- Test cases in green are ready for verification. Test cases in white are compilable. NOTE 1:
- NOTE 2:

#### A.2 NAS ATS

The approved NAS test cases are listed.

### Table A.2: NAS TTCN test cases

Test case	Description
	MM
9.1	TMSI reallocation
9.2.1	Authentication accepted
9.2.2	Authentication rejected
9.2.3	Authentication rejected by the UE (MAC code failure)
9.2.4	Authentication rejected by the UE (SQN failure)
9.3.1	General Identification
9.3.2	Handling of IMSI shorter than the maximum length
9.4.1	Location updating / accepted
9.4.2.1	Location updating / rejected / IMSI invalid
9.4.2.2.4.1	Location updating / rejected / PLMN not allowed/Test 1
9.4.2.2.4.2	Location updating / rejected / PLMN not allowed / Test 2
9.4.2.3	Location updating / rejected / location area not allowed
9.4.2.4 Proc 1	Location updating / rejected / roaming not allowed in this location area / Procedure 1
9.4.2.4 Proc 2	Location updating / rejected / roaming not allowed in this location area / Procedure 2
9.4.2.4 Proc 3	Location updating / rejected / roaming not allowed in this location area / Procedure 3
9.4.2.4 Proc 4	Location updating / rejected / roaming not allowed in this location area / Procedure 4
9.4.2.4 Proc 5	Location updating / rejected / roaming not allowed in this location area / Procedure 5
9.4.2.5	Location updating / rejected / No Suitable Cells In Location Area
9.4.3.2	Location updating / abnormal cases / attempt counter less or equal to 4, LAI different
9.4.3.3	Location updating / abnormal cases / attempt counter equal to 4
9.4.3.4	Location updating / abnormal cases / attempt counter less or equal to 4, stored LAI equal to broadcast LAI
9.4.4	Location updating / release / expiry of T3240
9.4.5.1	Location updating / periodic spread
9.4.5.2	Location updating / periodic normal / test 1
9.4.5.3	Location updating / periodic normal / test 2
9.4.5.4.1	Location updating / periodic HPLMN search / UE waits time T
9.4.5.4.2	Location updating / periodic HPLMN search / UE in manual mode
9.4.5.4.3	Location updating / periodic HPLMN search / UE waits at least two minutes and at most T minutes
9.4.6	Location updating / interworking of attach and periodic
9.4.7	Location Updating / accept with replacement or deletion of Equivalent PLMN list
9.4.8	Location Updating after UE power off
9.4.9	Location Updating / Accept, Interaction between Equivalent PLMNs and Forbidden PLMNs
9.5.2	MM connection / establishment in security mode
9.5.4	MM connection / establishment rejected
9.5.5	MM connection / establishment rejected cause 4
9.5.6	MM connection / expiry T3230
9.5.7.1	MM connection / abortion by the network / cause #6
9.5.7.2	MM connection / abortion by the network / cause not equal to #6
9.5.8.1	MM connection / follow-on request pending / test 1
9.5.8.2	MM connection / follow-on request pending / test 2
9.5.8.3	MM connection / follow-on request pending / test 3
	DD CC
10.1.2.1.1	Outgoing call / U0 null state / MM connection requested
10.1.2.2.1	Outgoing call / U0.1 MM connection pending / CM service rejected
10.1.2.2.2	Outgoing call / U0.1 MM connection pending / CM service accepted
10.1.2.2.3	Outgoing call / U0.1 MM connection pending / lower layer failure
10.1.2.3.1	Outgoing call / U1 call initiated / receiving CALL PROCEEDING

10.1.2.3.2	Outgoing call / U1 call initiated / rejecting with RELEASE COMPLETE
10.1.2.3.3	Outgoing call / U1 call initiated / T303 expiry
10.1.2.3.4	Outgoing call / U1 call initiated / lower layer failure
10.1.2.3.5	Outgoing call / U1 call initiated / receiving ALERTING
10.1.2.3.6	Outgoing call / U1 call initiated / entering state U10
10.1.2.3.7	Outgoing call / U1 call initiated / unknown message received
10.1.2.4.1	Outgoing call / U3 UE originating call proceeding / ALERTING received
10.1.2.4.2	Outgoing call / U3 UE originating call proceeding / CONNECT received
10.1.2.4.3	Outgoing call / U3 UE originating call proceeding / PROGRESS received without in band
	information
10.1.2.4.4	Outgoing call / U3 UE originating call proceeding / PROGRESS with in band information
10.1.2.4.5	Outgoing call / U3 UE originating call proceeding / DISCONNECT with in band tones
10.1.2.4.6	Outgoing call / U3 UE originating call proceeding / DISCONNECT without in band tones
10.1.2.4.7	Outgoing call / U3 UE originating call proceeding / RELEASE received
10.1.2.4.8	Outgoing call / U3 UE originating call proceeding / termination requested by the user
10.1.2.4.9	Outgoing call / U3 UE originating call proceeding / traffic channel allocation
10.1.2.4.10	Outgoing call / U3 UE originating call proceeding / timer T310 time-out
10.1.2.4.11	Outgoing call / U3 UE originating call proceeding / lower layer failure
10.1.2.4.12	Outgoing call / U3 UE originating call proceeding / unknown message received
10.1.2.4.13	Outgoing call / U3 UE originating call proceeding / Internal alerting indication
10.1.2.5.1	Outgoing call / U4 call delivered / CONNECT received
10.1.2.5.2	Outgoing call / U4 call delivered / termination requested by the user
10.1.2.5.3	Outgoing call / U4 call delivered / DISCONNECT with in band tones
10.1.2.5.4	Outgoing call / U4 call delivered / DISCONNECT without in band tones
10.1.2.5.5	Outgoing call / U4 call delivered / RELEASE received
10.1.2.5.6	Outgoing call / U4 call delivered / lower layer failure
10.1.2.5.7	Outgoing call / U4 call delivered / traffic channel allocation
10.1.2.5.8	Outgoing call / U4 call delivered / unknown message received
10.1.2.6.1	U10 call active / termination requested by the user
10.1.2.6.2	U10 call active / RELEASE received
10.1.2.6.3	U10 call active / DISCONNECT with in band tones
10.1.2.6.4	U10 call active / DISCONNECT without in band tones
10.1.2.6.5	U10 call active / RELEASE COMPLETE received
10.1.2.6.6	U10 call active / SETUP received
10.1.2.7.1	U11 disconnect request / clear collision
10.1.2.7.2	U11 disconnect request / RELEASE received
10.1.2.7.3	U11 disconnect request / timer T305 time-out
10.1.2.7.4	U11 disconnect request / lower layer failure
10.1.2.7.5	U11 disconnect request / unknown message received
10.1.2.8.1	U12 disconnect indication / call releasing requested by the user
10.1.2.8.2	U12 disconnect indication / RELEASE received
10.1.2.8.3	U12 disconnect indication / lower layer failure
10.1.2.8.4	U12 disconnect indication / unknown message received
10.1.2.9.1	Outgoing call / U19 release request / timer T308 time-out
10.1.2.9.2	Outgoing call / U19 release request / 2nd timer T308 time-out
10.1.2.9.3	Outgoing call / U19 release request / RELEASE received
10.1.2.9.4	Outgoing call / U19 release request / RELEASE COMPLETE received
10.1.2.9.5	Outgoing call / U19 release request / lower layer failure
10.1.3.1.1	Incoming call / U0 null state / SETUP received with a non supported bearer capability
10.1.3.2.1	Incoming call / U6 call present / automatic call rejection
10.1.3.3.1 10.1.3.3.2	Incoming call / U9 mobile terminating call confirmed / alerting or immediate connecting
10.1.3.3.2	Incoming call / U9 mobile terminating call confirmed / DTCH assignment Incoming call / U9 mobile terminating call confirmed / termination requested by the user
10.1.3.3.4	Incoming call / U9 mobile terminating call confirmed / DISCONNECT received
10.1.3.3.4	Incoming call / U9 mobile terminating call confirmed / DISCONNECT received
10.1.3.3.6	Incoming call / U9 mobile terminating call confirmed / RELEASE received
10.1.3.3.0	

10.1.3.3.7	Incoming call / U9 mobile terminating call confirmed / unknown message received
10.1.3.4.1	Incoming call / U7 call received / call accepted
10.1.3.4.2	Incoming call / U7 call received / termination requested by the user
10.1.3.4.3	Incoming call / U7 call received / DISCONNECT received
10.1.3.4.4	Incoming call / U7 call received / RELEASE received
10.1.3.4.5	Incoming call / U7 call received / lower layer failure
10.1.3.4.6	Incoming call / U7 call received / unknown message received
10.1.3.4.7	Incoming call / U7 call received / DTCH assignment
10.1.3.4.8	Incoming call / U7 call received / RELEASE COMPLETE received
10.1.3.5.1	Incoming call / U8 connect request / CONNECT acknowledged
10.1.3.5.2	Incoming call / U8 connect request / timer T313 time-out
10.1.3.5.3	Incoming call / U8 connect request / termination requested by the user
10.1.3.5.4	Incoming call / U8 connect request / DISCONNECT received with in-band information
10.1.3.5.5	Incoming call / U8 connect request / DISCONNECT received without in-band information
10.1.0.0.0	
10.1.3.5.6	Incoming call / U8 connect request / RELEASE received
10.1.3.5.7	Incoming call / U8 connect request / lower layer failure
10.1.3.5.8	Incoming call / U8 connect request / DTCH assignment
10.1.3.5.9	Incoming call / U8 connect request / unknown message received
10.1.4.1.1	In-call functions / DTMF information transfer / basic procedures
10.1.4.2.1	In-call functions / User notification / UE terminated
10.1.4.3.1	In-call functions / channel changes / a successful channel change in active state/ Handover and
	Assignment Command
10.1.4.3.2	In-call functions / channel changes / an unsuccessful channel change in active mode/ Handover
	and Assignment Command
10.2.1	Call Re-establishment/call present, re-establishment allowed
10.3	User to user signalling
	Session Management
11.1.1.1	Attach initiated by context activation/QoS Offered by Network is the QoS Requested
11.1.1.2.1	QoS offered by the network is a lower QoS / QoS accepted by UE
11.1.1.2.2	QoS offered by the network is a lower QoS / QoS rejected by UE
11.1.2	PDP context activation requested by the network, successful and unsuccessful
11.1.3.1	Abnormal Cases / T3380 Expiry
11.1.3.2	Abnormal Cases / Collision of UE initiated and network requested PDP context activation
11.1.3.3	Abnormal Cases / Network initiated PDP context activation request for an already activated PDP context (on the UE side)
11.1.4.1.1	Successful secondary PDP context activation procedure initiated by the UE/QoS Offered by
	Network is the QoS Requested
11.1.4.1.2.1	Successful secondary PDP context activation procedure Initiated by the UE/QoS Offered by Network is a lower QoS/QoS accepted by UE
11.1.4.1.2.2	Successful secondary PDP context activation procedure Initiated by the UE/QoS Offered by Network is a lower QoS/QoS rejected by UE
11.1.4.2	Unsuccessful Secondary PDP Context Activation Procedure Initiated by the UE
11.1.4.3.1	Abnormal cases/T3380 Expiry
11.1.4.3.1 11.2.1	Abnormal cases/T3380 Expiry
-	
11.2.1	Abnormal cases/T3380 Expiry           Network initiated PDP context modification
11.2.1 11.2.2.1	Abnormal cases/T3380 Expiry Network initiated PDP context modification UE initiated PDP context modification/UE initiated PDP context modification accepted by network UE initiated PDP context modification/UE initiated PDP context modification not accepted by network Abnormal Cases/T3381 Expiry
11.2.1 11.2.2.1 11.2.2.2	Abnormal cases/T3380 Expiry Network initiated PDP context modification UE initiated PDP context modification/UE initiated PDP context modification accepted by network UE initiated PDP context modification/UE initiated PDP context modification not accepted by network
11.2.1 11.2.2.1 11.2.2.2 11.2.3.1	Abnormal cases/T3380 Expiry Network initiated PDP context modification UE initiated PDP context modification/UE initiated PDP context modification accepted by network UE initiated PDP context modification/UE initiated PDP context modification not accepted by network Abnormal Cases/T3381 Expiry
11.2.1 11.2.2.1 11.2.2.2 11.2.3.1 11.2.3.2	Abnormal cases/T3380 Expiry Network initiated PDP context modification UE initiated PDP context modification/UE initiated PDP context modification accepted by network UE initiated PDP context modification/UE initiated PDP context modification not accepted by network Abnormal Cases/T3381 Expiry Collision of UE and network initiated PDP context modification procedures
11.2.1 11.2.2.1 11.2.2.2 11.2.3.1 11.2.3.2 11.3.1	Abnormal cases/T3380 Expiry Network initiated PDP context modification UE initiated PDP context modification/UE initiated PDP context modification accepted by network UE initiated PDP context modification/UE initiated PDP context modification not accepted by network Abnormal Cases/T3381 Expiry Collision of UE and network initiated PDP context modification procedures PDP context deactivation initiated by the UE
11.2.1 11.2.2.1 11.2.2.2 11.2.3.1 11.2.3.2 11.3.1 11.3.2	Abnormal cases/T3380 Expiry Network initiated PDP context modification UE initiated PDP context modification/UE initiated PDP context modification accepted by network UE initiated PDP context modification/UE initiated PDP context modification not accepted by network Abnormal Cases/T3381 Expiry Collision of UE and network initiated PDP context modification procedures PDP context deactivation initiated by the UE PDP context deactivation initiated by the network
11.2.1         11.2.2.1         11.2.3.2         11.3.1         11.3.2         11.3.3.1         11.3.3.2	Abnormal cases/T3380 Expiry         Network initiated PDP context modification         UE initiated PDP context modification/UE initiated PDP context modification accepted by network         UE initiated PDP context modification/UE initiated PDP context modification not accepted by network         Abnormal Cases/T3381 Expiry         Collision of UE and network initiated PDP context modification procedures         PDP context deactivation initiated by the UE         PDP context deactivation initiated by the network         Abnormal cases / T3390 Expiry         Abnormal cases / Collision of UE and network initiated PDP context deactivation requests
11.2.1 11.2.2.1 11.2.2.2 11.2.3.1 11.2.3.2 11.3.1 11.3.2 11.3.3.1	Abnormal cases/T3380 Expiry Network initiated PDP context modification UE initiated PDP context modification/UE initiated PDP context modification accepted by network UE initiated PDP context modification/UE initiated PDP context modification not accepted by network Abnormal Cases/T3381 Expiry Collision of UE and network initiated PDP context modification procedures PDP context deactivation initiated by the UE PDP context deactivation initiated by the network Abnormal cases / T3390 Expiry

12.2.1.1	PS attach / accepted
12.2.1.2	PS attach / rejected / IMSI invalid / illegal UE
12.2.1.3	PS attach / rejected / IMSI invalid / PS services not allowed
12.2.1.4.1	PS attach / rejected / PLMN not allowed / test procedure 1
12.2.1.4.2	PS attach / rejected / PLMN not allowed / test procedure 2
12.2.1.5a.1	PS attach / rejected / roaming not allowed in this location area / test procedure 1
12.2.1.5a.2	PS attach / rejected / roaming not allowed in this location area / test procedure 2
12.2.1.5a.3	PS attach / rejected / roaming not allowed in this location area / test procedure 3
12.2.1.5a.4	PS attach / rejected / roaming not allowed in this location area / test procedure 4
12.2.1.5b	PS attach / rejected / No Suitable Cells In Location Area
12.2.1.5c	PS attach / rejected / Location area not allowed
12.2.1.5d	PS attach / rejected / PS services not allowed in this PLMN
12.2.1.6.1	PS attach / abnormal cases / access barred due to access class control / tes procedure 1
12.2.1.6.2	PS attach / abnormal cases / access barred due to access class control / test procedure 2
12.2.1.7	PS attach / abnormal cases / change of cell into new routing area
12.2.1.8	PS attach / abnormal cases / power off
12.2.1.9	PS attach / abnormal cases / PS detach procedure collision
12.2.2.1	Combined PS attach / PS and non-PS attach accepted
12.2.2.2.1	Combined PS attach / PS only attach accepted / test procedure 1
12.2.2.2.2	Combined PS attach / PS only attach accepted / test procedure 1
12.2.2.2.3	Combined PS attach / PS only attach accepted / test procedure 2
12.2.2.3	Combined PS attach / PS attach while IMSI attach
12.2.2.4	Combined PS attach / rejected / IMSI invalid / illegal ME
12.2.2.5	Combined PS attach / rejected / PS services and non-PS services not allowed
12.2.2.6	Combined PS attach / rejected / PS services not allowed
12.2.2.7a	Combined PS attach / rejected / location area not allowed
12.2.2.7b	Combined PS attach / rejected / No Suitable Cells In Location Area
12.2.2.7c	Combined PS attach / rejected / Roaming not allowed in this location area
12.2.2.7d	Combined PS attach / rejected / PS services not allowed in this PLMN
12.2.2.8	Combined PS attach / abnormal cases / attempt counter check / miscellaneous reject causes
12.2.2.9	Combined PS attach / abnormal cases / PS detach procedure collision
12.3.1.1	PS detach / power off / accepted
12.3.1.2	PS detach / accepted
12.3.1.3	PS detach / abnormal cases / attempt counter check / procedure timeout
12.3.1.4	PS detach / abnormal cases / GMM common procedure collision
12.3.1.5	PS detach / power off / accepted / PS/IMSI detach
12.3.1.6	PS detach / accepted / PS/IMSI detach
12.3.1.7	PS detach / accepted / IMSI detach
12.3.1.8	PS detach / abnormal cases / change of cell into new routing area
12.3.1.9	PS detach / abnormal cases / PS detach procedure collision
12.3.2.1	PS detach / re-attach not required / accepted
12.3.2.2	PS detach / rejected / IMSI invalid / PS services not allowed
12.3.2.3	PS detach / IMSI detach / accepted
12.3.2.4	PS detach / re-attach requested / accepted
12.3.2.5	PS detach / rejected / location area not allowed
12.3.2.6	PS detach / rejected / No Suitable Cells In Location Area
12.3.2.7	PS detach / rejected / Roaming not allowed in this location area
12.4.1.1a	Routing area updating / accepted
12.4.1.1b	Routing area updating / accepted / Signalling connection re-establishment
12.4.1.2	Routing area updating / rejected / IMSI invalid / illegal ME
12.4.1.3	Routing area updating / rejected / UE identity cannot be derived by the network
12.4.1.4a	Routing area updating / rejected / location area not allowed
12.4.1.4b	Routing area updating / rejected / No Suitable Cells In Location Area
12.4.1.4c	Routing area updating / rejected / PS services not allowed in this PLMN
12.4.1.4d1	Routing area updating / rejected / Roaming not allowed in this location area / test 1
12.4.1.4d2	Routing area updating / rejected / Roaming not allowed in this location area / test 2

12.4.1.5	Routing area updating / abnormal cases / attempt counter check / miscellaneous reject causes
12.4.1.6	Routing area updating / abnormal cases / change of cell into new routing area
12.4.1.7	Routing area updating / abnormal cases / change of cell during routing area updating procedure
12.4.1.8	Routing area updating / abnormal cases / P-TMSI reallocation procedure collision
12.4.2.1	Combined routing area updating / combined RA/LA accepted
12.4.2.2	Combined routing area updating / UE in CS operation at change of RA
12.4.2.3.1	Combined routing area updating / RA only accepted / test / procedure 1
12.4.2.3.2	Combined routing area updating / RA only accepted / test procedure 2
12.4.2.4	Combined routing area updating / rejected / PLMN not allowed
12.4.2.5a.1	Combined routing area updating / rejected / roaming not allowed in this location area / test procedure 1
12.4.2.5a.2	Combined routing area updating / rejected / roaming not allowed in this location area / test procedure 2
12.4.2.5b	Combined routing area updating / rejected / No Suitable Cells In Location Area
12.4.2.5c	Combined routing area updating / rejected / Location area not allowed
12.4.2.5d	Combined routing area updating / rejected / PS services not allowed in this PLMN
12.4.2.6.1	Combined routing area updating / abnormal cases / access barred due to access class control / test procedure 1
12.4.2.6.2	Combined routing area updating / abnormal cases / access barred due to access class control / test procedure 2
12.4.2.7	Combined routing area updating / abnormal cases / attempt counter check / procedure timeout
12.4.2.8	Combined routing area updating / abnormal cases / change of cell into new routing area
12.4.2.9	Combined routing area updating / abnormal cases / change of cell during routing area updating procedure
12.4.2.10.1	Combined routing area updating / abnormal cases / PS detach procedure collision / test procedure 1
12.4.2.10.2	Combined routing area updating / abnormal cases / PS detach procedure collision / test procedure 2
12.4.3.1	Periodic routing area updating / accepted
12.4.3.2	Periodic routing area updating / accepted / T3312 default value
12.4.3.3	Periodic routing area updating / no cell available / network mode I
12.4.3.4	Periodic routing area updating / no cell available
12.5	P-TMSI reallocation
12.6.1.1	Authentication accepted
12.6.1.2	Authentication rejected - by the network
12.6.1.3.1	GMM cause 'MAC failure'
12.6.1.3.2	GMM cause 'Synch failure'
12.6.1.3.3	Authentication rejected by the UE / fraudulent network
12.7.1	General Identification
12.8	GMM READY timer handling
12.9.1	Service Request Initiated by UE Procedure
12.9.2	Service Request Initiated by Network Procedure
12.9.3	Service Request / rejected / Illegal MS
12.9.4	Service Request / rejected / PS services not allowed
12.9.5	Service Request / rejected / MS identity cannot be derived by the network
12.9.6	Service Request / rejected / PLMN not allowed
12.9.7a	Service Request / rejected / No PDP context activated
12.9.7b	Service Request / rejected / No Suitable Cells In Location Area
12.9.7c 12.9.8	Service Request / rejected / Roaming not allowed in this location area Service Request / Abnormal cases / Access barred due to access class control
12.9.0	Service Request / Abnormal cases / Routing area update procedure is triggered
12.9.10	Service Request / Abnormal cases / Power off
12.9.11	Service Request / Abnormal cases / Service request procedure collision
	General Tests

13.2.2.1	Emergency call / without USIM / accept case
13.2.2.2	Emergency call / without USIM / reject case
	User Equipment features
17.1.2	Constraining the access to a single number
17.1.3	Constraining the access to a single number
17.1.4	Behaviour of the MS when its list of blacklisted numbers is full

# A.3 SMS ATS

The approved SMS test cases are listed.

### Table A.3: SMS TTCN test cases

Test case	Description
16.1.1	SMS on CS mode / SMS mobile terminated
16.1.2	SMS on CS mode / SMS mobile originated
16.1.3	SMS on CS mode / Test of memory full condition and memory available notification
16.1.4	SMS on CS mode / Test of the status report capabilities and of SMS-COMMAND
16.1.5.1	SMS on CS mode / Short message class 0
16.1.5.2	SMS on CS mode / Test of class 1 short messages
16.1.5.3	SMS on CS mode / Test of class 2 short messages
16.1.6	SMS on CS mode / Test of short message type 0
16.1.6a	Test of short message type 0
16.1.7	SMS on CS mode / Test of the replace mechanism for SM type 1-7
16.1.8	SMS on CS mode / Test of the reply path scheme
16.1.9.1	SMS on CS mode / Multiple SMS mobile originated / UE in idle mode
16.1.9.2	SMS on CS mode / Multiple SMS mobile originated / UE in active mode
16.1.10	SMS on CS mode / Test of capabilities of simultaneously receiving a short message whilst
	sending a mobile originated short message
16.2.1	SMS on PS mode / SMS mobile terminated
16.2.2	SMS on PS mode / SMS mobile originated
16.2.3	SMS on PS mode / Test of memory full condition and memory available notification
16.2.4	SMS on PS mode / Test of the status report capabilities and of SMS-COMMAND
16.2.5.1	Short message class 0
16.2.5.2	SMS on PS mode / Test of class 1 short messages
16.2.5.3	SMS on PS mode / Test of class 2 short messages
16.2.6	SMS on PS mode / Test of short message type 0
16.2.6a	Test of short message type 0
16.2.7	SMS on PS mode / Test of the replace mechanism for SM type 1-7
16.2.8	SMS on PS mode / Test of the reply path scheme
16.2.10	SMS on PS mode / Test of capabilities of simultaneous ly receiving a short message whilst
	sending a mobile originated short message
16.3	Short message service cell broadcast

# A.4 RRC ATS

The approved RRC test cases are listed.

### Table A.4: RRC TTCN test cases

Test case	Description
	Singlecell
8.1.1.1	RRC / Paging for Connection in idle mode
8.1.1.2	RRC / Paging for Connection in connected mode (CELL_PCH)
8.1.1.3	RRC / Paging for Connection in connected mode (URA_PCH)
8.1.1.4	RRC / Paging for notification of BCCH modification in idle mode
8.1.1.5	RRC / Paging for notification of BCCH modification in connected mode (CELL_PCH)
8.1.1.6	RRC / Paging for notification of BCCH modification in connected mode (URA_PCH)
8.1.1.7	RRC / Paging for Connection in connected mode (CELL_DCH)
8.1.1.8	RRC / Paging for Connection in connected mode (CELL_FACH)
8.1.2.1	RRC / RRC Connection Establishment in CELL_DCH state: Success
8.1.2.2	RRC / RRC Connection Establishment: Success after T300 timeout
8.1.2.3	RRC / RRC Connection Establishment: Failure (V300 is greater than N300)
8.1.2.4	RRC / RRC Connection Establishment: Reject ("wait time" is not equal to 0)
8.1.2.5	RRC / RRC Connection Establishment: Reject ("wait time" is not equal to 0 and V300 is greater than N300)
8.1.2.6	RRC / RRC Connection Establishment: Reject ("wait time" is set to 0)
8.1.2.7	RRC / RRC Connection Establishment in CELL_FACH state: Success
8.1.2.9	RRC / RRC Connection Establishment: Success after Physical channel failure and Invalid configuration
8.1.3.1	RRC / RRC Connection Release in CELL_DCH state: Successful
8.1.3.2	RRC / RRC Connection Release using on DCCH in CELL_FACH state: Successful
8.1.3.3	RRC / RRC Connection Release using on CCCH in CELL_FACH state: Failure
8.1.3.4	RRC / RRC Connection Release in CELL_FACH state: Failure
8.1.3.5	RRC / RRC Connection Release in CELL_FACH state: Invalid message
8.1.5.1	RRC / UE Capability in CELL_DCH state: Success
8.1.5.2	RRC / UE Capability in CELL_DCH state: Success after T304 timeout
8.1.5.3	RRC / UE Capability in CELL_DCH state: Failure (After N304 re-transmissions)
8.1.5.4	RRC / UE Capability in CELL_FACH state: Success
8.1.5.5	RRC / UE Capability in CELL_FACH state: Success after T304 timeout
8.1.6.1	Direct Transfer in CELL_DCH state (invalid message reception and no signalling connection exists)
8.1.6.2	Direct Transfer in CELL_FACH state (invalid message reception and no signalling connection exists)
8.1.7.1	Security mode command in CELL_DCH state (CS Domain)
8.1.7.1b	Security mode command in CELL_DCH state (PS Domain)
8.1.7.2	RRC / Security mode control in CELL_FACH state
8.1.8.1	RRC / Counter check in CELL_DCH state
8.1.8.2	RRC / Counter check in CELL_FACH state
8.1.9	RRC / Signalling Connection Release Indication
8.2.1.1	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success
8.2.1.3	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)
8.2.1.4	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Physical channel Failure and successful reversion to old configuration)
8.2.1.5	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Physical channel Failure and reversion failure)
8.2.1.6	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Incompatible simultaneous configuration)
8.2.1.7	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.1.8	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH: Success
8.2.1.9	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH: Success (Cell re-selection)
8.2.1.10	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Success

8.2.1.11	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure
	(Unsupported configuration)
8.2.1.12	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Physical channel Failure and successful reversion to old configuration)
8.2.1.13	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Physical channel Failure and reversion failure)
8.2.1.14	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)
8.2.1.15	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.1.16	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_FACH: Success
8.2.1.17	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Subsequently received )
8.2.1.18	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Success (Subsequently received )
8.2.1.19	RRC / Radio Bearer Establishment from CELL_DCH to CELL_PCH: Success
8.2.1.20	RRC / Radio Bearer Establishment from CELL_DCH to URA_PCH: Success
8.2.2.1	RRC / Radio Bearer Reconfiguration (Hard Handover) from CELL_DCH to CELL_DCH: Success
8.2.2.2	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)
8.2.2.3	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion to old configuration)
8.2.2.4	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion failure)
8.2.2.5	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)
8.2.2.6	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.2.7	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Continue and stop)
8.2.2.8	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Success
8.2.2.9	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Success (Cell re- selection)
8.2.2.10	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Success
8.2.2.11	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)
8.2.2.12	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)
8.2.2.13	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Physical channel failure and cell reselection)
8.2.2.14	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)
8.2.2.15	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.2.16	Void
8.2.2.17	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_FACH: Success
8.2.2.18	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_FACH: Success (Cell re- selection)
8.2.2.19	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Subsequently received)
8.2.2.20	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Success ( Subsequently received )
8.2.2.21	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_PCH: Success
8.2.2.22	RRC / Radio Bearer Reconfiguration from CELL_DCH to URA_PCH: Success
8.2.2.23	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_PCH: Success
8.2.2.24	RRC / Radio Bearer Reconfiguration from CELL_FACH to URA_PCH: Success
8.2.3.1	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success

8.2.3.2	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)
8.2.3.3	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion to old configuration)
8.2.3.4	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion failure)
8.2.3.5	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)
8.2.3.6	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.3.7	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_FACH: Success
8.2.3.8	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_FACH: Success (Cell re- selection)
8.2.3.9	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Success
8.2.3.10	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)
8.2.3.11	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)
8.2.3.12	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and cell re-selection)
8.2.3.13	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)
8.2.3.14	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.3.15	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_FACH: Success
8.2.3.16	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (Subsequently received)
8.2.3.17	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Success (Subsequently received)
8.2.3.18	RRC / Radio Bearer Release from CELL_DCH to CELL_PCH: Success
8.2.3.19	RRC / Radio Bearer Release from CELL_DCH to URA_PCH: Success
8.2.4.1	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH (Hard handover to same radio frequency): Success with no transport channel type switching
8.2.4.1a	RRC / Radio Bearer Release from CELL_DCH to CELL_PCH (Frequency band modification): Success
8.2.4.2	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)
8.2.4.3	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion to old configuration)
8.2.4.4	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion failure)
8.2.4.5	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)
8.2.4.6	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.4.7	RRC / Transport channel reconfiguration from CELL_DCH to CELL_FACH: Success
8.2.4.9	RRC / Transport channel reconfiguration from CELL_DCH to CELL_FACH: Success (Cell re- selection)
8.2.4.10	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Success
8.2.4.11	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)
8.2.4.12	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old channel)
8.2.4.13	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Failure (Physical channel failure and cell re-selection)
8.2.4.14	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)

8.2.4.15	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Failure (Invalid
	message reception and invalid configuration)
8.2.4.16	RRC / Transport channel reconfiguration from CELL_FACH to CELL_FACH: Success with no transport channel type switching
8.2.4.17	RRC / Transport channel reconfiguration from CELL_FACH to CELL_FACH: Success (Cell re- selection)
8.2.4.18	RRC / Transport Channel Reconfiguration from CELL_DCH to CELL_DCH: Success (Subsequently received)
8.2.4.19	RRC / Transport Channel Reconfiguration from CELL_FACH to CELL_DCH: Success (Subsequently received)
8.2.4.20	RRC / Transport channel Reconfiguration from CELL_DCH to CELL_PCH: Success
8.2.4.21	RRC / Transport channel from CELL_DCH to URA_PCH: Success
8.2.4.22	RRC / Transport channel reconfiguration from CELL_FACH to CELL_PCH: Success
8.2.4.23	RRC / Transport channel reconfiguration from CELL_FACH to URA_PCH: Success
8.2.5.1	RRC / Transport format combination Control in CELL_DCH: restriction
8.2.5.4	RRC / Transport format combination Control in CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.6.1	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Success
8.2.6.2	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard
	handover for code modification): Failure (Unsupported configuration)
8.2.6.3	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Physical channel failure and reversion to old channel)
8.2.6.4	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Physical channel failure and reversion failure)
8.2.6.5	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Incompatible simultaneous reconfiguration)
8.2.6.6	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handoverfor code modification): Failure (Invalid message reception and invalid configuration)
8.2.6.7	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH: Success
8.2.6.8	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH: Success (Cell re-selection)
8.2.6.9	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Success
8.2.6.10	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)
8.2.6.11	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)
8.2.6.12	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and cell re-selection)
8.2.6.13	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)
8.2.6.14	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Invalid message reception and invalid configuration)
8.2.6.15	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_FACH (Hard handover to another cell): Success
8.2.6.16	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_FACH: Failure (Cell re-selection)
8.2.6.17	RRC / Physical Channel Reconfiguration from CELL_DCH to CELL_DCH (Hard Handover for code modification): Success (Subsequently received)
8.2.6.18	RRC / Physical Channel Reconfiguration from CELL_FACH to CELL_DCH: Success ( Subsequently received )
8.2.6.19	RRC / Physical channel from CELL_DCH to CELL_PCH: Success
8.2.6.20	RRC / Physical channel from CELL_DCH to URA_PCH: Success

8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH
8.3.1.2	RRC / Cell Update: cell reselection in CELL_PCH
8.3.1.3	RRC / Cell Update: periodical cell update in CELL_FACH
8.3.1.4	RRC / Cell Update: periodical cell update in CELL_PCH
8.3.1.5	RRC / Cell Update: UL data transmission in URA_PCH
8.3.1.6	RRC / Cell Update: UL data transmission in CELL_PCH
8.3.1.9	RRC / Cell Update: re-entering of service area after T305 expiry and being out of service area
0.0.1.0	River 7 Oen opdate. Te entening of service area after 1000 expiry and being out of service area
8.3.1.10	RRC / Cell Update: expiry of T307 after T305 expiry and being out of service area
8.3.1.11	RRC / Cell Update: Success after T302 time-out
8.3.1.12	RRC / Cell Update: Failure (After Maximum Re-transmissions)
8.3.1.13	RRC / Cell Update: Reception of Invalid CELL UPDATE CONFIRM message
8.3.1.14	RRC / Cell Update: Incompatible simultaneous reconfiguration
8.3.1.14 8.3.1.15	RRC / Cell Update: Unrecoverable error in Acknowledged Mode RLC
8.3.1.15 8.3.1.17	RRC / Cell Update: Failure (UTRAN initiate an RRC connection release procedure on CCCH)
0.3.1.17	KKC / Cell Opdale. Failure (OTKAN Initiale an KKC connection release procedure on CCCH)
8.3.1.18	RRC / Cell Update: Radio Link Failure (T314>0, T315=0)
8.3.1.20	RRC / Cell Update: Reception of CELL UPDATE CONFIRM Message that causes invalid
0.3.1.20	configuration
9 2 2 4	
8.3.2.1	RRC / URA Update: Change of URA
8.3.2.2	RRC / URA Update: Periodical URA update and Reception of Invalid message
8.3.2.3	RRC / URA Update: re-entering of service area after T306 expiry
8.3.2.4	RRC / URA Update: loss of service after expiry of timers T307 after T306
8.3.2.5	RRC / URA Update: Success after Confirmation error of URA-ID list
8.3.2.6	RRC / URA Update: Failure (V303 is greater than N303: Confirmation error of URA-ID list)
8.3.2.7	RRC / URA Update: Success after T303 timeout
8.3.2.9	RRC / URA Update: Failure (UTRAN initiate an RRC connection release procedure on CCCH)
8.3.2.10	RRC / URA Update: Reception of URA UPDATE CONFIRM message that causes invalid
	configuration
8.3.3.1	RRC / UTRAN Mobility Information: Success
8.3.3.2	RRC / UTRAN Mobility Information: Failure (Invalid message reception)
8.3.4.1	RRC / Active set update in soft handover: Radio Link addition
8.3.4.2	RRC / Active set update in soft handover: Radio Link removal
8.3.4.3	RRC / Active set update in soft handover: Combined radio link addition and removal
8.3.4.4	RRC / Active set update in soft handover: Invalid Configuration
8.3.4.5	RRC / Active set update in soft handover: Reception of an ACTIVE SET UPDATE message in
0.01.10	wrong state
8.3.4.7	RRC / Active set update in soft handover: Invalid Message Reception
8.3.7.1	Inter system handover from UTRAN/To GSM/Speech/Success
8.3.7.2	Inter system handover from UTRAN/To GSM/Data/Same data rate/Success
8.3.7.3	Inter system handover from UTRAN/To GSM/Data/Data rate down grading/Success
8.3.7.4	Inter system handover from UTRAN/To GSM/Speech/Establishment/Success
8.3.7.5	Inter system handover from UTRAN/To GSM/Speech/Failure
8.3.7.6	Inter system handover from UTRAN/To GSM/Speech/Failure (L2 Establishment)
8.3.7.0 8.3.7.7	Inter system handover from UTRAN/To GSM/Speech/Failure (L1 Synchronization)
8.3.7.8	Inter system handover from UTRAN/To GSM/Speech/Failure (Invalid Inter-RAT message)
0.0.7.0	
8.3.7.9	Inter system handover from UTRAN/To GSM/Speech/Failure (Unsupported configuration)
8.3.7.10	Inter system handover from UTRAN/To GSM/Speech/Failure (Reception by UE in CELL_FACH)
8.3.7.11	Inter system handover from UTRAN/To GSM/Speech/Failure (Invalid message reception)
0.0.7.40	
8.3.7.12	Inter system handover from UTRAN/To GSM/Speech/Failure (Physical channel Failure and Reversion Failure)
	Measurement
8.4.1.1	Measurement Control and Report: Intra-frequency measurement for transition from idle mode to
0.4.1.1	CELL_DCH state

8.4.1.2	Measurement Control and Report: Inter-frequency measurement for transition from idle mode to
	CELL_DCH state
8.4.1.3	Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_FACH state
8.4.1.4	Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_FACH state
8.4.1.5	Measurement Control and Report: Intra-frequency measurement for transition from CELL_DCH to CELL_FACH state
8.4.1.6	Measurement Control and Report: Inter-frequency measurement for transition from CELL_DCH to CELL_FACH state
8.4.1.7	Measurement Control and Report: Intra-frequency measurement for transition from CELL_FACH to CELL_DCH state
8.4.1.8	Measurement Control and Report: Inter-frequency measurement for transition from CELL_FACH to CELL_DCH state
8.4.1.9	Measurement Control and Report: Unsupported measurement in the UE
8.4.1.10	Measurement Control and Report: Failure (Invalid Message Reception)
8.4.1.11	Measurement Control and Report: Compressed Mode Configuration Failure during radio bearer reconfiguration procedure
8.4.1.12	Measurement Control and Report: Compressed Mode Configuration Failure during transport channel reconfiguration procedure
8.4.1.13	Measurement Control and Report: Compressed Mode Configuration Failure during physical channel reconfiguration procedure
8.4.1.14	Measurement Control and Report: Cell forbidden to affect reporting range
8.4.1.15	Measurement Control and Report: Configuration Incomplete
8.4.1.16	Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL_FACH state
8.4.1.17	Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL_DCH state
8.4.1.18	Measurement Control and Report: Traffic volume measurement for transition from CELL_FACH state
8.4.1.19	Measurement Control and Report: Traffic volume measurement for transition from CELL_DCH to CELL_FACH state
8.4.1.20	Measurement Control and Report: Traffic volume measurement for transition from CELL_DCH to CELL_FACH state
8.4.1.21	Measurement Control and Report: Traffic volume measurement in URA_PCH state
8.4.1.22	Measurement Control and Report: Quality measurements
8.4.1.23	Measurement Control and Report: Intra-frequency measurement for events 1C and 1D
8.4.1.24	Measurement Control and Report: Inter-frequency measurement for event 2A
8.4.1.25	Measurement Control and Report: Inter-frequency measurement for events 2B and 2E
8.4.1.26	Measurement Control and Report: Inter-frequency measurement for events 2D and 2F
8.4.1.28	Measurement Control and Report: UE internal measurement for events 6F and 6G
8.4.1.29	Measurement Control and Report: Event based Traffic Volume measurement in CELL_FACH state
8.4.1.30	Measurement Control and Report: Event based Traffic Volume measurement in CELL_DCH state
8.4.1.31	Measurement Control and Report: Inter-RAT measurement in CELL_DCH state
8.4.1.33	Measurement Control and Report: Inter-RAT measurement, event 3a
8.4.1.34	Measurement Control and Report: Inter-RAT measurement, event 3b
8.4.1.35	Measurement Control and Report: Inter-RAT measurement, event 3c
8.4.1.36	Measurement Control and Report: Inter-RAT measurement, event 3d
8.4.1.39	Measurement Control and Report: UE internal measurement, event 6e
8.4.1.40	Measurement Control and Report: Inter-RAT measurement event 3C in CELL_DCH state using sparse compressed mode pattern
	Idle Mode Operations
6.1.1.1	PLMN selection of RPLMN, HPLMN, UPLMN and OPLMN; Manual mode
6.1.1.2	PLMN selection of "Other PLMN / access technology combinations"; Manual mode
6.1.1.3	PLMN selection; independence of RF level and preferred PLMN; Manual mode
6.1.1.4	PLMN selection of RPLMN, HPLMN, UPLMN and OPLMN; Automatic mode
6.1.1.5	PLMN selection of "Other PLMN / access technology combinations"; Automatic mode
6.1.1.6 6.1.1.7	UE will transmit only if PLMN available Cell reselection of ePLMN in manual mode
6.1.2.1	Cell reselection
6.1.2.2	Cell reselection using Qhyst, Qoffset and Treselection
0.1.2.2	

6.1.2.3	HCS cell reselection	
6.1.2.4	HCS cell reselection using reselection timing parameters for the H criterion	
6.1.2.5	HCS Cell reselection using reselection timing parameters for the R criterion	
6.1.2.6	Emergency calls	
6.1.2.7	Emergency calls; Intra-frequency cell "Not allowed"	
6.1.2.8	Cell reselection: Equivalent PLMN	
6.2.1.1	Selection of the correct PLMN and associated RAT	
6.2.1.2	Selection of RAT for HPLMN; Manual mode	
6.2.1.3	Selection of RAT for UPLMN; Manual mode	
6.2.1.4	Selection of RAT for OPLMN; Manual mode	
6.2.1.5	Selection of "Other PLMN / access technology combinations"; Manual mode	
6.2.1.6	Selection of RAT for HPLMN; Automatic mode	
6.2.1.7	Selection of RAT for UPLMN; Automatic mode	
6.2.1.8	Selection of RAT for OPLMN; Automatic mode	
6.2.1.9	Selection of "Other PLMN / access technology combinations"; Automatic mode	
6.2.2.1	Cell reselection if cell becomes barred or S<0; UTRAN to GSM	
6.2.2.2	Cell reselection if cell becomes barred or C1<0; GSM to; UTRAN	
6.2.2.3	Cell reselection timings; GSM to UTRAN	

# A.5 RLC ATS

The approved RLC test cases are listed.

### Table A.5: RLC TTCN test cases

Test case	Description
7.2.2.2	UM RLC / Segmentation and reassembly / Selection of 7 or 15 bit Length Indicators
7.2.2.3	UM RLC / Segmentation / 7-bit Length Indicators / Padding
7.2.2.4	UM RLC / Segmentation / 7-bit Length Indicators / LI = 0
7.2.2.5	UM RLC / Segmentation / 7-bit Length Indicators / Invalid LI value
7.2.2.6	UM RLC / Segmentation / 7-bit Length Indicators / LI value > PDU
7.2.2.7	UM RLC / Segmentation / 7-bit Length Indicators / First data octet LI
7.2.2.8	UM RLC / Segmentation / 15-bit Length Indicators / Padding
7.2.2.9	UM RLC / Segmentation / 15-bit Length Indicators / LI = 0
7.2.2.10	UM RLC / Segmentation / 15-bit Length Indicators / One octet short LI
7.2.2.11	UM RLC / Segmentation / 15-bit Length Indicators / Invalid LI value
7.2.2.12	UM RLC / Segmentation / 15-bit Length Indicators / LI value > PDU size
7.2.2.13	UM RLC / Segmentation / 15-bit Length Indicators / First data octet LI
7.2.3.2	AM RLC / Segmentation and reassembly / Selection of 7 or 15 bit Length Indicators
7.2.3.3	AM RLC / Segmentation / 7-bit Length Indicators / Padding
7.2.3.4	AM RLC / Segmentation / 7-bit Length Indicators / LI = 0
7.2.3.5	AM RLC / Segmentation / 7-bit Length Indicators / Reserved LI value
7.2.3.6	AM RLC / Segmentation / 7-bit Length Indicators / LI value > PDU
7.2.3.7	AM RLC / Segmentation / 15-bit Length Indicators / Padding or Piggy-backed Status
7.2.3.8	AM RLC / Segmentation / 15-bit Length Indicators / LI = 0
7.2.3.9	AM RLC / Segmentation / 15-bit Length Indicators / One octet short LI
7.2.3.10	AM RLC / Segmentation / 15-bit Length Indicators / Reserved LI value
7.2.3.11	AM RLC / Segmentation / 15-bit Length Indicators / LI value > PDU size
7.2.3.12	AM RLC / Correct use of Sequence Numbering
7.2.3.13	AM RLC / Control of Transmit Window
7.2.3.14	AM RLC / Control of Receive Window
7.2.3.15	AM RLC / Polling for status / Last PU in transmission queue
7.2.3.16	AM RLC / Polling for status / Last PU in retransmission queue
7.2.3.17	AM RLC / Polling for status / Poll every Poll_PU PUs
7.2.3.18	AM RLC / Polling for status / Poll every Poll_SDU SDUs
7.2.3.19	AM RLC / Polling for status / Timer triggered polling (Timer_Poll_Periodic)
7.2.3.20	AM RLC / Polling for status / Polling on Poll_Window% of transmission window
7.2.3.21	AM RLC / Polling for status / Operation of Timer_Poll timer / Timer expiry
7.2.3.22	AM RLC / Polling for status / Operation of Timer_Poll timer / Stopping Timer_Poll timer
7.2.3.23	AM RLC / Polling for status / Operation of Timer_Poll timer / Restart of the Timer_Poll timer
7.2.3.24	AM RLC / Polling for status / Operation of timer Timer_Poll_Prohibit
7.2.3.25	AM RLC / Receiver Status Triggers / Detection of missing PUs
7.2.3.26	AM RLC / Receiver Status Triggers / Operation of timer Timer_Status_Periodic
7.2.3.27	AM RLC / Receiver Status Triggers / Operation of timer Timer_Status_Prohibit
7.2.3.28	AM RLC / Status reporting / Abnormal conditions / Reception of LIST SUFI with Length set to
	zero
7.2.3.29	AM RLC / Timer based discard, with explicit signalling / Expiry of Timer_Discard
7.2.3.30	AM RLC / Timer based discard, with explicit signalling / Obsolete MRW_ACK
7.2.3.31	AM RLC / Timer based discard, with explicit signalling / Failure of MRW procedure
7.2.3.32	AM RLC / SDU discard after MaxDAT number of retransmissions
7.2.3.33	AM RLC / Operation of the RLC Reset procedure / UE Originated
7.2.3.34	AM RLC / Operation of the RLC Reset procedure / UE Terminated

# A.6 MAC ATS

The approved MAC test cases are listed.

### Table A.6: MAC TTCN test cases

Test case	Description
7.1.1.1	CCCH mapped to RACH/FACH / Invalid TCTF
7.1.1.2	DTCH or DCCH mapped to RACH/FACH / Invalid TCTF
7.1.1.3	DTCH or DCCH mapped to RACH/FACH / Invalid C/T Field
7.1.1.4	DTCH or DCCH mapped to RACH/FACH / Invalid UE ID Type Field
7.1.1.5	DTCH or DCCH mapped to RACH/FACH / Incorrect UE ID
7.1.1.8	DTCH or DCCH mapped to DCH / Invalid C/T Field
7.1.2.3.1	Correct Selection of RACH parameters (FDD)
7.1.2.4a	Access Service class selection for RACH transmission

# A.7 BMC ATS

The approved BMC test cases are listed.

### Table A.7: BMC TTCN test cases

Test case	Description
7.4.2.1	UE in RRC Idle mode
7.4.2.2	UE in RRC Connected mode, state CELL_PCH
7.4.2.3	UE in RRC Connected mode, state URA_PCH
7.4.3.1	Reception of certain CBS message types

# A.8 PDCP ATS

The approved PDCP test cases are listed.

### Table A.8: PDCP TTCN test cases

Test case	Description
7.3.2.1.1.1	IP Header Compression and PID assignment /UE in RLC AM /Transmission of uncompressed Header (1. Test procedure: Transmission of uncompressed IP header packets using PDCP Data PDU)
7.3.2.1.1.2	IP Header Compression and PID assignment /UE in RLC AM /Transmission of uncompressed Header (2. Test procedure: Transmission of uncompressed IP header packets using No Header PDU)
7.3.2.1.2	IP Header Compression and PID assignment /UE in RLC AM/Transmission of compressed Header
7.3.2.2.1.1	IP Header Compression and PID assignm ent /UE in RLC UM /Transmission of uncompressed Header (1. Test procedure: Transmission of uncompressed IP header packets using PDCP Data PDU)
7.3.2.2.1.2	IP Header Compression and PID assignment /UE in RLC UM /Transmission of uncompressed Header (2. Test procedure: Transmission of uncompressed IP header packets using No Header PDU)
7.3.2.2.2	IP Header Compression and PID assignment /UE in RLC UM/Transmission of compressed Header
7.3.2.2.3	Extension of used compression methods
7.3.2.2.4	Compression type used for different entities
7.3.2.2.5	Reception of not defined PID values

# A.9 RAB ATS

The approved RAB test cases are listed.

### Table A.9: RAB TTCN test cases

Test case	Description
14.2.1	Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH
14.2.2	Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.5	Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.6	Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.7	Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.8	Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.9	Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.10	Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH
14.2.11	Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH
14.2.12	Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.13.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.13.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI
14.2.14.1	Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.14.2	Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI
14.2.15	Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.16	Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.17	Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.18	Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.19	Streaming / unknown / UL:64 DL:0 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.20	Streaming / unknown / UL:0 DL:128 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.21	Streaming / unknown / UL:128 DL:0 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.22	Streaming / unknown / UL:0 DL:384 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.23.1	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)
14.2.23.2	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)
14.2.23.3	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)
14.2.23.4	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)
14.2.23c	Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
14.2.24.1	Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / TC
14.2.24.2	Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / CC

14.2.25.1	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/ (TC, 10 ms TTI)
14.2.25.2	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)
14.2.25.3	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)
14.2.25.4	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)
14.2.26	Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.27	Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.28	Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.29	Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH
14.2.30	Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH
14.2.31.1	Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /10 ms TTI
14.2.31.2	Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /20 ms TTI
14.2.32.1	Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.32.2	Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.33.1	Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.33.2	Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.34.1	Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.34.2	Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.35.1	Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.35.2	Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.36.1	Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.36.2	Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.37.1	Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.37.2	Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.38.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)
14.2.38.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)
14.2.38.3	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)
14.2.38.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)

14.2.39.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32
	DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)
14.2.39.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)
14.2.39.3	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)
14.2.39.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)
14.2.40	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH
14.2.41	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.42.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.42.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.43.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.44.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.44.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.45	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.46	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.47	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:0 DL:128 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.48	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:0 DL:384 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.49.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI
14.2.50.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI
14.2.50.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI
14.2.51.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.52.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.52.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.53.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.53.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.54	Interactive or background / UL:64 DL:128 kbps / PS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.55	Interactive or background / UL:64 DL:128 kbps / PS RAB + Streaming / unknown / UL:0 DL:128 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

14.4.1 Stand-alone signalling RB for PCCH

Total of test cases: 676 Ready for verification (Green): 646