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Annex A (normative): Abstract Test Suites (ATS)

This annex contains the approved ATSs.

The ATSs have been produced using the Tree and Tabular Combined Notation (TTCN) according to TR 101 666 [Error! Reference source not found.].

The ATSs were developed on a separate TTCN software tool and therefore the TTCN tables are not completely referenced in the table of contents. Each ATS contains a test suite overview part which provides additional information and references.

NOTE: Where an Abstract Test Suite (in TTCN) is published in both .GR and .MP format these two forms shall be considered equivalent. In the event that there appears to be syntactical or semantic differences between the two then the problem shall be resolved and the erroneous format (whichever it is) shall be corrected.

A.1 Version of specifications

Table A.1 shows the version of the test specifications which the delivered ATSs are referred to.

Table A.1: Versions of the test and Core specifications

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				
9.4.1	Location updating / accepted				
9.4.2.1	Location updating / rejected / IMSI invalid				
9.4.2.2.1	Location updating / rejected / PLMN not allowed/Test 1				
9.4.2.2.2	Location updating / rejected / PLMN not allowed / Test 2				
9.4.2.3	Location updating / rejected / location area not allowed				
9.4.2.4.1	Location updating / rejected / roaming not allowed in this location area / Procedure 1				
9.4.2.4.2	Location updating / rejected / roaming not allowed in this location area / Procedure 2				
9.4.2.5	Location updating / rejected / No Suitable Cells In Location Area				
9.4.3.5	Location updating / abnormal cases / Failure due to non-integrity protection				
9.4.4	Location updating / release / expiry of T3240				
9.4.5.2	Location updating / periodic normal / test 1				
9.4.5.3	Location updating / periodic normal / test 2				
<u>9.4.5.4.6</u>	Location updating/periodic search of the higher priority PLMN, VPLMN in a foreign country—List				
9.4.7	of EPLMN contain HPLMN /UE is in automatic mode Location Updating / accept with replacement or deletion of Equivalent PLMN list				
9.4.7	Location Updating 7 accept with replacement of deletion of Equivalent PLIVIN list Location Updating after UE power off				
9.4.0	Location Updating after 0E power on Location Updating / Accept, Interaction between Equivalent PLMNs and Forbidden				
9.4.9	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				
9.5.7.1	MM connection / abortion by the network / cause #6				
9.5.7.2	MM connection / abortion by the network / cause not equal to #6				
3.3.7. <u>Z</u>	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				
10.1.2.3.7	Outgoing call / U1 call initiated / unknown message received				
10.1.2.4.3	Outgoing call / U3 Mobile originating call proceeding / PROGRESS received without in				
	band information				
10.1.2.4.4	Outgoing call / U3 Mobile originating call proceeding / PROGRESS with in band				
	information				
10.1.2.4.6	Outgoing call / U3 Mobile originating call proceeding / DISCONNECT without in band				
	tones				
10.1.2.4.7	Outgoing call / U3 Mobile originating call proceeding / RELEASE received				
10.1.2.4.8	Outgoing call / U3 Mobile originating call proceeding / termination requested by the				
	user				
10.1.2.4.9	Outgoing call / U3 Mobile originating call proceeding / traffic channel allocation				
10.1.2.4.10	Outgoing call / U3 Mobile originating call proceeding / timer T310 time-out				
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				
10.1.2.5.5	Outgoing call / U4 call delivered / RELEASE received				
10.1.2.6.2	U10 active / RELEASE received				
10.1.2.6.3	U10 active / DISCONNECT with in band tones				
10.1.2.6.6	U10 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				
10.1.2.9.1	Outgoing call / U19 release request / timer T308 time-out				
10.1.3.3.1	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				
10.1.3.3.4	Incoming call / U9 mobile terminating call confirmed / DISCONNECT received				

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10 1 2 1 1	Incoming cell / LI7 cell received / cell accorded
10.1.3.4.1 10.1.3.5.6	Incoming call / U7 call received / call accepted Incoming call / U8 connect request / RELEASE received
10.1.3.5.0	Session Management
11.1.1.1	Attach initiated by context activation/QoS Offered by Network is the QoS Requested
11.3.1	PDP context deactivation initiated by the UE
11.3.2	PDP context deactivation initiated by the network
	GPRS Mobility Management
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 Proc 1	PS attach / rejected / PLMN not allowed / test procedure 1
12.2.1.4 Proc 2	PS attach / rejected / PLMN not allowed / test procedure 2
12.2.1.5a Proc 1	PS attach / rejected / roaming not allowed in this location area / test procedure 1
12.2.1.5a Proc 2	PS attach / rejected / roaming not allowed in this location area / test procedure 2
12.2.1.5b	PS attach / rejected / No Suitable Cells In Location Area
12.2.1.5d	PS attach / rejected / PS services not allowed in this PLMN PS attach / abnormal cases / access barred due to access class control / tes
12.2.1.6 Proc 1	procedure 1
12.2.1.6 Proc 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
12.2.1.10	PS attach / abnormal cases / Failure due to non-integrity protection
12.2.2.1	Combined PS attach / PS and non-PS attach accepted
12.3.1.1	PS detach / power off / accepted
12.3.1.2	PS detach / accepted
12.3.1.5	PS detach / power off / accepted / PS/IMSI detach
12.3.2.1	PS detach / re-attach not required / accepted
12.3.2.7	PS detach / rejected / Roaming not allowed in this location area
12.3.2.8.Proc 1	PS detach / rejected / PS services not allowed in this PLMN/ test1
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 12.4.1.4b	Routing area updating / rejected / location area not allowed Routing area updating / rejected / No Suitable Cells In Location Area
12.4.1.4c Proc 1	Routing area updating / rejected / No Suitable Cells III Education Area Routing area updating / rejected / PS services not allowed in this PLMN
12.4.1.4c Proc 2	Routing area updating / rejected / PS services not allowed in this PLMN
12.4.1.4d Proc 1	Routing area updating / rejected / Roaming not allowed in this location area / test 1
12.4.1.4d Proc 2	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
12.4.2.1	Combined routing area updating / combined RA/LA accepted
12.4.2.2	Combined routing area updating / UE in CS operation at change of RA
12.4.2.5a Proc 1	Combined routing area updating / rejected / roaming not allowed in this location area /
12.4.2.5a.Proc 2	test procedure 1 Combined routing area updating / rejected / roaming not allowed in this location area /
	test procedure 2
12.4.2.6 Proc 1	Combined routing area updating / abnormal cases / access barred due to access class control / test procedure 1
12.4.2.6.Proc 2	Combined routing area updating / abnormal cases / access barred due to access class
	control / test procedure 2
12.4.3.1	Periodic routing area updating / accepted
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 12.6.1.3.3	GMM cause 'Synch failure' Authentication rejected by the UE / fraudulent network
12.7.1	General Identification
12.9.1	Service Request Initiated by UE Procedure
12.9.2	Service Request Initiated by OE 1 rocedure Service Request Initiated by Network Procedure
12.9.3	Service Request / rejected / Illegal MS
12.9.4	Service Request / rejected / PS services not allowed
12.9.6	Service Request / rejected / PLMN not allowed
12.9.7a	Service Request / rejected / No PDP context activated

12.9.7c	Service Request / rejected / Roaming not allowed in this location area
12.9.7b	Service Request / rejected / No Suitable Cells In Location Area
<u>12.9.7c</u>	Service Request / rejected / Roaming not allowed in this location area
12.9.8	Service Request / Abnormal cases / Access barred due to access class control
12.9.9	Service Request / Abnormal cases / Routing area update procedure is triggered
12.9.13	Service Request / RAB re-establishment / UE initiated / multiple PDP contexts
12.9.14	Service Request / RAB re-establishment / Network initiated / single PDP context
	General Tests
13.2.1.1	Emergency call / with USIM / accept case
13.2.2.1	Emergency call / without USIM / accept case
13.2.2.2	Emergency call / without USIM / reject case

A.2.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format[™] file (NASv5<u>1</u>0.PDF contained in archive 34123c500ATS.ZIP) which accompanies the present document.

A.2.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (NASv5<u>1</u>00.MP-contained in archive 34123e500ATS.ZIP) which accompanies the present document.

A.3 SMS ATS

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
16.1.9.1	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
16.2.10	SMS on PS mode / Test of capabilities of simultaneously receiving a short message whilst
	sending a mobile originated short message

A.3.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format[™] file (SMSv5100.PDF contained in archive 34123c500ATS.ZIP) which accompanies the present document.

A.3.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (SMSv5<u>1</u>00.MP-contained in archive 34123e500ATS.ZIP) which accompanies the present document.

A.4 RRC ATS

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The approved RRC test cases are listed.

Table A.4: RRC TTCN test cases

Test case	Description
	Singlecell
	PLMN selection of "Other PLMN / access technology combinations"; Automatic mode
6.1.1.7	Cell reselection of ePLMN in manual mode
6.1.2.9	Cell reselection using cell status and cell reservations
8.1.1.1	RRC / Paging for Connection in idle mode
	RRC / Paging for Connection in connected mode (CELL_PCH)
	R RRC / Paging for Connection in connected mode (URA_PCH)
	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 for connection in connected mode (CELL_DCH)
	RRC / Paging for Connection in connected mode (CELL_FACH)
	RRC / Paging for Connection in idle mode (multiple paging records)
	RRC / Paging for Connection in connected mode (URA_PCH, multiple paging records)
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)
8.1.2.7	RRC Connection Establishment in CELL_FACH state: Success
8.1.2.9	RRC / RRC Connection Establishment: Success after Physical channel failure and Invalid
0.1.0.10	configuration
	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH (Frequency band modification): Success
	RRC Connection Establishment in FACH state (Frequency band modification): Success
	RRC / RRC Connection Release in CELL_DCH state: Successful
	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
	RRC / RRC Connection Release in CELL_FACH state: Invalid message RRC Connection Release in CELL_DCH state (Network Authentication Failure): Success
	RRC / UE Capability in CELL_DCH state: Success
8.1.5.4	RRC / UE Capability in CELL_FACH state: Success
8.1.6.1	Direct Transfer in CELL_DCH state (invalid message reception and no signalling connection exists)
8.1.6.3	Measurement Report on INITIAL DIRECT TRANSFER message and UPLINK DIRECT TRANSFER
8.1.7.1	message Security mode command in CELL_DCH state (CS Domain)
8.1.7.1b 8.1.7.1c	Security mode command in CELL_DCH state (PS Domain)
8.1.7.1C	Security mode control in CELL_DCH state (CN Domain switch and new keys at RRC message
01714	sequence number wrap around)
8.1.7.1d	Security mode control in CELL_DCH state interrupted by a cell update
8.1.7.2	RRC / Security mode control in CELL_FACH state
	RRC / Signalling Connection Release Indication
	Dynamic change of segmentation, concatenation & scheduling and handling of unsupported information blocks
8.1.12	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Physical channel Failure and successful reversion to old configuration)
8.2.1.1	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success
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)
8.2.1.7	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Invalid
0.2.1.7	message reception and invalid configuration)
8218	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH: Success
8.2.1.8 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_DCH to CELL_FACH (Frequency band modification): Success

Test case	Description
0.0.0.4	Singlecell DDC / Dadia Pages Pages figuration / Hard Handows \ from CELL DCL to CELL DCL
8.2.2.1 8.2.2.4	RRC / Radio Bearer Reconfiguration (Hard Handover) from CELL_DCH to CELL_DCH: Success RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel
	failure and reversion failure)
8.2.2.7	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (stop and continue)
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	Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)
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 reselection)
8.2.2.19	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Subsequently received)
8.2.2.23	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_PCH: Success
8.2.2.31	Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_DCH (Frequency band modification): Success
8.2.2.35	Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Successful channel switching with multiple PS RABs established
8.2.3.1	Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success
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
8.2.3.11	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)
8.2.3.15	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_FACH: Success
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
8.2.3.29	Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Associated with signalling
0.2.0.20	connection release during multi call for PS and CS services
8.2.4.1a	Transport channel reconfiguration (Transmission Rate Modification) from CELL_DCH to CELL_DCH of the same cell: Success
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	Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and cell reselection)
8.2.4.10	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Success
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)
8.2.6.7	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH: Succes
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
8.2.6.11	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)
8.2.6.19	RRC / Physical channel reconfiguration 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
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
3.3.1.11	parto a son space. Success and a root time out

Toot case	Description
Test case	Description Singlecell
8.3.1.12	RRC / Cell Update: Failure (After Maximum Re-transmissions)
8.3.1.15	RRC / Cell Update: Unrecoverable error in Acknowledged Mode RLC
8.3.1.17	RRC / Cell Update: Failure (UTRAN initiate an RRC connection release procedure on CCCH)
8.3.1.18	RRC / Cell Update: Radio Link Failure (T314>0, T315=0), CS RAB established
8.3.1.21	Cell Update: Cell reselection to cell of another PLMN belonging to the equivalent PLMN list
8.3.1.24	Cell Update: HCS cell reselection in CELL_PCH
8.3.1.25	CELL UPDATE: Radio Link Failure (T314=0, T315=0)
8.3.1.22	Cell update: Restricted cell reselection to a cell belonging to forbidden LA list (Cell_FACH)
8.3.1.30	Cell Update: Radio Link Failure (T314>0, T315>0), PS RAB
8.3.1.31	Cell Update: re-entering of service area from URA_PCH after T316 expiry but before T317 expiry
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
8.3.2.4	RRC / URA Update: loss of service after expiry of timers T307 after T306
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)
8.3.2.11	URA Update: Cell reselection to cell of another PLMN belonging to the equivalent PLMN list
8.3.2.12	Restricted cell reselection to a cell belonging to forbidden LA list (URA_PCH)
8.3.2.13	URA Update: Change of URA due to HCS Cell Reselection
8.3.3.1	RRC / UTRAN Mobility Information: Success
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
8.4.1.1	Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL DCH state
8.4.1.2	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL DCH state
8.4.1.3	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL FACH state
8.4.1.5	RRC / Measurement Control and Report: Intra-frequency measurement for transition from CELL_DCH to CELL_FACH state
<u>8.4.1.6</u>	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL DCH to CELL FACH state
8.4.1.7	RRC / Measurement Control and Report: Intra- frequency measurement for transition from CELL_FACH to CELL_DCH state
8.4.1.16	Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL_FACH state
8.4.1.17	RRC / Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL DCH state
8.4.1.18	RRC / Measurement Control and Report: Traffic volume measurement for transition from CELL_FACH state to CELL_DCH state
8.4.1.19	RRC / Measurement Control and Report: Traffic volume measurement for transition from CELL_DCH to CELL_FACH state
8.4.1.23	RRC / Measurement Control and Report: Intra-frequency measurement for events 1C and 1D
8.4.1.24	RRC / Measurement Control and Report: Inter-frequency measurement for event 2A
8.4.1.25	RRC / Measurement Control and Report: Inter-frequency measurement for events 2B and 2E
8.4.1.26	RRC / Measurement Control and Report: Inter-frequency measurement for events 2D and 2F
8.4.1.27	RRC / Measurement Control and Report: UE internal measurement for events 6A and 6B
8.4.1.29	RRC / Measurement Control and Report: Event based Traffic Volume measurement in CELL_FACH state
8.4.1.30	RRC / Measurement Control and Report: Event based Traffic Volume measurement in CELL_DCH state
8.4.1.37	Measurement Control and Report: UE internal measurement, event 6c
8.4.1.38	Measurement Control and Report: UE internal measurement, event 6d
8.4.1.41	Measurement Control and Report: Additional Measurements list
	'

A.4.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format™ file (RRCv5100.PDF contained in archive 34123c500ATS.ZIP) which accompanies the present document.

A.4.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (RRCv5<u>1</u>90.PDF-contained in archive <u>34123500ATS.ZIP</u>) which accompanies the present document.

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
7.2.3.2	AM RLC / Segmentation and reassembly / Selection of 7 or 15 bit Length Indicators
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
7.2.3.12	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
	<u>zero</u>
7.2.3.32	AM RLC / SDU discard after MaxDAT number of retransmissions
<u>7.2.3.35</u>	AM RLC / Reconfiguration of RLC parameters by upper layers
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.5.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format™ file (RLCv51380.PDF-contained in archive 34123c380ATS.ZIP) which accompanies the present document.

A.5.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (RLCv5<u>1</u>90.PDF-contained in archive 34123e500ATS.ZIP) which accompanies the present document.

A.6 MAC ATS

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
7.1.3.1	Priority handling between data flows of one UE

A.6.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format[™] file (MACv5100.PDF contained in archive 34123c500ATS.ZIP) which accompanies the present document.

A.6.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (MACv5<u>1</u>90.PDF-contained in archive-34123c500ATS.ZIP) which accompanies the present document.

A.7 BMC ATS

Table A.7: BMC TTCN test cases

Test case	Description			

A.7.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format™ file (<any_name>.PDF-contained in archive <Shortfilename>.ZIP) which accompanies the present document.

A.7.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (<any_name>.MP-contained in archive <Shortfilename>.ZIP) which accompanies the present document.

A.8 PDCP ATS

Table A.8: PDCP TTCN test cases

Test case	Description	

A.8.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document FormatTM file (<any name>.PDF-contained in archive <<u>Shortfilename>.ZIP</u>) which accompanies the present document.

A.8.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (<any_name>.MP-contained in archive <Shortfilename>.ZIP) which accompanies the present document.

A.9 RAB ATS

Table A.9: RAB TTCN test cases

Test case	Description
14.2.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.4a	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.5a	Conversational / speech / UL:(10.2, 6.7, 5.9, 4.75) DL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.7a	Conversational / speech / UL:(7.4, 6.7, 5.9, 4.75) DL:(7.4, 6.7, 5.9, 4.75) 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
14.2.12	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
14.2.23a1	Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.23a.2	Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / TC
14.2.23b	Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.23c	Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.26	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
14.2.31.1	Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /10 ms TTI
14.2.32.1	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
14.2.34.1	Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI
14.2.38a	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.38b	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.38c	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.38e	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.38f	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
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
14.2.43.1	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 / 10 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
14.2.49.1	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 / 20 ms TTI

14.2.51.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.51a.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:8 DL:8 kbps / PS RAB
14.2.51b.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:16 DL:64 kbps / PS RAB
14.2.57	Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
14.2.58	Streaming / unknown / UL:16 DL:64 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
14.2.58a	Streaming / unknown / UL:16 DL:128 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
14.4.2.1	One SCCPCH: Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH
14.4.2.2	Two SCCPCHs: Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH
14.4.2.3	One SCCPCH/connected mode: Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH
14.4.2a.1	One SCCPCH: Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH
14.4.2a.2	Two SCCPCHs: Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB
14.4.2a.3	One SCCPCH/connected mode: Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH
14.4.3	Interactive/Background 32 kbps RAB + SRBs for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

A.9.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format™ file (RABv5100.PDF.PDF contained in archive 34123e500ATS.ZIP) which accompanies the present document.

A.9.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (RABv5100.MP) which accompanies the present document.

A.10 IR_U ATS

Table A.10: InterRat TTCN test cases

Test case	Description
6.2.1.1	Selection of the correct PLMN and associated RAT
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
8.1.2.12	RRC Connection Establishment: Reject with interRATInfo is set to GSM
8.1.2.13	RRC Connection Establishment: Reject with InterRATInfo is set to GSM and selection to the designated system fails
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
8.3.7.7	Inter system handover from UTRAN/To GSM/Speech/Failure (L1 Synchronization)
8.3.7.9	Inter system handover from UTRAN/To GSM/Speech/Failure (Unsupported configuration)
8.3.7.12	Inter system handover from UTRAN/To GSM/Speech/Failure (Physical channel Failure and Reversion Failure)
8.3.7.13	Inter system handover from UTRAN/To GSM/ success / call under establishment
8.3.7.1 <u>6</u>	Inter system handover from UTRAN/To GSM/Simultaneous CS and PS domain
	services/Success/TBF Establishment Success
8.3.9.1	Cell reselection if cell becomes barred or S<0; UTRAN to GPRS (CELL_FACH)
<u>8.3.9.5</u>	Cell Reselection with RAU – Qoffset value modification; UTRAN to GPRS (CELL_FACH)
8.3.11.1	Cell change order from UTRAN/To GPRS/CELL_DCH/Success
8.3.11.4	Cell change order from UTRAN/To GPRS/CELL_DCH/Failure (Physical channel & Reversion Failure)
8.4.1.31	RRC / 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
8.4.1.40	Measurement Control and Report: Inter-RAT measurement event 3C in CELL_DCH state using
	sparse compressed mode pattern
12.8	GMM READY timer handling

A.10.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document FormatTM file (IR Uv5<u>1</u>00.PDF.<u>PDF contained in archive 34123e500ATS.ZIP</u>) which accompanies the present document.

A.10.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (IR_Uv5<u>1</u>90.MP-contained in archive <u>34123e500ATS.ZIP</u>) which accompanies the present document.

A.11 AGPS ATS

Table A.11: AGPS TTCN test cases

Test case	<u>Description</u>

A.11.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document FormatTM file (AGPSv5?0.PDF) which accompanies the present document.

A.11.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (AGPSv5?0.MP) which accompanies the present document.

A.12 HS ENH ATS

Table A.12: HSDPA and Rel-5 enhancement TTCN test cases

Test case	<u>Description</u>
8.2.3.30	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (stop of
	HS-DSCH reception)
8.2.4.36	Transport Channel Reconfiguration from CELL DCH to CELL DCH: Success (with active HS-
	DSCH reception, not changing the value of TTI during UL rate modification)

A.12.1 The TTCN Graphical form (TTCN.GR)

The TTCN.GR representation of this ATS is contained in an Adobe Portable Document Format™ file (HS_ENHv510.PDF) which accompanies the present document.

A.12.2 The TTCN Machine Processable form (TTCN.MP)

The TTCN.MP representation corresponding to this ATS is contained in an ASCII file (HS_ENHv510.MP) which accompanies the present document.