2_Release_IND	
PCO Type	G_DSAP	
Comments	The ASP is used to receive an indication of the termination of an established multiple frame operation or an indication of an unsuccessful establishment attempt.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).
releaseMode	BITSTRING[1]	0 = normal release; 1 = local end release
outstanding_Indicator	BOOLEAN	whether or not there are outstanding acknowledgements or unsolved G_L2_DATA_REQ primitives.
Detailed Comments		

ASP Name	G_L2_SYSINFO_REQ	
PCO Type	G_DSAP	
Comments	The ASP is used to send system information messages to the lower layer emulator.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
sAPI	SAPI	0
physicalChId	PhysicalChId	
g_LogicChType	G_LogicChType	BCCH or SACCH
instanceIndex	INTEGER	To indicate the instance of the system information messages. For SYSTEM INFORMATION Type 2ter, 18, 19, 20 the value is (0..7); for type 14, 15 the value is (0..3); for type 2quater the value is (0..15); for all other type the value is 0.
sysInfoType	SysInfoType	SYSTEM INFORMATION Type 5, 5bis, 5ter, and 6 are sent on SACCH, the other SYSTEM INFORMATION 's are sent on BCCH.
msg	PDU	This field contains SYSTEM INFORMATION message. See 3GPP TS 44.018 [43] clause 9.1.31 to clause 9.1.43h for SYSTEM INFORMATION message definitions.
Detailed Comments	The lower layer emulator shall store the SYSTEM INFORMATION's, and transmit them periodically according to the rules specified in clause 6.3.1.3 of 3GPP TS 05.02 or 3GPP TS 45.002 [**Error! Reference source not found.**]. The msg shall override the same type system information message previous stored in the lower layer emulator.	

Type Name	SysInfoType
Type Definition	INTEGER
Type Encoding	
Comments	25--SYSTEM INFORMATION TYPE 1 26--SYSTEM INFORMATION TYPE 2 2 -- SYSTEM INFORMATION TYPE 2bis 3 -- SYSTEM INFORMATION TYPE 2ter 7 -- SYSTEM INFORMATION TYPE 2quater 27--SYSTEM INFORMATION TYPE 3 28--SYSTEM INFORMATION TYPE 4 29--SYSTEM INFORMATION TYPE 5 5 -- SYSTEM INFORMATION TYPE 5bis 6 -- SYSTEM INFORMATION TYPE 5ter 30--SYSTEM INFORMATION TYPE 6 31--SYSTEM INFORMATION TYPE 7 24--SYSTEM INFORMATION TYPE 8 4 -- SYSTEM INFORMATION TYPE 9 0 -- SYSTEM INFORMATION TYPE 13 61--SYSTEM INFORMATION TYPE 16 62--SYSTEM INFORMATION TYPE 17 64--SYSTEM INFORMATION TYPE 18 65--SYSTEM INFORMATION TYPE 19 66--SYSTEM INFORMATION TYPE 20

7.3.4.3.2.2 ASPs for configuration and control of GERAN L2

ASP Name	G_CL2_HoldPhyInfo_REQ	
PCO Type	G_CSAP	
Comments	The ASP commands the SS to hold the PHYSICAL INFORMATION message, which will be sent on PCO G_L2 following the current ASP. The PHYSICAL INFORMATION message shall be sent to the UE/MS within T3124 from the time when the SS has received n handover access bursts.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4, This field is not applicable and the SS shall ignore it if this field is coded as 15.
n	INTEGER	The number of handover access bursts to be received
Detailed Comments	T3124 is defined in 3GPP TS 04.18 or 3GPP TS 44.018 [**Error! Reference source not found.**] clauses 3.4.4.2.2 and 11.1.1	

ASP Name	G_CL2_HoldPhyInfo_CNF	
PCO Type	G_CSAP	
Comments	The ASP is used to get a confirmation of the G_CL2_HoldPhyInfo_REQ.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4. This field is not applicable and the SS shall ignore it if this field is coded as 15.
Detailed Comments		

ASP Name	G_CL2_MeasRptControl_REQ	
PCO Type	G_CSAP	
Comments	The ASP is used to enable or disable the reporting of received Measurement Reports to the TTCN	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	Valid only for logical channel types: SACCH/TF, SACCH/TH, SACCH/C8 and SACCH/C4
subChannel	SubChannelNumber	For SACCH/TH value is (0..1); for SACCH/C8 value is (0..7); for SACCH/C4 value is (0..3).
sendMeasRpts	BOOLEAN	Whether or not to report received Measurement Reports to the TTCN.
Detailed Comments	Per default, this will be set to FALSE	

ASP Name	G_CL2_MeasRptControl_CNF	
PCO Type	G_CSAP	
Comments	The ASP is used to confirm that G_CL2_MeasRptControl_REQ was executed correctly	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments		

ASP Name	G_CL2_NoUAforSABM_REQ	
PCO Type	G_CSAP	
Comments	The ASP commands the SS not to send UA response to the UE when it receives SABM from the UE on the specified channel.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4, This field is not applicable and the SS shall ignore it if this field is coded as 15.
Detailed Comments		

ASP Name	G_CL2_NoUAforSABM_CNF	
PCO Type	G_CSAP	
Comments	The ASP is used to get a confirmation of the G_CL2_NoUAforSABM_REQ.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4. This field is not applicable and the SS shall ignore it if this field is coded as 15.
Detailed Comments		

~~ASP Name~~	~~G_CL2_Release_IND~~	
~~PCO Type~~	~~G_DSAP~~	
~~Comments~~	~~The ASP is used to receive an indication of the termination of an established multiple frame operation or an indication of an unsuccessful establishment attempt.~~	
~~Parameter Name~~	~~Parameter Type~~	~~Comments~~
~~cellId~~	~~CellId~~	
~~sAPI~~	~~SAPI~~	~~0~~
~~physicalChId~~	~~PhysicalChId~~	~~Channel identifier~~
~~g_LogicChType~~	~~G_LogicChType~~	
~~subChannel~~	~~SubChannelNumber~~	~~Valid only for logical channel types: TCH/H, FACCH/H, SACCH/TH, SDCCH/8, SACCH/C8, SDCCH/4, and SACCH/C4. For TCH/H, FACCH/H and SACCH/TH value is (0..1); for SDCCH/8 and SACCH/C8 value is (0..7); for SDCCH/4 and SACCH/C4 value is (0..3).~~
~~releaseMode~~	~~BITSTRING[1]~~	~~0 = normal release; 1 = local end release~~
~~outstanding_Indicator~~	~~BOOLEAN~~	~~whether or not there are outstanding acknowledgements or unsolved G_L2_DATA_REQ primitives.~~
~~Detailed Comments~~		

ASP Name	G_CL2_Release_REQ	
PCO Type	G_CSAP	
Comments	The ASP is used request the SS stop L2 transmission on a channel.	
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
Detailed Comments		

ASP Name	G_CL2_Release_CNF	
PCO Type	G_CSAP	
Comments	The ASP is used to confirm that the G_CL2_Release_REQ is executed correctly	
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier

ASP Name	G_CL2_ResumeUAforSABM_REQ	
PCO Type	G_CSAP	
Comments	The ASP commands the SS to send UA response to the UE when it receives SABM from the UE on the specified channel. This ASP is used after G_CL2_NoUAforSABM_REQ to resume the normal multiframe operation of L2	
Parameter Name	Parameter Type	Comments
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4, This field is not applicable and the SS shall ignore it if this field is coded as 15.
Detailed Comments		

ASP Name	G_CL2_ResumeUAforSABM_CNF	
PCO Type	G_CSAP	
Comments	The ASP is used to get a confirmation of the G_CL2_ResumeUAforSABM_REQ.	
Parameter Name	**Parameter Type**	**Comments**
cellId	CellId	
physicalChId	PhysicalChId	Channel identifier
g_LogicChType	G_LogicChType	
subChannel	SubChannelNumber	Valid only for logical channel types: FACCH/H, SDCCH/8 and SDCCH/4. This field is not applicable and the SS shall ignore it if this field is coded as 15.
Detailed Comments		

8.2.4 Radio bearers

Table 1: Radio bearer identities

Identities (value assigned)	Direction	Type	RLC mode	Service domain	Comments
tsc_RB_BCCH (-1)	downlink		TM	NA	BCCH-BCH
tsc_RB_PCCH (-2)	downlink		TM	NA	PCCH PCH
tsc_RB_BCCH_FACH (-3)	downlink		TM	NA	BCCH FACH
tsc_RB_2ndPCCH (-4)	downlink		TM	NA	Second PCCH PCH SCPCCH
tsc_RB_2ndCCCH (-5)	uplink		TM	NA	Second CCCH RACH PRACH
tsc_RB_UM_7_RLC (-10)	downlink	RAB	TM	CS	For UM RLC tests using 7 bit LIs
tsc_RB_UM_7_RLC (-10)	uplink	RAB	TM	CS	For UM RLC tests using 7 bit LIs
tsc_RB_UM_15_RLC (-11)	downlink	RAB	TM	CS	For UM RLC tests using 15 bit LIs
tsc_RB_UM_15_RLC (-11)	uplink	RAB	TM	CS	For UM RLC tests using 15 bit LIs
tsc_RB_AM_7_RLC (-12)	downlink	RAB	TM	CS	For AM RLC tests using 15 bit LIs
tsc_RB_AM_7_RLC (-12)	uplink	RAB	TM	CS	For AM RLC tests using 7 bit LIs
tsc_RB_AM_15_RLC (-13)	downlink	RAB	TM	CS	For AM RLC tests using 15 bit LIs
tsc_RB_AM_15_RLC (-13)	uplink	RAB	TM	CS	For AM RLC tests using 15 bit LIs
tsc_RB_DCCH_FACH_MAC (-14)	downlink	SRB3	TM	CS	For MAC tests using DCCH mapped to FACH
tsc_RB_DCCH_FACH_MAC (-14)	uplink	SRB3	TM	CS	For MAC tests using DCCH mapped to FACH
tsc_RB_DCCH_DCH_MAC (-15)	downlink	SRB3	TM	CS	For MAC tests using DCCH mapped to DCH
tsc_RB_DCCH_FACH_MAC (-15)	uplink	SRB3	TM	CS	For MAC tests using DCCH mapped to DCH
tsc_RB3_DCCH_RRC_(-16)	uplink	SRB3	AM	CS or PS	For RRC test cases to route UL NAS messages
tsc_RB_CCCH_FACH_MAC (-18)	downlink	SRB0	TM	CS or PS	For MAC test using donwlink SRB0 on TM
tsc_RB_BCCH_FACH_RAB (-19)	downlink		TM	NA	BCCH FACH
tsc_RB0 (0)	uplink	SRB0	TM	CS or PS	The service domain for which the most recent security negotiation took place. CCCH
tsc_RB0 (0)	downlink	SRB0	UM	CS or PS	CCCH
tsc_RB1 (1)	uplink	SRB1	UM	CS or PS	DCCH
tsc_RB1 (1)	downlink	SRB1	UM	CS or PS	DCCH
tsc_RB2 (2)	uplink	SRB2	AM	CS or PS	DCCH
tsc_RB2 (2)	downlink	SRB2	AM	CS or PS	DCCH
tsc_RB3 (3)	uplink	SRB3	AM	CS or PS	DCCH
tsc_RB3 (3)	downlink	SRB3	AM	CS or PS	DCCH
tsc_RB4 (4)	uplink	SRB4	AM	CS or PS	DCCH
tsc_RB4 (4)	downlink	SRB4	AM	CS or PS	DCCH
tsc_RB5 (5)	uplink		TM		DCCH
tsc_RB5 (5)	downlink		TM		DCCH
tsc_RB10 (10)	uplink	RAB#1-1	TM	CS	or RAB1
tsc_RB10 (10)	downlink	RAB#1-1	TM	CS	or RAB1
tsc_RB11 (11)	uplink	RAB#1-2	TM	CS	or RAB2
tsc_RB11 (11)	downlink	RAB#1-2	TM	CS	or RAB2
tsc_RB12 (12)	uplink	RAB#1-3	TM	CS	

Identities (value assigned)	Direction	Type	RLC mode	Service domain	Comments
tsc_RB12 (12)	downlink	RAB#1-3	TM	CS	
tsc_RB13 (13)	uplink	RAB#2	TM	CS	
tsc_RB13 (13)	downlink	RAB#2	TM	CS	
tsc_RB20 (20)	uplink	RAB#1	AM	PS	
tsc_RB20 (20)	downlink	RAB#1	AM	PS	
tsc_RB21 (21)	uplink	RAB#2	UM	PS	
tsc_RB21 (21)	downlink	RAB#2	UM	PS	
tsc_RB22 (22)	uplink	RAB#2	AM	PS	
tsc_RB22 (22)	downlink	RAB#2	AM	PS	
tsc_RB30 (30)	downlink		UM		CTCH FACH
tsc_RB31 (31)	downlink		UM		Second CTCH FACH

The RB values 0 to 5 are used for the signalling bearers. The values 10 to 15 are assigned to the CS RAB sub-flows. The values 20 to 25 are assigned to the PS RAB sub-flows. The value 30 is assigned to the CBSMS/BMC service.

Table 2: RB identities mapping between 34.123-1 & 34.123-3

	Single CS RAB	Single PS RAB	Multi RAB Configuration				
			CS			PS	
34.123-1	RB5	RB5	RB5	RB6	RB7	RB8	RB9
34.123-3	tsc_RB10	tsc_RB20	tsc_RB10	tsc_RB11	tsc_RB12	tsc_RB20	tsc_RB22

8.5.4.5 SRNS relocation

```
Simulataneous SRNS relocation will take place
either "Downlink count synchronization info" IE is received in
    CELL UPDATE CONFIRM,
    PHYSICAL CHANNEL RECONFIGURATION,
    RADIO BREARER RECONFIGURATIONSETUP,
    RADIO BEARER RELEASE,
    TRANSPORT CHANNEL RECONFIGURATION,
    URA UPDATE CONFIRM,
    UTRAN MOBILITY INFROMATION,
or "new U-RNTI" IE is received in
    RADIO BEARER RECONFIGURATIONSETUP.

INTEGRITY_PROTECTION Status = Started
```

8.12 Pre- & postambles for GERAN to UTRAN tests

8.12.1 Preamble for GERAN to UTRAN tests

Before running inter-RAT test cases, radio conditions should be such that the mobile has to select the cell of the intended original RAT. The following steps should be used before running GERAN to UTRAN test cases.

1. UTRAN cell is powered OFF. The default radio conditions for a suitable GERAN cell are used for the serving cell, as defined in 34.108 clause 6.1.7. This step is performed while the UE is still switched OFF.

2. UE is switched ON and performs registration and attach.

3. The UTRAN cell is powered ON with an RF level such that the cell is a suitable neighbour cell, using the RF conditions defined in 34.108 clause 6.1.5, so that the UE will not re-select the UTRAN cell.

8.12.2 Postamble for GERAN to UTRAN tests

- PLMN identity	Not present

The following procedure is used after inter-RAT handover or cell change order test cases in case the test needs to be performed multiple times in a loop.

8.12.2.1 GERAN to UTRAN handover in CS

The test cases are defined in 51.010-1 clause 60.

Expected sequence

Step	Direction		Message	Comments
	UE	SS		
1		<--	SECURITY MODE COMMAND	Integrity protection is activated. UTRAN security keys in PS domain derived from GERAN
2		-->	SECURITY MODE COMPLETE	
3		<--	UTRAN MOBILITY INFORMATION	RRC
4		-->	UTRAN MOBILITY INFORMATION CONFIRM	RRC
5		-->	ROUTING AREA UPDATE REQUEST	GMM - Update type = 'RA updating'. Not performed by CS only mobile.
6		<--	ROUTING AREA UPDATE ACCEPT	GMM - P-TMSI is included
7		-->	ROUTING AREA UPDATE COMPLETE	
8				The call is terminated. SS releases the RRC connection.
9		-->	RRC CONNECTION REQUEST	RRC – establishment cause = 'registration'
10		<--	RRC CONNECTION SETUP	RRC
11		-->	RRC CONNECTION SETUP COMPLETE	RRC
12		-->	ROUTING AREA UPDATE REQUEST	CS/PS mobiles: GMM – Update type" = 'combined RA/LA updating' or 'combined RA/LA updating with ISMI Attach' Note: CS only mobiles will perform a normal LAU
13		<--	SECURITY MODE COMMAND	Integrity protection is activated.
14		-->	SECURITY MODE COMPLETE	
15		<--	ROUTING AREA UPDATE ACCEPT	P-TMSI is included
16		-->	ROUTING AREA UPDATE COMPLETE	
17				The SS releases the RRC connection.
18				UE is powered OFF

Specific message contents

UTRAN MOBILITY INFORMATION message:

Use the same message sub-type found in TS 34.108, clause 9, with the following exceptions:

Information Element	Value/remark
CN information info	

SECURITY MODE COMMAND message:

Use the same message sub-type found in TS 34.108, clause 9, with the following exceptions:

Information Element	Value/remark
Ciphering mode info	Not present

All remaining Specific message contents shall be referred to 34.108 clause 9 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

8.12.2.2 GERAN to UTRAN cell change in PS (in PMM-CONNECTED)

These test cases are defined in 51.010-1 clause 42.4.7.

Expected sequence

Step	Direction		Message	Comments
	UE	SS		
1	-->		ROUTING AREA UPDATE REQUEST	GMM - Update type = 'Combined RA / LA updating' or 'combined RA/LA updating with ISMI Attach 'for CS/PS mobiles, and 'RA updating' for PS only mobiles. Follow-on request is made.
2	<--		SECURITY MODE COMMAND	Integrity protection is activated, UTRAN security keys in PS domain derived from GERAN
3	-->		SECURITY MODE COMPLETE	
4	<--		ROUTING AREA UPDATE ACCEPT	GMM - P-TMSI is included
5	-->		ROUTING AREA UPDATE COMPLETE	SS releases the RRC connection UE is powered OFF.

B.1.1 BasicM test suite parameter declarations

The following parameters are common to all ATSs.

Table B.1: BasicM PIXIT

Parameter name	Description	Type	Default value	Supported value
px_PDP_IP_AddrInfoDCH	A string parameter that identifies the MT in the address space applicable to the PDP for DCH.	IA5String	"200.1.1.80"	
px_PDP_IP_AddrInfoFACH	A string parameter that identifies the MT in the address space applicable to the PDP for FACH.	IA5String	"200.1.1.90"	
px_AuthAMF	Authentication Management Field (16 bits). The value shall be different from '1111 1111 1111 1111'B (AMFresynch).	BITSTRING	See note 2	
px_AuthK	Authentication Key (128 bits)	BITSTRING	'0101111001001 0101011001101 0110001001000 1001101110101 1101001010101 1101110100000 0100101110011 0011111000011 0000100110100 11000101001'B	
px_AuthN	Value of n to initialize tcv_Auth_n (length of extended response) min 31, max 127 (3GPP TS 34.108 [**Error! Reference source not found.**] clause 8.1.2)	INTEGER	127	
px_AuthRAND	Random Challenge (128 bits)	BITSTRING	'01010101…01' B	
px_CC_CallDiallingDigits	Dialling digits used to initiate a CC MO call (used with the AT dial D command).	IA5String	"0123456902"	

Parameter name	Description	Type	Default value	Supported value
px_CipheringOnOff	Security mode - TRUE if ciphering is applicable	BOOLEAN	TRUE	
px_CN_DomainTested	CN domain to be tested. This parameter is used in test cases that handle both PS and CS domains.	CN_DomainIdentity	cs_domain	
px_FDD_OperationBand	Operation band of test	INTEGER	1	
px_FRESH	Value for FRESH	Fresh	See note 1	
px_IMEI_Def	Default IMEI value	HEXSTRING	See note 1	
px_IMEISV_Def	Default IMEISV value	HEXSTRING	See note 1	
px_IMSI_Def	Default IMSI value	HEXSTRING	'001010123456063'H	
px_IMSI_Diff	Different IMSI from the IMSI stored in the USIM	HEXSTRING	'001010654321063'H	
px_PriScrmCode	Primary scrambling code	PrimaryScramblingCode	100	
px_PTMSI_Def	default PTMSI	OCTETSTRING	'12345678'O	
px_PTMSI_SigDef	default PTMSI signature (3 octets, 3GPP 24.008 [**Error! Reference source not found.**], clause 10.5.5.8).	OCTETSTRING	'AB1234'O	
px_RAT	This parameter is used to specify which radio access technology is being used for the current test execution. Valid values: fdd and tdd	RatType	fdd	
px_RRC_CS_ServTested	CS service to be tested for RRC test cases.	RRC_ServTested	Speech	
px_RRC_PS_ServTested	PS service to be tested for RRC test cases.	RRC_ServTested	Speech	
px_SRNC_Id	SRNC Id	SRNC_Identity	'0000 0000 0001'B	
px_SRNC_IdDiff	Different value for SRNC Id than in px_SRNCId	SRNC_Identity	'0000 0000 0010'B	
px_SRNTI	S RNTI	S_RNTI	'0000 0000 0000 0000 0001'B	
px_SRNTI_Diff	Different value for S RNTI than in px_SRNTI	S_RNTI	'0000 0000 0000 0000 0010'B	
px_TCellA	TCell value for cell A	Tcell	0	
px_TCellB	TCell value for cell B	Tcell	512	
px_TCellC	TCell value for cell C	Tcell	1536	
px_TCellD	TCell value for cell D	Tcell	321	
px_TCellE	TCell value for cell E	Tcell	833	
px_TCellF	TCell value for cell F	Tcell	6577	
px_TCellG	TCell value for cell G	Tcell	7253	
px_TCellH	TCell value for cell H	Tcell	4351	
px_TMSI_Def	Default TMSI	OCTETSTRING	'12345678'O	
px_UARFCN_D_Mid	Mid Range downlink UARFCN value	INTEGER	10700	
px_UARFCN_D_Low	Low Range downlink UARFCN value	INTEGER	10563	
px_UARFCN_D_High	High Range downlink UARFCN value	INTEGER	10837	
px_UARFCN_U_High	High Range uplink UARFCN value. This value shall be set based on the operation band supported.	INTEGER	9887	
px_UARFCN_U_Low	Low Range uplink UARFCN value. This value shall be set based on the operation band supported.	INTEGER	9613	
px_UARFCN_U_Mid	Mid Range uplink UARFCN value. This value shall be set based on the operation band supported.	INTEGER	9750	
px_UE_OpModeDef	Default UE operation mode (either opModeA or opModeC). (For most UEs this corresponds class-A or class-C, and can not be changed by the user)	UE_OperationMode	opModeA	
px_UL_ScramblingCode	UL scrambling code value to be used by UE.	UL_ScramblingCode	0	
px_UTRAN_GERAN	This parameter is used to specify for	Region	"UTRAN and	

Parameter name	Description	Type	Default value	Supported value
	which environment region the system information blocks are broadcast in the test execution. Valid values: "UTRAN only" and "UTRAN and GERAN".		GERAN"	
px_DeltaSS_DelayTime	Tdelta value (refer to 34.108 clause 4.2.3) in ms.	INTEGER	55ms	
NOTE 1: No default value can be proposed (Manufacturer defined value). NOTE 2: No default value can be proposed, because not enough information is available in 3GPP TS 34.109 [**Error! Reference source not found.**] clause 8.1.2.				

F.5 USIM

Please insert the USIM card, with information given in ~~table~~<Test Case~~NUMBER~~>

Please insert the USIM card, with Type A EFACC in <Test Case>

Please insert the USIM card, with Type B EFACC in <Test Case>

Please remove the USIM card from the UE

Please check if the Memory Capacity Exceeded Flag has been set on the USIM simulator

Please check if the Memory Capacity Exceeded Flag has been reset on the USIM simulator

Please connect the USIM simulator to the UE Only used in SMS ATS.

Please check whether the USIM simulator indicates an attempt made by the ME to store the short message in the USIM and returns the status response 'OK' ('90 00') Only used in SMS ATS.

Please check whether the USIM simulator indicates an attempt made by the ME to store the short message in the USIM and returns the status response 'Memory Problem' ('92 40') Only used in SMS ATS.

Please remove the USIM card and then insert a new one

Please insert Test USIM programmed with Access Class : <ACCESSCLASS> - Only used in SMS ATS.

Please insert the USIM card of type B into the UE

Please insert 2nd SIM card with short IMSI

Please insert the USIM card into the UE