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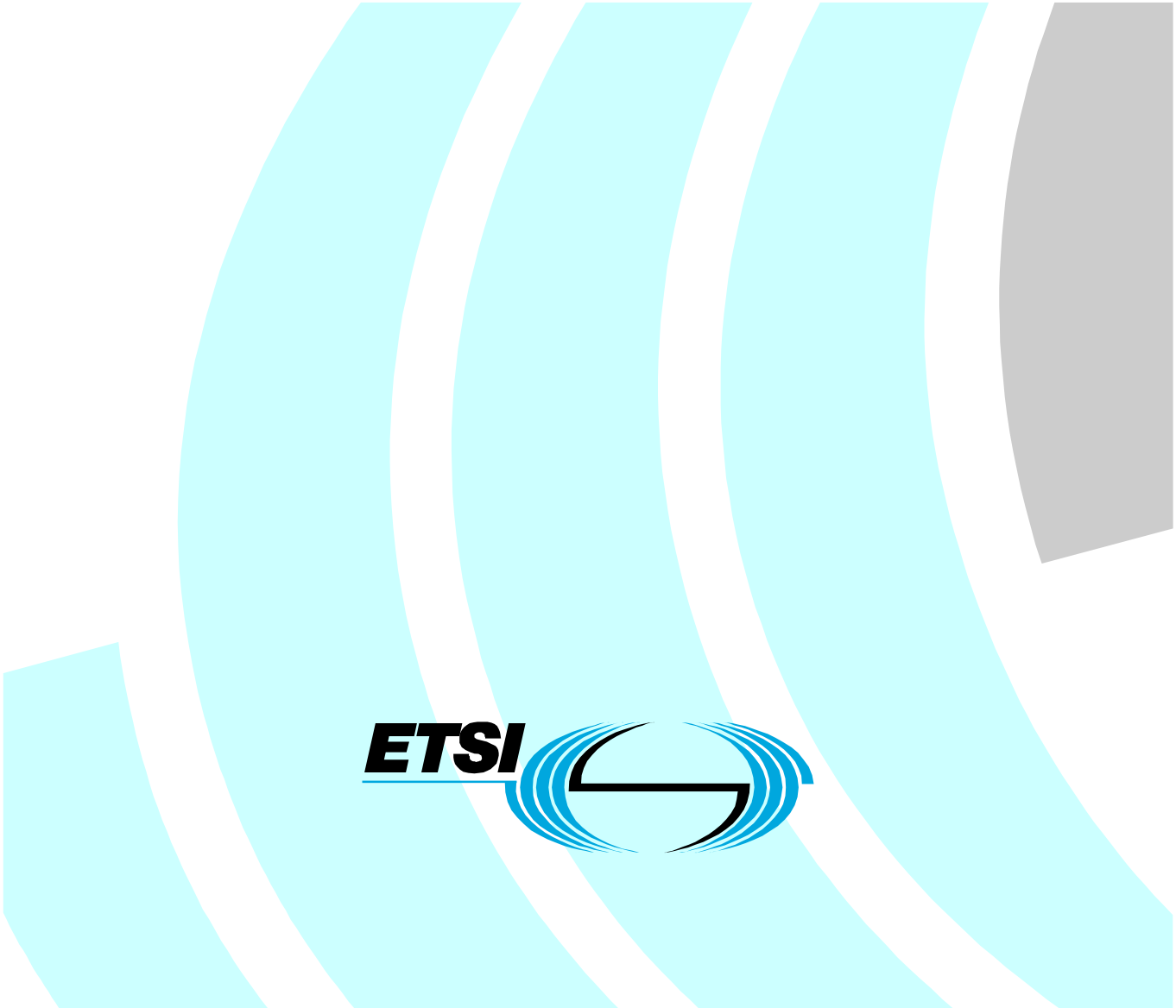
Technical Specification

Broadband Radio Access Networks (BRAN);
HIPERLAN Type 2;
Conformance testing for the Data Link Control (DLC) layer;
Part 2: Radio Link Control (RLC) sublayer;
Sub-part 2: Test Suite Structure and
Test Purposes (TSS&TP) specification



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Contents

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Foreword

This Technical Specification (TS) has been produced by ETSI Project Broadband Radio Access Networks (BRAN).

The present document is part 2, sub-part 2 of a multi-part deliverable. Full details of the entire series can be found in part 1, sub-part 1 (see bibliography).

1 Scope

The present document contains the Test Suite Structure (TSS) and Test Purposes (TP) to test the BRAN HIPERLAN type 2; Data Link Control (DLC) layer; Radio Link Control (RLC) sublayer.

The objective of the present document is to provide a basis for conformance tests for BRAN HIPERLAN type 2 equipment giving a high probability of air interface inter-operability between different manufacturer's BRAN HIPERLAN type 2 equipment.

The ISO standard for the methodology of conformance testing (ISO/IEC 9646-1 [3] and ISO/IEC 9646-2 [4]) as well as the ETSI rules for conformance testing (ETS 300 406 [2]) are used as a basis for the test methodology.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

[1] ETSI TS 101 761-2 (V1.3.1): "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Data Link Control (DLC) layer; Part 2: Radio Link Control (RLC) Sublayer".

[2] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

[3] ISO/IEC 9646-1 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts". (See also ITU-T Recommendation X.290 (1995)).

[4] ISO/IEC 9646-2 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract test suite specification". (See also ITU-T Recommendation X.291 (1995)).

[5] ISO/IEC 9646-6 (1994): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".

[6] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statement".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in ISO/IEC 9646-7 [6] and TS 101 761-2 [1] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations defined in ISO/IEC 9646-1 [3], ISO/IEC 9646-6 [5], ISO/IEC 9646-7 [6], TS 101 761-2 [1] and the following apply:

ACF	Association Control Function
AP	Access Point
APT	Access Point Transceiver
BI	Invalid Behaviour
BO	Inopportune Behaviour
BV	Valid Behaviour
CA	Capability tests
CC	Central Controller
CL	Convergence Layer
DFS	Dynamic Frequency Selection
DLC	Data Link Control
DM	Direct Mode
DUC	DLC User Connection
IUT	Implementation Under Test
LT	Lower Tester
MAC	Medium Access Control
MT	Mobile Terminal
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
RBCH	RLC Broadcast CHannel
RLC	Radio Link Control
RRC	Radio Resource Control
SCH	Short CHannel
TP	Test Purposes
TSS	Test Suite Structure

4 Test suite structure

4.1 Structure

Figure 1 shows the RLC Test Suite Structure (TSS) including its subgroups defined for the conformance testing.

Test Suite	Protocol group	Protocol subgroup	Test group				
			CA	BV	BI	BO	TI
RLC-AP/ RLC-MT	Association control function	RBCH association	x				
		Mac ID assignment	x				
		Link_Capability	x				
		Encryption	x				
		Authentication	x				
		Common Key	x				
		Info_Transfer	x				
		Multicast	x				
		Disassociation	x				
		Key refresh	x				
	Radio Resource Control	DFS Requesting	x				
		DFS Reporting	x				
		Sector Handover	x				
		Radio Handover	x				
		Network Handover	x				
		Sleep	x				
		Alive	x				
		Absence	x				
	DLC user connection	CM Set-up	x				
		CM Release	x				
		CM Modify	x				
		CM Reset	x				
		DM Set-up	x				
		DM Release	x				
		DM Modify	x				
		DM Relay Set-up	x				
		DM Relay Release	x				
		DM Relay Modify	x				
		DM Reset	x				
		TM Set-up	x				

Figure 1: TSS for HIPERLAN 2 RLC

The test suite is structured as a tree with a first level defined as RLC-AP or RLC-MT representing the protocol group "RLC for AP and RLC for MT".

4.2 Test groups

The test groups are organized in three levels. The first level creates three protocol groups representing the protocol services. The second level separates the protocol services in functional modules. The last level in each branch contains one or more of the standard ISO subgroups CA, BV, BI, BO and TI.

4.2.1 Protocol groups

The protocol groups identifier the RLC services: Association control function, Radio resource control function, and DLC user connection function, as defined in TS 101 761-2 [1].

4.2.1.1 Association control function

The association control function group is divided in ten functional modules. The first functional module identifies the RBCH association procedures. The second functional module identifies the Mac Id assignment procedures. The third functional module distinguishes the Link Capability procedures. The fourth functional module distinguishes the Encryption procedures. The fifth functional module distinguishes the Authentication procedures. The sixth functional module distinguishes the information transfer procedures. The seventh functional module distinguishes the common key distribution procedures. The eighth functional module distinguishes the multicast procedures. The ninth functional module distinguishes the disassociation procedures. The last functional module identifies the key refresh procedures.

4.2.1.2 Radio resource control function

The Radio resource control protocol group is divided in eight functional modules. The first functional module distinguishes the DFS requesting procedures. The second functional module distinguishes the DFS reporting procedures. The third functional module distinguishes the Sector handover procedures. The fourth functional module identifies the radio handover procedures. The fifth functional module distinguishes the network handover procedures. The sixth functional module distinguishes the sleep procedures. The seventh functional module distinguishes the alive procedures. The last functional module distinguishes the absence procedures.

4.2.1.3 DLC user connection function

The DLC user connection protocol group is divided in eight functional modules. The first functional module identifies the centralized mode set-up procedures. The second functional module identifies the centralized mode release procedures. The third functional module identifies the centralized mode modify procedures. The fourth functional module identifies the centralized mode reset procedures. The fifth functional module distinguishes the direct mode set-up procedures. The sixth functional module distinguishes the direct mode release procedures. The seventh functional module distinguishes the direct mode modify procedures. The four last functional modules distinguish the direct mode relay procedures and the direct mode reset procedure.

4.2.2 Main test groups

The main test groups are the capability group, the valid behaviour group, the invalid behaviour group and the inopportune behaviour group.

4.2.2.1 Capability (CA) tests

This test sub group shall provide limited testing of the major IUT capabilities aiming to insure that the claimed capabilities are correctly supported, according to the PICS.

4.2.2.2 Valid Behaviour (BV) tests

This test sub group shall verify that the IUT reacts in conformity with the present document, after receipt or exchange of valid Protocol Data Units (PDUs). Valid PDUs means that the exchange of messages and the content of the exchanged messages are considered as valid.

4.2.2.3 Invalid Behaviour (BI) tests

This test sub group shall verify that the IUT reacts in conformity with the present document, after receipt of a syntactically invalid PDU.

4.2.2.4 Inopportune Behaviour (BO) tests

This test sub group shall verify that the IUT reacts in conformity with the present document, after receipt of a syntactically correct PDU not expected in the actual message exchange.

4.2.2.5 Timer (TI) tests

This test sub group shall verify that the IUT reacts in conformity with the present document, after timer activity (start, stop, expiration, etc.).

5 Test Purposes (TP)

5.1 Introduction

5.1.1 TP definition conventions

The TPs are defined following particular rules as shown in table 1.

Table 1: TP definition rules

TP Id according to the TP naming conventions	Reference. Initial condition. Stimulus. Expected behaviour.
TP Id	The TP Id is a unique identifier it shall be specified according to the TP naming conventions defined in clause 5.1.2.
Reference	The reference should contain the references of the subject to be validated by the actual TP (specification reference, clause and paragraph).
Condition	The condition defines in which initial state the IUT has to be to apply the actual TP.
Stimulus	The stimulus defines the test event to which the TP is related.
Expected behaviour	Definition of the events that are expected from the IUT to conform to the base specification.

5.1.2 TP naming conventions

The identifier of the TP is built according to table 2.

Table 2: TP naming convention

Identifier:	**TP/<st>/<pg>/<fm>/<x>-<nnn>**		
	<st> = side type	AP	Access Point
		MT	Mobile Terminal
	<pg> = protocol group	ACF	Association control function
		RRC	Radio resource control function
		DUC	DLC user connection function
	<fm> = functional module	RA	RBCH association
		MA	Mac Id assignment
		LC	Link_Capability
		EN	Encryption
		AU	Authentication
		CK	Common Key distribution
		IT	Info_Transfer
		MT	Multicast
		DI	Disassociation
		KR	Key refresh
		AR	Association rejection
		RQ	DFS Requesting
		RP	DFS Reporting
		SH	Sector Handover
		RH	Radio Handover
		NH	Network Handover
		HR	Handover rejection
		SL	Sleep
		AL	Alive
		AB	Absence
		CS	Centralized Mode Set-up
		CR	Centralized Mode Release
		CM	Centralized Mode Modify
		CT	Centralized Mode Reset
		DS	Direct Mode Set-up
		DR	Direct Mode Release
		DM	Direct Mode Modify
		RS	Direct Mode Relay Set-up
		RR	Direct Mode Relay Release
		RM	Direct Mode Relay Modify
		DT	Direct Mode Reset
		TM	Test Mode Set-up
		UM	Unsupported message
	x = Type of testing	CA	Capability Tests
		BV	Valid Behaviour Tests
		BI	Invalid Behaviour Tests
		BO	Inopportune Behaviour Tests
		TI	Timer Tests
	<nnn> = sequential number	(000-999)	Test Purpose Number

EXAMPLE: TP/MT/DFS/RP/BV-010 is the tenth purpose for the valid behaviour testing of the reporting procedures of the dynamic frequency selection function implemented at MT side.

5.1.3 Sources of TP definitions

All TPs are specified according to TS 101 761-2 [1].

5.2 Test purposes for AP

5.2.1 Association control function

5.2.1.1 RBCH Association

TP/AP/ACF/RA/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Check, that the IUT sends periodically the RBCH_ASSOCIATION message.
TP/AP/ACF/RA/CA-001	Reference: TS 101 761-2, clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Check, that the IUT, having received a RLC_RBCH_ASSOCIATION_REQ message reply with the relevant RLC_RBCH_ASSOCIATION message.

A configuration primitive is used to initialize the tester with the expected value of the broadcast variables: Number of sectors, NET ID, AP ID, AP TX level, AP RX UL level, Version indicator, AP traffic load indicator, Maximum power indicator.

5.2.1.2 Mac Id assignment

TP/AP/ACF/MA/CA-000	Reference: TS 101 761-2[1], clause 5.1.1.2 Initial condition: MT_disassociated_from_AP Check, that: after receiving the RLC_MAC_ID_ASSIGN message the IUT replies with a RLC_MAC_ID_ASSIGN_ACK message containing the assigned Mac Id.
TP/AP/ACF/MA/CA-0001	Reference: TS 101 761-2, clause 5.1.1.2 Initial condition: MT_disassociated_from_AP Check, that: after receiving the RLC_MAC_ID_ASSIGN message the IUT, if it cannot assign a MAC Id, replies with a RLC_MAC_ID_ASSIGN_NACK message.

5.2.1.3 Link capability

TP/AP/ACF/LC/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.3 Initial condition: MAC_ID_Assigned Check, that: after receiving the RLC_LINK_CAPABILITY message the IUT replies with a RLC_LINK_CAPABILITY_ACK message containing a set of selected parameters.

5.2.1.4 Encryption

TP/AP/ACF/EN/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.4 Initial condition: Link_Agreed. Check, that: after receiving the RLC_KEY_EXCHANGE_MT_1 message and the RLC_KEY_EXCHANGE_MT_2 message, the IUT replies to the LT with a RLC_KEY_EXCHANGE_AP_1 message and a RLC_KEY_EXCHANGE_AP_2 message.

5.2.1.5 Authentication

TP/AP/ACF/AU/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.2 Initial condition: Encryption_active. For IUT supporting IEEE MT authentication. Check, that: for IEEE MT authentication, after receiving the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-001	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.3 Initial condition: Encryption_active. For IUT supporting extended IEEE MT authentication. Check, that: for extended IEEE MT authentication, after receiving the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-002	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.4 Initial condition: Encryption_active. For IUT supporting Net_Acc_Id MT authentication. Check, that: for Net_Acc_Id MT authentication with MT auth id up to 46 octets, after receiving the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-003	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.4 Initial condition: Encryption_active. For IUT supporting Net_Acc_Id MT authentication. Check, that: for Net_Acc_Id MT authentication with MT auth id longer than 46 octets, after receiving the RLC_AUTHENTICATION (more 1) message and the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-004	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.6 Initial condition: Encryption_active. For IUT supporting Compressed authentication. Check, that: for compressed authentication, after receiving the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-005	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.7 Initial condition: Encryption_active. For IUT supporting Generic authentication. Check, that: for Generic authentication with MT auth id up to 46 octets, after receiving the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-006	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.7 Initial condition: Encryption_active. For IUT supporting Generic authentication. Check, that: for Generic authentication with MT auth id longer than 46 octets, after receiving the RLC_AUTHENTICATION (more 1) message and the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-007	Reference: TS 101 761-2 [1], clause 5.1.1.5 Initial condition: Encryption_active. For IUT supporting Distinguished name MT authentication. Check, that: for Distinguished name MT authentication with MT auth id up to 46 octets, after receiving the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.
TP/AP/ACF/AU/CA-008	Reference: TS 101 761-2 [1], clause 5.1.1.5 Initial condition: Encryption_active. For IUT supporting Distinguished name MT authentication. Check, that: for Distinguished name MT authentication with MT auth id longer than 46 octets, after receiving the RLC_AUTHENTICATION (more 1) message and the RLC_AUTHENTICATION (more 0) message, the IUT replies to the LT with a RLC_AUTHENTICATION_MT message with the correct MT challenge value.

TP/AP/ACF/AU/CA-009	Reference: TS 101 761-2 [1], clause 5.1.1.6.1 Initial condition: MT authenticated. For IUT supporting Pre Shared AP authentication. Check, that: for Pre Shared AP authentication after receiving the RLC_AUTHENTICATION_AP_1 message with the correct AP challenge value, the IUT replies to the LT with a RLC_AUTHENTICATION_ACK_1 message with the correct response value.
TP/AP/ACF/AU/CA-010	Reference: TS 101 761-2 [1], clause 5.1.1.6.2 Initial condition: MT authenticated. For IUT supporting RSA_Signature_512 AP authentication. Check, that: after receiving the RLC_AUTHENTICATION_AP_1 and RLC_AUTHENTICATION_AP_2 messages containing together the correct AP challenge value, the IUT replies to the LT with RLC_AUTHENTICATION_ACK_1 and RLC_AUTHENTICATION_ACK_2 messages with the correct response value.
TP/AP/ACF/AU/CA-011	Reference: TS 101 761-2 [1], clause 5.1.1.6.3 Initial condition: MT authenticated. For IUT supporting RSA_Signature_768 AP authentication. Check, that: after receiving the RLC_AUTHENTICATION_AP_1, RLC_AUTHENTICATION_AP_2 and RLC_AUTHENTICATION_AP_3 messages containing together the correct AP challenge value, the IUT replies to the LT with RLC_AUTHENTICATION_ACK_1 and RLC_AUTHENTICATION_ACK_2 messages with the correct response value.
TP/AP/ACF/AU/CA-012	Reference: TS 101 761-2 [1], clause 5.1.1.6.4 Initial condition: MT authenticated. For IUT supporting RSA_Signature_1024 AP authentication. Check, that: after receiving the RLC_AUTHENTICATION_AP_1, RLC_AUTHENTICATION_AP_2 and RLC_AUTHENTICATION_AP_3 messages containing together the correct AP challenge value, the IUT replies to the LT with RLC_AUTHENTICATION_ACK_1, RLC_AUTHENTICATION_ACK_2 and RLC_AUTHENTICATION_ACK_3 messages with the correct response value.

5.2.1.6 Common Key distribution

TP/AP/ACF/CK/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.7 Initial condition: Link_Agreed_or_Encryption_active_or_Authenticated Only for IUT that support the Direct Mode procedures. Check, that: immediately after termination of either the link capability process or the encryption process or the authentication process, the IUT initiates the common key distribution procedure by sending a RLC_DM_COMMON_KEY_DISTR message to the LT.

5.2.1.7 Information transfer

TP/AP/ACF/IT/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.8 Initial condition: Link_Agreed_or_Encryption_active_or_Authenticated Check, that: after receiving the RLC_INFO message, the IUT replies to the LT with a RLC_INFO_ACK message and considers the MT (LT) as MT_Associated_to_AP.

5.2.1.8 Multicast

TP/AP/ACF/MT/CA-000	Reference: TS 101 761-2 [1], clause 5.1.4 Initial condition: MT_Associated_to_AP and MT has made connection setup for unicast traffic. Check, that: after receiving the RLC_GROUP_JOIN message, the IUT replies to the LT with a RLC_GROUP_JOIN_ACK message.
TP/AP/ACF/MT/CA-001	Reference: TS 101 761-2 [1], clause 5.1.5 Initial condition: MT_Associated_to_AP and MT has made connection setup for unicast traffic. Check, that: after receiving the RLC_CL_BROADCAST_JOIN message, the IUT replies to the LT with a RLC_CL_BROADCAST_JOIN_ACK message.
TP/AP/ACF/MT/CA-002	Reference: TS 101 761-2 [1], clause 5.1.4 Initial condition: MT_Associated_to_AP and MT has joined a group. Check, that: after receiving the RLC_GROUP_LEAVE message, the IUT replies to the LT with a RLC_GROUP_LEAVE_ACK message.
TP/AP/ACF/MT/CA-003	Reference: TS 101 761-2, clause 5.1.5 Initial condition: MT_Associated_to_AP and MT has joined a group. Check, that: after receiving the RLC_ CL_BROADCAST_LEAVE message corresponding to the CL_BROADCAST group, the IUT replies to the LT with the relevant RLC_CL_BROADCAST_LEAVE_ACK message.

5.2.1.9 Disassociation

TP/AP/ACF/DI/CA-000	Reference: TS 101 761-2 [1], clause 5.1.3 Initial condition: MT_Associated_to_AP. Only for AP that implement disassociation process at power off. Simulus: AP is powered off. Check, that: the IUT initiates the disassociation process by sending a RLC_DISASSOCIATION message during power off procedure.
TP/AP/ACF/DI/CA-001	Reference: TS 101 761-2 [1], clause 5.1.3 Initial condition: MT_Associated_to_AP. Check, that: after receiving a RLC_DISASSOCIATION message, the IUT responds with a RLC_DISASSOCIATION_ACK and considers the MT (LT) as MT_Disassociated_from_AP.

5.2.1.10 Key refresh

TP/AP/ACF/KR/CA-000	Reference: TS 101 761-2 [1], clause 5.1.2.2 Initial condition: LT is MT_Associated_to_AP, and encryption is allowed and started. Check, that: the IUT, periodically sends the RLC_UNICAST_KEY_REFRESH message, to refresh the unicast key.
TP/AP/ACF/KR/CA-001	Reference: TS 101 761-2 [1], clause 5.1.2.3.3 Initial condition: LT is MT_Associated_to_AP, LT has joined a group, and encryption is allowed and started. Check, that: the IUT, periodically sends the RLC_COMMON_KEY_REFRESH message, to refresh the common key.
TP/AP/ACF/KR/CA-002	Reference: TS 101 761-2 [1], clause 5.1.2.3.3 Initial condition: LT is MT_Associated_to_AP, LT has joined a group, and encryption is allowed and started. Check, that: the IUT, having sent the RLC_COMMON_KEY_REFRESH message, to refresh the common key, after receiving the acknowledgement from all associated MTs, sends the RLC_COMMON_KEY_ACTIVATE to start use of the new derived common key.

5.2.1.11 Association rejection

TP/AP/ACF/AR/CA-000	Reference: TS 101 761-2 [1], clause 5.1.6 Initial condition: MT_disassociated_from_AP. Check, that: after receiving the RLC_MAC_ID_ASSIGN message and when the IUT does not accept the request, it replies with a relevant RLC_MAC_ID_ASSIGN_NACK message.

5.2.1.12 Unsupported messages

TP/AP/ACF/UM/CA-000	Reference: TS 101 761-2 [1], clause 7 Initial condition: MAC_ID_Assigned. Check, that: after receiving an unsupported ACF message (40 ≤ pdu type ≥ 63), the IUT replies by sending a relevant RLC_NO_SUPPORT message.

5.2.1.13 Timers and repetitions of messages

TP/AP/ACF/TI-000	Reference: TS 101 761-2 [1], clause 6 Initial condition: MAC_ID_Assigned. Check, that: for an ACF procedure initiated by the IUT and when no reply was received, the IUT re-transmits the same message.
TP/AP/ACF/TI-001	Reference: TS 101 761-2 [1], clause 6 Initial condition: MAC_ID_Assigned. Check, that: for an ACF procedure initiated by the IUT and when each time no reply was received, the IUT re-transmits the same message 4 times and stops the initiated procedure.
TP/AP/ACF/TI-002	Reference: TS 101 761-2 [1]– 6 Only for AP that implement RLC_PROCEEDING procedure. Initial condition: MAC_ID_Assigned. Check, that: for an ACF procedure initiated by the LT that uses either a T_medium timer or T_long timer, the IUT replies with a relevant RLC_PROCEEDING message as an acknowledgement for the received message.

5.2.2 Radio resource control

5.2.2.1 Dynamic frequency selection

5.2.2.1.1 Requesting

TP/AP/RRC/RQ/CA-000	Reference: TS 101 761-2 [1], clause 5.2.2.4.1 Initial condition: Active Mode. Check, that: when the IUT wishes to make measurements it sends a relevant RLC_DFS_AP_ABSENCE message to all active MTs.
TP/AP/RRC/RQ/CA-003	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active Mode. Check, that: when the IUT wishes to request the LT to measure and report the complete measurements, it sends a relevant RLC_DFS_MEASUREMENT_COMPLETE_REQUEST message
TP/AP/RRC/RQ/CA-004	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active Mode. Check, that: when the IUT wishes to request the LT to measure and report the percentiles measurements, it sends a relevant RLC_DFS_MEASUREMENT_PERCENTILES_REQUEST message
TP/AP/RRC/RQ/CA-005	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active Mode. Check, that: when the IUT wishes to request the LT to measure and report the short measurements, it sends a relevant RLC_DFS_MEASUREMENT_SHORT_REQUEST message
TP/AP/RRC/RQ/CA-006	Reference: TS 101 761-2 [1], clause 5.2.2.6 Initial condition: Active Mode. Check, that: when the IUT wishes to change frequency, it sends a relevant RLC_CHANGE_FREQUENCY message.
TP/AP/RRC/RQ/CA-007	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active_Mode. Check, that: after receiving a RLC_DFS_MT_INIT_REPORT_REQUEST message, the IUT acknowledges by sending a relevant RLC_DFS_MT_INIT_REPORT_ACK message.

5.2.2.2 Handover

5.2.2.2.1 Sector Handover

TP/AP/RRC/SH/CA-000	Reference: TS 101 761-2 [1], clause 5.2.1.1 Initial condition: LT is MT_Associated_to_AP. Check, that: after receiving a sector handover request (RLC_SECTOR_HANDOVER_REQUEST message), the IUT sends an acknowledgement via the new sector (RLC_SECTOR_HANDOVER_ACK message).

5.2.2.2.2 Radio Handover

TP/AP/RRC/RH/CA-000	Reference: TS 101 761-2 [1], clause 5.2.1.2 Initial condition: MT_Associated_to_AP. Check, that: after receiving a radio handover request (RLC_HANDOVER_REQUEST message) and if all relevant information are available, the IUT assigns a new MAC_ID to the LT (MT) by sending RLC_RADIO_HANDOVER_COMPLETE message.
TP/AP/RRC/RH/CA-001	Reference: TS 101 761-2 [1], clause 5.2.1.5 Initial condition: MT_Associated_to_AP. Check, that: after receiving a radio handover request (RLC_HANDOVER_REQUEST message), in order to reject the RLC_HANDOVER_REQUEST, the IUT sends a RCL_HANDOVER_REQUEST_NACK message.

5.2.2.2.3 Network Handover

TP/AP/RRC/NH/CA-000	Reference: TS 101 761-2 [1], clause 5.2.1.4 Initial condition: MT_Associated_to_AP. Check, that: when network support is available, the IUT sends a RLC_HO_INFO_DISTRIBUTION message for updating the network token.
TP/AP/RRC/NH/CA-001	Reference: TS 101 761-2 [1], clause 5.2.1.6 Only for AP that implement FORCE_HANDOVER procedure. Initial condition: MT_Associated_to_AP. Check, that: when the IUT detects the need for handover, it sends a RLC_FORCE_HANDOVER message to the LT.
TP/AP/RRC/NH/CA-002	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. Check, that: after receiving an handover request (RLC_HANDOVER_REQUEST message) and if all relevant information are not available, the IUT initiates the network handover process by sending RLC_HANDOVER_ASSOCIATION message.
TP/AP/RRC/NH/CA-003	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. Network handover process is pending. Check, that: after receiving a RLC_LINK_CAPABILITY message, the IUT completes the link capability process by sending RLC_HO_LINK_CAPABILITY_ACK message.
TP/AP/RRC/NH/CA-004	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. Network handover process is pending. Check, that: after receiving the RLC_NW_SIGNALLING_HANDOVER message, the IUT terminates the NW signalling process by sending a RLC_NW_SIGNALLING_HANDOVER_ACK message to the LT.
TP/AP/RRC/NH/CA-005	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. Network handover process is pending. Check, that: before ending the network handover process, the IUT sends a RLC_HO_INFO_DISTRIBUTION message to the LT.
TP/AP/RRC/NH/CA-006	Reference: TS 101 761-2 [1], clause 5.2.1.4 Initial condition: MT_Associated_to_AP. Network handover process is pending. Check, that: after re-establishment of all previously existing DLC user connections, the IUT terminates the network handover process by sending a RLC_NETWORK_HANDOVER_COMPLETE message to the LT.

5.2.2.2.4 Handover Rejection

TP/AP/RRC/HR/CA-000	Reference: TS 101 761-2 [1], clause 5.2.1.5 Initial condition: MT_Associated_to_AP. Check, that: after receiving the RLC_HANDOVER_REQUEST message and when the IUT does not accept the request, it either replies with a relevant RLC_HANDOVER_REQUEST_NACK message or initiates the dissasociation process by sending a RLC_DISASSOCIATION message.

5.2.2.3 Power saving

5.2.2.3.1 Power saving - Sleep

TP/AP/RRC/SL/CA-000	Reference: TS 101 761-2 [1], clause 5.2.6.2 Initial condition: Active_Mode. Check, that: after receiving a RLC_SLEEP message, the IUT acknowledges by sending a relevant RLC_SLEEP_ACK message.

5.2.2.3.2 Power saving - Alive

TP/AP/RRC/AL/CA-000	Reference: TS 101 761-2 [1], clause 5.2.4 Initial condition: Active_Mode. Check, that: after receiving a RLC_MT_ALIVE message, the IUT acknowledges by sending a relevant RLC_MT_ALIVE_ ACK message.

5.2.2.3.3 Power saving - Absence

TP/AP/RRC/AB/CA-000	Reference: TS 101 761-2 [1], clause 5.2.5 Initial condition: Active_Mode. Check, that: after receiving a RLC_ABSENCE message specifying the duration of the MT absence, the IUT acknowledges it by sending a relevant RLC_ABSENCE_ACK message.
TP/AP/RRC/AB/CA-001	Reference: TS 101 761-2 [1], clause 5.2.5 Initial condition: Active_Mode. Check, that: after receiving a RLC_MT_ALIVE message indicating the come back of an absent MT, the IUT acknowledges by sending a relevant RLC_MT_ALIVE_ACK message.
TP/AP/RRC/AB/CA-002	Reference: TS 101 761-2 [1], clause 5.2.5 Only for AP that implement MT_ALIVE_REQUEST procedure. Initial condition: Active_Mode. Check, that: when the duration time specified in the RLC_ABSENCE sent by a MT has elapsed and no RLC_MT_ALIVE message was received from this MT, the IUT reacts by sending a relevant RLC_MT_ALIVE_REQUEST message to determine the presence of the MT.

5.2.2.4 Unsupported messages

TP/AP/RRC/UM/CA-000	Reference: TS 101 761-2 [1], clause 7 Initial condition: MT_Associated_to_AP. Check, that: after receiving an unsupported RRC message (100 ≤ pdu type ≥ 127), the IUT replies by sending a relevant RLC_NO_SUPPORT message.

5.2.2.5 Timers and repetitions of messages

TP/AP/RRC/TI-000	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for an RRC procedure initiated by the IUT and when no reply was received, the IUT re-transmits the same message.
TP/AP/RRC/TI-001	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for an RRC procedure initiated by the IUT and when each time no reply was received, the IUT re-transmits the same message 4 times and stops the initiated procedure.
TP/AP/RRC/TI-002	Reference: TS 101 761-2 [1], clause 6 Only for AP that implement RLC_PROCEEDING procedure. Initial condition: MT_Associated_to_AP. Check, that: for an RRC procedure initiated by the LT that uses either a T_medium timer or T_long timer, the IUT replies with a relevant RLC_PROCEEDING message as an acknowledgement for the received message.

5.2.3 DLC user connection

5.2.3.1 Centralized mode

5.2.3.1.1 Centralized mode - Set-up

5.2.3.1.1.1 Mobile originated

TP/AP/DUC/CS/CA-000	Reference: TS 101 761-2 [1], clause 5.3.1.2 Initial condition: MT_Associated_to_AP. Check, that: after receiving the RLC_SETUP message, the IUT replies to the LT with a RLC_CONNECT message.
TP/AP/DUC/CS/CA-001	Reference: TS 101 761-2 [1], clause 5.3.1.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_CONNECT message. Check, that: after receiving the RLC_CONNECT_ACK message, the IUT considers the DLC user connection as established.

5.2.3.1.1.2 Mobile terminated

TP/AP/DUC/CS/CA-002	Reference: TS 101 761-2 [1], clause 5.3.1.1 Initial condition: MT_Associated_to_AP. Check, that: when the IUT wishes to establish a DLC user connection, it sends a relevant RLC_SETUP message.
TP/AP/DUC/CS/CA-003	Reference: TS 101 761-2 [1], clause 5.3.1.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_SETUP message. Check, that: after receiving the RLC_CONNECT message, the IUT replies to the LT with a RLC_CONNECT_ACK message and considers the DLC user connection as established.

5.2.3.1.2 Centralized mode - Release

5.2.3.1.2.1 Mobile originated

TP/AP/DUC/CR/CA-000	Reference: TS 101 761-2 [1], clause 5.3.2.2 Initial condition: DUC established. Check, that: after receiving the RLC_RELEASE message, the IUT replies to the LT with a RLC_RELEASE_ACK message and considers the DLC user connection as released.

5.2.3.1.2.2 Mobile terminated

TP/AP/DUC/CR/CA-001	Reference: TS 101 761-2 [1], clause 5.3.2.1 Initial condition: DUC established. Check, that: when the IUT wishes to release a DLC user connection, it sends a relevant RLC_RELEASE message.

5.2.3.1.3 Centralized mode - Modify

5.2.3.1.3.1 Mobile originated

TP/AP/DUC/CM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.3.2 Initial condition: DUC established. Check, that: after receiving the RLC_MODIFY_REQ message, the IUT replies to the LT with a RLC_MODIFY message.
TP/AP/DUC/CM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.3.2 Initial condition: DUC established. IUT has sent a RLC_MODIFY message Check, that: after receiving the RLC_MODIFY_ACK message, the IUT considers the DLC user connection as modified.

5.2.3.1.3.2 Mobile terminated

TP/AP/DUC/CM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.3.1 Initial condition: DUC established. Check, that: when the IUT wishes to modify a DLC user connection, it sends a relevant RLC_MODIFY_REQ message.
TP/AP/DUC/CM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.3.1 Initial condition: DUC established. IUT has sent a RLC_MODIFY_REQ message. Check, that: after receiving the RLC_MODIFY message, the IUT replies to the LT with a RLC_MODIFY_ACK message and considers the DLC user connection as modified.

5.2.3.1.4 Centralized mode - Reset

5.2.3.1.4.1 Mobile originated

TP/AP/DUC/CT/CA-000	Reference: TS 101 761-2 [1], clause 5.3.4.2 Initial condition: DUC established. Check, that: after receiving the RLC_RESET message, the IUT replies to the LT with a RLC_RESET_ACK message and considers the DLC user connection as established and restarted.

5.2.3.1.4.2 Mobile terminated

TP/AP/DUC/CT/CA-001	Reference: TS 101 761-2 [1], clause 5.3.4.1 Initial condition: DUC established. Check, that: when the IUT wishes to reset a DLC user connection, it sends a relevant RLC_RESET message.

5.2.3.2 Direct Mode

5.2.3.2.1 Direct Mode - Set-up

5.2.3.2.1.1 Mobile originated

TP/AP/DUC/DS/CA-000	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_SETUP message from MT1, the IUT replies to the LT with a RLC_DM_CONNECT message.
TP/AP/DUC/DS/CA-001	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT message to MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_ACK message from the MT1, the IUT sends a relevant RLC_DM_SETUP message to the MT2.
TP/AP/DUC/DS/CA-002	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_SETUP message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT message from the MT2, the IUT replies to the LT with a RLC_DM_CONNECT_ACK message and sends a relevant RLC_DM_CONNECT_COMPLETE message to MT1.
TP/AP/DUC/DS/CA-003	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE message to the MT1. Only for IUT that support the Direct Mode procedures and does not send the RLC_DM_CONNECT_COMPLETE message in parallel to the two MTs. Check, that: after receiving the RLC_DM_CONNECT_COMPLETE_ACK message from the MT1, the IUT sends a relevant RLC_DM_CONNECT_COMPLETE message to MT2.
TP/AP/DUC/DS/CA-004	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM setup procedure, the U-plane is established between the MT1 and the MT2.

5.2.3.2.1.2 Mobile terminated

TP/AP/DUC/DS/CA-005	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to establish a DM DLC user connection, it sends a relevant RLC_DM_SETUP message to the MT1.
TP/AP/DUC/DS/CA-006	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_SETUP message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT message from the MT1, the IUT replies to the LT with a RLC_DM_CONNECT_ACK message and sends a relevant RLC_DM_SETUP message to the MT2.
TP/AP/DUC/DS/CA-007	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_SETUP message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT message from the MT2, the IUT replies to the LT with a RLC_DM_CONNECT_ACK message and sends a relevant RLC_DM_CONNECT_COMPLETE message to MT1.
TP/AP/DUC/DS/CA-008	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE message to the MT1. Only for IUT that support the Direct Mode procedures and does not send the RLC_DM_CONNECT_COMPLETE message in parallel to the two MTs. Check, that: after receiving the RLC_DM_CONNECT_COMPLETE_ACK message from the MT1, the IUT sends a relevant RLC_DM_CONNECT_COMPLETE message to MT2.
TP/AP/DUC/DS/CA-009	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM setup procedure, the U-plane is established between the MT1 and the MT2.

5.2.3.2.2 Direct Mode - Release

5.2.3.2.2.1 Mobile originated

TP/AP/DUC/DR/CA-000	Reference: TS 101 761-2 [1], clause 5.3.8.2 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE message from the MT1, the IUT sends a relevant RLC_DM_RELEASE message to MT2
TP/AP/DUC/DR/CA-001	Reference: TS 101 761-2 [1], clause 5.3.8.2 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE_ACK message from the MT2, the IUT sends a relevant RLC_DM_RELEASE_ACK message to MT1.
TP/AP/DUC/DR/CA-002	Reference: TS 101 761-2 [1], clause 5.3.8.2 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE_ACK message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM release procedure, the U-plane is released between the MT1 and the MT2.

5.2.3.2.2.2 Mobile terminated

TP/AP/DUC/DR/CA-003	Reference: TS 101 761-2 [1], clause 5.3.8.1 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to release a DM DLC user connection, it sends a relevant RLC_DM_RELEASE message to the MT1.
TP/AP/DUC/DR/CA-004	Reference: TS 101 761-2 [1], clause 5.3.8.1 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE_ACK message from the MT1, the IUT sends a relevant RLC_DM_RELEASE message to MT2.
TP/AP/DUC/DR/CA-005	Reference: TS 101 761-2 [1], clause 5.3.8.1 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE_ACK message from the MT2, the IUT considers the DM DLC user connection as released.

5.2.3.2.3 Direct Mode - Modify

5.2.3.2.3.1 Mobile originated

TP/AP/DUC/DM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_REQ message from the MT1, the IUT replies to the LT with a RLC_DM_MODIFY message.
TP/AP/DUC/DM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_ACK message, the IUT sends a relevant RLC_DM_MODIFY_REQ message to MT2.
TP/AP/DUC/DM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_REQ message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY message from the MT2, the IUT replies to the LT with a RLC_DM_MODIFY_ACK message and sends a relevant RLC_DM_MODIFY_COMPLETE message to MT1.
TP/AP/DUC/DM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE message to the MT1. Only for IUT that support the Direct Mode procedures and does not send the RLC_DM_MODIFY_COMPLETE message in parallel to the two MTs. Check, that: after receiving the RLC_DM_MODIFY_COMPLETE_ACK message from the MT1, the IUT sends a relevant RLC_DM_MODIFY_COMPLETE message to MT2.
TP/AP/DUC/DM/CA-004	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM_MODIFY procedure, the U-plane is modified between the MT1 and the MT2.

5.2.3.2.3.2 Mobile terminated

TP/AP/DUC/DM/CA-005	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to modify a DM DLC user connection, it sends a relevant RLC_DM_MODIFY_REQ message to the MT1.
TP/AP/DUC/DM/CA-006	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_REQ message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY message from the MT1, the IUT replies to the LT with a RLC_DM_MODIFY_ACK message and sends a relevant RLC_DM_MODIFY_REQ message to MT2.
TP/AP/DUC/DM/CA-007	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_REQ message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY message from the MT2, the IUT replies to the LT with a RLC_DM_MODIFY_ACK message and sends a relevant RLC_DM_MODIFY_COMPLETE message to MT1.
TP/AP/DUC/DM/CA-008	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE message to the MT1. Only for IUT that support the Direct Mode procedures and does not send the RLC_DM_MODIFY_COMPLETE message in parallel to the two MTs. Check, that: after receiving the RLC_DM_MODIFY_COMPLETE_ACK message from the MT1, the IUT sends a relevant RLC_DM_MODIFY_COMPLETE message to MT2.
TP/AP/DUC/DM/CA-009	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM_MODIFY procedure, the U-plane is modified between the MT1 and the MT2.

5.2.3.2.4 Relay Set-up

5.2.3.2.4.1 Mobile originated

TP/AP/DUC/RS/CA-000	Reference: TS 101 761-2 [1], clause 5.3.7.3 Initial condition: MT_Associated_to_AP. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELAY_SETUP message from MT1, it sends a relevant RLC_DM_SETUP message to the MT2.
TP/AP/DUC/RS/CA-001	Reference: TS 101 761-2 [1], clause 5.3.7.3 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_SETUP message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT message from the MT2, the IUT replies to the LT with a RLC_DM_CONNECT_ACK message and sends a relevant RLC_DM_SETUP message to the MT1.
TP/AP/DUC/RS/CA-002	Reference: TS 101 761-2 [1], clause 5.3.7.3 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_SETUP message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT message from the MT1, the IUT replies to the LT with a RLC_DM_CONNECT_ACK message and sends a relevant RLC_DM_CONNECT_COMPLETE message to MT2.
TP/AP/DUC/RS/CA-003	Reference: TS 101 761-2 [1], clause 5.3.7.3 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_COMPLETE_ACK message from the MT2, the IUT sends a relevant RLC_DM_CONNECT_COMPLETE message to MT1.
TP/AP/DUC/RS/CA-004	Reference: TS 101 761-2 [1], clause 5.3.7.3 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_COMPLETE_ACK message from the MT1, the IUT sends a relevant RLC_DM_RELAY_SETUP_ACK message to MT1.
TP/AP/DUC/RS/CA-005	Reference: TS 101 761-2 [1], clause 5.3.7.3 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_RELAY_SETUP_ACK message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM relay setup procedure, two U-planes are established. One is established between the MT1 and AP/CC and another one is established between the MT2 and AP/CC.

5.2.3.2.5 Relay Release

5.2.3.2.5.1 Mobile originated

TP/AP/DUC/RR/CA-000	Reference: TS 101 761-2 [1], clause 5.3.8.3 Initial condition: DM relay DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELAY_RELEASE message from the MT1, the IUT sends a relevant RLC_DM_RELEASE message to MT2.
TP/AP/DUC/RR/CA-001	Reference: TS 101 761-2 [1], clause 5.3.8.3 Initial condition: DM relay DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE_ACK message from the MT2, the IUT sends a relevant RLC_DM_RELEASE message to MT1.
TP/AP/DUC/RR/CA-002	Reference: TS 101 761-2 [1], clause 5.3.8.3 Initial condition: DM relay DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE_ACK message from the MT1, the IUT sends a relevant RLC_DM_RELAY_RELEASE_ACK message to MT1.
TP/AP/DUC/RR/CA-003	Reference: TS 101 761-2 [1], clause 5.3.8.3 Initial condition: DM relay DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELAY_RELEASE_ACK message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after sending the RLC_DM_RELAY_RELEASE_ACK message to the MT1, the two DM relay DLC user connections are released.

5.2.3.2.6 Relay Modify

5.2.3.2.6.1 Mobile originated

TP/AP/DUC/RM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.9.3 Initial condition: DM relay DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELAY_MODIFY message from the MT1, the IUT sends a RLC_DM_MODIFY_REQ message to the MT2.
TP/AP/DUC/RM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.9.3 Initial condition: DM relay DUC established. IUT has sent a RLC_DM_MODIFY_REQ message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY message from the MT2, the IUT replies to with a RLC_DM_MODIFY_ACK message and sends a relevant RLC_DM_MODIFY_REQ message to MT1.
TP/AP/DUC/RM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.9.3 Initial condition: DM relay DUC established. IUT has sent a RLC_DM_MODIFY_REQ message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY message from the MT1, the IUT replies to with a RLC_DM_MODIFY_ACK message and sends a relevant RLC_DM_MODIFY_COMPLETE message to the MT2.
TP/AP/DUC/RM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.9.3 Initial condition: DM relay DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE message to the MT2. Only for IUT that support the Direct Mode procedures and does not send the RLC_DM_MODIFY_COMPLETE message in parallel to the two MTs. Check, that: after receiving the RLC_DM_MODIFY_COMPLETE_ACK message from the MT2, the IUT sends a relevant RLC_DM_MODIFY_COMPLETE message to MT1.
TP/AP/DUC/RM/CA-004	Reference: TS 101 761-2 [1], clause 5.3.9.3 Initial condition: DM relay DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_COMPLETE_ACK message from the MT1 and from the MT2, the IUT sends a relevant RLC_DM_RELAY_MODIFY_ACK message to MT1
TP/AP/DUC/RM/CA-005	Reference: TS 101 761-2 [1], clause 5.3.9.3. Initial condition: DM relay DUC established. IUT has sent a RLC_DM_RELAY_MODIFY_ACK message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after sending the RLC_DM_RELAY_MODIFY_ACK message to the MT1, the IUT considers the two DM relay DLC user connections as modified.

5.2.3.2.7 Direct Mode - Reset

5.2.3.2.7.1 Mobile originated

TP/AP/DUC/DT/CA-000	Reference: TS 101 761-2 [1], clause 5.3.10.2 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RESET message from the MT1, the IUT sends a relevant RLC_DM_RESET message to MT2
TP/AP/DUC/DT/CA-001	Reference: TS 101 761-2 [1], clause 5.3.10.2 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RESET message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RESET_ACK message from the MT2, the IUT sends a relevant RLC_DM_RESET_ACK message to MT1.
TP/AP/DUC/DT/CA-002	Reference: TS 101 761-2 [1], clause 5.3.10.2 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RESET_ACK message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM reset procedure, the U-plane is established and restarted between the MT1 and the MT2.

5.2.3.2.7.2 Mobile terminated

TP/AP/DUC/DT/CA-003	Reference: TS 101 761-2 [1], clause 5.3.10.1 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to reset a DM DLC user connection, it sends a relevant RLC_DM_RESET message to MT1.
TP/AP/DUC/DT/CA-004	Reference: TS 101 761-2 [1], clause 5.3.10.1 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RESET message to the MT1. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RESET_ACK message from the MT1, the IUT sends a relevant RLC_DM_RESET message to MT2.
TP/AP/DUC/DT/CA-005	Reference: TS 101 761-2 [1], clause 5.3.10.1 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RESET message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RESET_ACK message from the MT2, the IUT considers the DM DLC user connection as established and restarted.

5.2.3.3 Test mode

5.2.3.3.1 Test mode - Set-up

5.2.3.3.1.1 Mobile originated

TP/AP/DUC/TM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.13.2 Initial condition: MT_Associated_to_AP. Check, that: after receiving the RLC_TEST_MODE_SETUP message, the IUT replies to the LT with a RLC_TEST_MODE_CONNECT message.
TP/AP/DUC/TM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.13.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_TEST_MODE_CONNECT message. Check, that: after receiving the RLC_TEST_MODE_CONNECT_ACK message, the IUT considers the test mode connection as established.

5.2.3.3.1.2 Mobile terminated

TP/AP/DUC/TM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.13.1 Initial condition: MT_Associated_to_AP. Check, that: when the IUT wishes to establish a test mode connection, it sends a relevant RLC_TEST_MODE_SETUP message.
TP/AP/DUC/TM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.13.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_TEST_MODE_SETUP message. Check, that: after receiving the RLC_TEST_MODE_CONNECT message, the IUT replies to the LT with a RLC_TEST_MODE_CONNECT_ACK message and considers the test mode as established.

5.2.4 Unsupported messages

TP/AP/DUC/UM/CA-000	Reference: TS 101 761-2 [1], clause 7 Initial condition: MT_Associated_to_AP. Check, that: after receiving an unsupported DUC message (160 ≤ pdu type), the IUT replies by sending a relevant RLC_NO_SUPPORT message.

5.2.5 Timers and repetitions of messages

TP/AP/DUC/TI-000	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for a DUC procedure initiated by the IUT and when no reply was received, the IUT re-transmits the same message.
TP/AP/DUC/TI-001	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for a DUC procedure initiated by the IUT and when each time no reply was received, the IUT re-transmits the same message 4 times and stops the initiated procedure.
TP/AP/DUC/TI-002	Reference: TS 101 761-2 [1], clause 6 Only for AP that implement RLC_PROCEEDING procedure. Initial condition: MT_Associated_to_AP. Check, that: for a DUC procedure initiated by the LT that uses either a T_medium timer or T_long timer, the IUT replies with a relevant RLC_PROCEEDING message as an acknowledgement for the received message.

5.3 Test purposes for MT

5.3.1 Association control function

5.3.1.1 RBCH Association

TP/MT/ACF/RA/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Stimulus: Switch on. Check, that the IUT does not attempt the association process if the Network Operator Id broadcast by the LT (AP) is not contained in its allowed Network Operator Id list.
TP/MT/ACF/RA/CA-001	Reference: TS 101 761-2 [1], clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Stimulus: Switch on. Check, that the IUT attempts the association process if the Network Operator Id field of the RBCH_ASSOCIATION message, broadcast by the LT (AP), indicate No Network Operator Id provided.
TP/MT/ACF/RA/CA-002	Reference: TS 101 761-2 [1], clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Stimulus: Switch on. Check, that the IUT attempts the association process if the Network Operator Id broadcast by the LT (AP) is contained in its allowed Network Operator Id list.
TP/MT/ACF/RA/CA-003	Reference: TS 101 761-2 [1], clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Stimulus: Switch on. Check, that the IUT does not attempt the association process if it cannot find at least one of its proper profile id:s/profile versions that match one of the profile id:s/profile versions broadcast by the LT (AP).
TP/MT/ACF/RA/CA-004	Reference: TS 101 761-2 [1], clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Stimulus: Switch on. Check, that the IUT attempts the association process if at least one of its proper profile id:s/profile versions matches one of the profile id:s/profile versions broadcast by the LT (AP).
TP/MT/ACF/RA/CA-005	Reference: TS 101 761-2 [1], clause 5.1.1.1 Initial condition: MT_disassociated_from_AP Stimulus: Switch on. Check, that the IUT, when it has not received the periodically sent RBCH_ASSOCIATION message, requests the information by sending a relevant RLC_RBCH_ASSOCIATION_REQ message.

A configuration primitive is used to initialize the tester with the value of the variables to broadcast: Number of sectors, NET ID, AP ID, AP TX level, AP RX UL level, Version indicator, AP traffic load indicator, Maximum power indicator.

5.3.1.2 Mac Id assignment

TP/MT/ACF/MA/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.2 Initial condition: Beacon_Received Check, that the IUT, having received a correct broadcast signalling and to continue the association procedure, requests a MAC_ID by sending a RLC_MAC_ID_ASSIGN message.

5.3.1.3 Link capability

TP/MT/ACF/LC/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.3 Initial condition: MAC_ID_Assigned Check, that: after receiving the MAC_ID the IUT initiates the exchange of link capabilities by sending its own parameters to the LT (RLC_LINK_CAPABILITY message).

5.3.1.4 Encryption

TP/MT/ACF/EN/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.4 Initial condition: Link_Agreed Check, that: after receiving the RLC_LINK_CAPABILITY_ACK message indicating the selected encryption procedure, the IUT initiates the encryption process by sending a RLC_KEY_EXCHANGE_MT_1 message and a RLC_KEY_EXCHANGE_MT_2 message to the LT.

5.3.1.5 Authentication

TP/MT/ACF/AU/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.2 Initial condition: Encryption_active. Authentication requested. For IUT supporting IEEE MT authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the IEEE MT authentication process by sending a RLC_AUTHENTICATION (more 0) message.
TP/MT/ACF/AU/CA-001	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.3 Initial condition: Encryption_active. Authentication requested. For IUT supporting Extended IEEE MT authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Extended IEEE MT authentication process by sending a RLC_AUTHENTICATION (more 0) message.
TP/MT/ACF/AU/CA-002	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.4 Initial condition: Encryption_active. Authentication requested. For IUT supporting Net_Acc_Id MT authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Net_Acc_Id MT authentication with MT auth id up to 46 octets by sending a RLC_AUTHENTICATION (more 0) message.
TP/MT/ACF/AU/CA-003	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.4 Initial condition: Encryption_active. Authentication requested. For IUT supporting Net_Acc_Id MT authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Net_Acc_Id MT authentication with MT auth id longer than 46 octets by sending a RLC_AUTHENTICATION (more 1) and a RLC_AUTHENTICATION (more 0) messages
TP/MT/ACF/AU/CA-004	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.6 Initial condition: Encryption_active. Authentication requested. For IUT supporting Compressed authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Compressed authentication by sending a RLC_AUTHENTICATION (more 0) message.
TP/MT/ACF/AU/CA-005	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.7 Initial condition: Encryption_active. Authentication requested. For IUT supporting Generic authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Generic authentication with MT auth id up to 46 octets by sending a RLC_AUTHENTICATION (more 0) message.
TP/MT/ACF/AU/CA-006	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.7 Initial condition: Encryption_active. Authentication requested. For IUT supporting Generic authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Generic authentication with MT auth id longer than 46 octets by sending a RLC_AUTHENTICATION (more 1) and a RLC_AUTHENTICATION (more 0) messages
TP/MT/ACF/AU/CA-007	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.5 Initial condition: Encryption_active. Authentication requested. For IUT supporting Distinguished name MT authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Distinguished name MT authentication with MT auth id up to 46 octets by sending a RLC_AUTHENTICATION (more 0) message.

TP/MT/ACF/AU/CA-008	Reference: TS 101 761-2 [1], clause 5.1.1.5.3.5 Initial condition: Encryption_active. Authentication requested. For IUT supporting Distinguished name MT authentication. Check, that: immediately after termination of the encryption process, the IUT initiates the Distinguished name MT authentication with MT auth id longer than 46 octets by sending a RLC_AUTHENTICATION (more 1) and a RLC_AUTHENTICATION (more 0) messages
TP/MT/ACF/AU/CA-009	Reference: TS 101 761-2 [1], clause 5.1.1.5.6.1 Initial condition: MT authenticated. For IUT supporting Pre Shared AP authentication. Check, that: immediately after termination of the MT authentication process, the IUT initiates the Pre Shared AP authentication process by sending a RLC_AUTHENTICATION_AP_1 message containing the correct AP challenge value.
TP/MT/ACF/AU/CA-010	Reference: TS 101 761-2 [1], clause 5.1.1.5.6.2 Initial condition: MT authenticated. For IUT supporting RSA_Signature_512 AP authentication. Check, that: immediately after termination of the MT authentication process, the IUT initiates the RSA_Signature_512 AP authentication process by sending RLC_AUTHENTICATION_AP_1 and RLC_AUTHENTICATION_AP_2 messages containing together the correct AP challenge value.
TP/MT/ACF/AU/CA-011	Reference: TS 101 761-2 [1], clause 5.1.1.5.6.3 Initial condition: MT authenticated. For IUT supporting RSA_Signature_768 AP authentication. Check, that: immediately after termination of the MT authentication process, the IUT initiates the RSA_Signature_768 AP authentication process by sending RLC_AUTHENTICATION_AP_1, RLC_AUTHENTICATION_AP_2 and RLC_AUTHENTICATION_AP_3 messages containing together the correct AP challenge value.
TP/MT/ACF/AU/CA-012	Reference: TS 101 761-2 [1], clause 5.1.1.5.6.4 Initial condition: MT authenticated. For IUT supporting RSA_Signature_1024 AP authentication. Check, that: immediately after termination of the MT authentication process, the IUT initiates the RSA_Signature_1024 AP authentication process by sending RLC_AUTHENTICATION_AP_1, RLC_AUTHENTICATION_AP_2 and RLC_AUTHENTICATION_AP_3 messages containing together the correct AP challenge value.

5.3.1.6 Common Key distribution

TP/MT/ACF/CK/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.7 Initial condition: Link_Agreed_or_Encryption_active_or_Authenticated Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_COMMON_KEY_DISTR message, the IUT replies to the LT with a RLC_DM_COMMON_KEY_DISTR_ACK message.

5.3.1.7 Information transfer

TP/MT/ACF/IT/CA-000	Reference: TS 101 761-2 [1], clause 5.1.1.8 Initial condition: Link_Agreed_or_Encryption_active_or_Authenticated Check, that: after termination of the MT_Id obtain process, the IUT initiates the exchange of higher layer information by sending a RLC_INFO message to the LT.

5.3.1.8 Multicast

TP/MT/ACF/MT/CA-000	Reference: TS 101 761-2 [1], clause 5.1.4 Initial condition: MT_Associated_to_AP and MT has made connection setup for unicast traffic. Check, that: when the IUT wishes to join a group, it sends a relevant RLC_GROUP_JOIN message.
TP/MT/ACF/MT/CA-001	Reference: TS 101 761-2 [1], clause 5.1.5 Initial condition: MT_Associated_to_AP and MT has made connection setup for unicast traffic. Check, that: when the IUT wishes to join the CL_BROADCAST group, it sends a relevant RLC_CL_BROADCAST_JOIN message.
TP/MT/ACF/MT/CA-002	Reference: TS 101 761-2 [1], clause 5.1.4 Initial condition: MT_Associated_to_AP and MT has joined a group. Check, that: when the IUT wishes to leave a group, it sends a relevant RLC_GROUP_LEAVE message.
TP/MT/ACF/MT/CA-003	Reference: TS 101 761-2 [1], clause 5.1.5 Initial condition: MT_Associated_to_AP and MT has joined a group. Check, that: when the IUT wishes to leave the CL_BROADCAST group, it sends a relevant RLC_CL_BROADCAST _LEAVE message.

5.3.1.9 Disassociation

TP/MT/ACF/DI/CA-000	Reference: TS 101 761-2 [1], clause 5.1.3 Initial condition: MT_Associated_to_AP. Only for MT that implement disassociation process at power off. Simulus: MT is powered off. Check, that: the IUT initiates the disassociation process by sending a RLC_DISASSOCIATION message during power off procedure.
TP/MT/ACF/DI/CA-001	Reference: TS 101 761-2 [1], clause 5.1.3 Initial condition: MT_Associated_to_AP. Check, that: after receiving a RLC_DISASSOCIATION message, the IUT responds with a RLC_DISASSOCIATION_ACK and enters in MT_Disassociated_from_AP state.

5.3.1.10 Key refresh

TP/MT/ACF/KR/CA-000	Reference: TS 101 761-2 [1], clause 5.1.2.2 Initial condition: MT_Associated_to_AP, encryption allowed and started. Check, that: after receiving the Unicast key refresh RLC_UNICAST_KEY_REFRESH message, the IUT acknowledges by sending RLC_UNICAST_KEY_REFRESH_ACK and starts using the new derived key.
TP/MT/ACF/KR/CA-001	Reference: TS 101 761-2 [1], clause 5.1.2.3.3 Initial condition: MT_Associated_to_AP, group joined, encryption allowed and started. Check, that: after receiving the multicast common key refresh RLC_COMMON_KEY_REFRESH message, the IUT acknowledges by sending RLC_COMMON_KEY_REFRESH_ACK and, after receiving the RLC_COMMON_KEY_ACTIVATE, starts using the new derived common key.

5.3.1.11 Unsupported messages

TP/MT/ACF/UM/CA-000	Reference: TS 101 761-2 [1], clause 7 Initial condition: MAC_ID_Assigned. Check, that: after receiving an unsupported ACF message (40 ≤ pdu type ≥ 63), the IUT replies by sending a relevant RLC_NO_SUPPORT message.

5.3.1.12 Timers and repetitions of messages

TP/MT/ACF/TI-000	Reference: TS 101 761-2 [1], clause 6 Initial condition: MAC_ID_Assigned. Check, that: for an ACF procedure initiated by the IUT and when no reply was received, the IUT re-transmits the same message.
TP/MT/ACF/TI-001	Reference: TS 101 761-2 [1], clause 6 Initial condition: MAC_ID_Assigned. Check, that: for an ACF procedure initiated by the IUT and when each time no reply was received, the IUT re-transmits the same message 4 times and stops the initiated procedure.
TP/MT/ACF/TI-002	Reference: TS 101 761-2 [1], clause 6 Only for MT that implement RLC_PROCEEDING procedure. Initial condition: MAC_ID_Assigned. Check, that: for an ACF procedure initiated by the LT that uses either a T_medium timer or T_long timer, the IUT replies with a relevant RLC_PROCEEDING message as an acknowledgement for the received message.

5.3.2 Radio resource control

5.3.2.1 Dynamic frequency selection

5.3.2.1.1 Requesting

TP/MT/RRC/RQ/CA-000	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active_Mode. Check, that: when the IUT wishes to transmit its proper measurement to the LT, it sends a relevant RLC_DFS_MT_INIT_REPORT_REQUEST message

5.3.2.1.2 Reporting

TP/MT/RRC/RP/CA-000	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active Mode. Check, that: the IUT having received a RLC_DFS_MEASUREMENT_COMPLETE_REQUEST message, sends back after measurement a relevant RLC_DFS_REPORT_COMPLETE message
TP/MT/RRC/RP/CA-001	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active Mode. Check, that: the IUT having received a RLC_DFS_MEASUREMENT_PERCENTILES_REQUEST message, sends back after measurement a relevant RLC_DFS_REPORT_PERCENTILES message
TP/MT/RRC/RP/CA-002	Reference: TS 101 761-2 [1], clause 5.2.2.4.2 Initial condition: Active Mode. Check, that: the IUT having received a RLC_DFS_MEASUREMENT_SHORT_REQUEST message, sends back after measurement a relevant RLC_DFS_REPORT_SHORT message

5.3.2.2 Handover

5.3.2.2.1 Sector Handover

TP/MT/RRC/SH/CA-000	Reference: TS 101 761-2 [1], clause 5.2.1.1 Initial condition: MT_Associated_to_AP. Check, that: the IUT detecting the need for a sector handover, sends a sector handover request via SCH of the old sector or RCH of the new sector (RLC_SECTOR_HANDOVER_REQUEST message).
TP/MT/RRC/SH/CA-001	Reference: TS 101 761-2 [1], clause 5.2.1.1 Initial condition: MT_Associated_to_AP. Check, that: after completion of a sector handover (RLC_SECTOR_HANDOVER_ACK message is received), the IUT communicates only via the new sector

5.3.2.2.2 Radio Handover

TP/MT/RRC/RH/CA-000	Reference: TS 101 761-2 [1], clause 5.2.1.2 Initial condition: MT_Associated_to_AP. Check, that: after receiving a RLC_FORCE_HANDOVER message, the IUT initiates a radio or network handover by sending a RLC_HANDOVER_REQUEST message to the new AP and optionally by sending a RLC_HANDOVER_NOTIFY message to the old AP.
TP/MT/RRC/RH/CA-001	Reference: TS 101 761-2 [1], clause 5.2.1.2 Only for MT that implement RLC_HANDOVER_NOTIFY procedure. Initial condition: MT_Associated_to_AP. Check, that: when handover is needed and the IUT is still synchronized to the old APT, the IUT notifies the old APT by sending a RLC_HANDOVER_NOTIFY message.
TP/MT/RRC/RH/CA-002	Reference: TS 101 761-2 [1], clause 5.2.1.2 Initial condition: MT_Associated_to_AP. Check, that: when handover is needed and the IUT is synchronized to the new APT, the IUT requests handover to the new APT by sending a RLC_HANDOVER_REQUEST message.
TP/MT/RRC/RH/CA-003	Reference: TS 101 761-2 [1], clause 5.2.1.2 Initial condition: MT_Associated_to_AP. Check, that: after completion of a radio handover (RLC_RADIO_HANDOVER_COMPLETE message is received), the IUT communicates correctly with the LT (new APT).

5.3.2.2.3 Network Handover

TP/MT/RRC/NH/CA-000	Reference: TS 101 761-2 [1], clause 5.2.1.4 Initial condition: MT_Associated_to_AP. Network support available. Check, that: after receiving RLC_HO_INFO_DISTRIBUTION message, the IUT sends back a RLC_HO_INFO_DISTRIBUTION_ACK message and update its network token
TP/MT/RRC/NH/CA-001	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. The IUT (MT) has sent a RLC_HANDOVER_REQUEST message. Check, that: after receiving RLC_HANDOVER_ASSOCIATION message, the IUT initiates the exchange of link capabilities by sending its own link parameters to the LT (RLC_LINK_CAPABILITY message).
TP/MT/RRC/NH/CA-002	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. Network handover process is pending. The IUT (MT) has sent a RLC_LINK_CAPABILITY message. Check, that: after receiving the RLC_HO_LINK_CAPABILITY_ACK message and if network support was available, the IUT initiates the NW signalling process by sending a RLC_NW_SIGNALLING_HANDOVER message to the LT.
TP/MT/RRC/NH/CA-003	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. Network handover process is pending. The IUT (MT) has sent a RLC_LINK_CAPABILITY message. Check, that: after receiving the RLC_HO_LINK_CAPABILITY_ACK message indicating the selected encryption procedure and network support was not available, the IUT initiates the encryption process by sending a RLC_KEY_EXCHANGE_MT_1 message and a RLC_KEY_EXCHANGE_MT_2 message to the LT.
TP/MT/RRC/NH/CA-007	Reference: TS 101 761-2 [1], clause 5.2.1.3 Initial condition: MT_Associated_to_AP. Check, that: after completion of a network handover (RLC_NETWORK_HANDOVER_COMPLETE message is received), the IUT communicates correctly with the LT (new AP).

5.3.2.3 Power saving

5.3.2.3.1 Power saving - Sleep

TP/MT/RRC/SL/CA-000	Reference: TS 101 761-2 [1], clause 5.2.6.2 Initial condition: Active_Mode. Check, that: the IUT sends a relevant RLC_SLEEP message, when it wishes to enter low power consumption mode.

5.3.2.3.2 Power saving - Alive

5.3.2.3.2.1 Mobile originated

TP/MT/RRC/AL/CA-000	Reference: TS 101 761-2 [1], clause 5.2.4 Initial condition: Active_Mode. Check, that: the IUT sends a relevant RLC_MT_ALIVE message, when a long period time has elapsed without transmission and it wishes to remain associated.

5.3.2.3.2.2 Mobile terminated

TP/MT/RRC/AL/CA-001	Reference: TS 101 761-2, clause 5.2.4 Initial condition: Active_Mode. Check, that: after receiving a RLC_MT_ALIVE_REQUEST message, the IUT acknowledges by sending a relevant RLC_MT_ALIVE_REQUEST_ACK message.

5.3.2.3.3 Power saving - Absence

TP/MT/RRC/AB/CA-000	Reference: TS 101 761-2 [1], clause 5.2.5 Initial condition: Active_Mode. Check, that: when the IUT has nothing to transmit in the up-link stream for a "long" time interval, it sends a relevant RLC_MT_ABSENCE message specifying the duration of its absence.
TP/MT/RRC/AB/CA-001	Reference: TS 101 761-2 [1], clause 5.2.5 Initial condition: Active_Mode. No DUC established. Check, that: when the duration time specified in the RLC_MT_ABSENCE has elapsed, the IUT indicates its presence by sending a relevant RLC_MT_ALIVE message.

5.3.2.4 Unsupported messages

TP/MT/RRC/UM/CA-000	Reference: TS 101 761-2 [1], clause 7 Initial condition: MT_Associated_to_AP. Check, that: after receiving an unsupported RRC message (100 ≤ pdu type ≥ 127), the IUT replies by sending a relevant RLC_NO_SUPPORT message.

5.3.2.5 Timers and repetitions of messages

TP/MT/RRC/TI-000	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for an RRC procedure initiated by the IUT and when no reply was received, the IUT re-transmits the same message.
TP/MT/RRC/TI-001	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for an RRC procedure initiated by the IUT and when each time no reply was received, the IUT re-transmits the same message 4 times and stops the initiated procedure.

5.3.3 DLC user connection

5.3.3.1 Centralized mode

5.3.3.1.1 Centralized mode - Set-up

5.3.3.1.1.1 Mobile originated

TP/MT/DUC/CS/CA-000	Reference: TS 101 761-2 [1], clause 5.3.1.2 Initial condition: MT_Associated_to_AP. Check, that: when the IUT wishes to establish a DLC user connection, it sends a relevant RLC_SETUP message.
TP/MT/DUC/CS/CA-001	Reference: TS 101 761-2 [1], clause 5.3.1.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_SETUP message. Check, that: after receiving the RLC_CONNECT message, the IUT replies to the LT with a RLC_CONNECT_ACK message and considers the DLC user connection as established.

5.3.3.1.1.2 Mobile terminated

TP/MT/DUC/CS/CA-002	Reference: TS 101 761-2 [1], clause 5.3.1.1 Initial condition: MT_Associated_to_AP. Check, that: after receiving the RLC_SETUP message, the IUT replies to the LT with a RLC_CONNECT message.
TP/MT/DUC/CS/CA-003	Reference: TS 101 761-2 [1], clause 5.3.1.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_CONNECT message. Check, that: after receiving the RLC_CONNECT_ACK message, the IUT considers the DLC user connection as established.

5.3.3.1.2 Centralized mode - Release

5.3.3.1.2.1 Mobile originated

TP/MT/DUC/CR/CA-000	Reference: TS 101 761-2 [1], clause 5.3.2.2 Initial condition: DUC established. Check, that: when the IUT wishes to release a DLC user connection, it sends a relevant RLC_RELEASE message.

5.3.3.1.2.2 Mobile terminated

TP/MT/DUC/CR/CA-001	Reference: TS 101 761-2 [1], clause 5.3.2.1 Initial condition: DUC established. Check, that: after receiving the RLC_RELEASE message, the IUT replies to the LT with a RLC_RELEASE_ACK message and considers the DLC user connection as released.

5.3.3.1.3 Centralized mode - Modify

5.3.3.1.3.1 Mobile originated

TP/MT/DUC/CM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.3.2 Initial condition: DUC established. Check, that: when the IUT wishes to modify a DLC user connection, it sends a relevant RLC_MODIFY_REQ message.
TP/MT/DUC/CM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.3.2 Initial condition: DUC established. IUT has sent a RLC_MODIFY_REQ message. Check, that: after receiving the RLC_MODIFY message, the IUT replies to the LT with a RLC_MODIFY_ACK message and considers the DLC user connection as modified.

5.3.3.1.3.2 Mobile terminated

TP/MT/DUC/CM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.3.1 Initial condition: DUC established. Check, that: after receiving the RLC_MODIFY_REQ message, the IUT replies to the LT with a RLC_MODIFY message.
TP/MT/DUC/CM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.3.1 Initial condition: DUC established. IUT has sent a RLC_MODIFY message. Check, that: after receiving the RLC_MODIFY_ACK message, the IUT considers the DLC user connection as modified.

5.3.3.1.4 Centralized mode - Reset

5.3.3.1.4.1 Mobile originated

TP/MT/DUC/CT/CA-000	Reference: TS 101 761-2 [1], clause 5.3.4.2 Initial condition: DUC established. Check, that: when the IUT wishes to reset a DLC user connection, it sends a relevant RLC_RESET message.

5.3.3.1.4.2 Mobile terminated

TP/MT/DUC/CT/CA-001	Reference: TS 101 761-2 [1], clause 5.3.4.1 Initial condition: DUC established. Check, that: after receiving the RLC_RESET message, the IUT replies to the LT with a RLC_RESET_ACK message and considers the DLC user connection as established and restarted.

5.3.3.2 Direct Mode

5.3.3.2.1 Direct Mode - Set-up

5.3.3.2.1.1 Mobile originated

TP/MT/DUC/DS/CA-000	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to establish a DM DLC user connection, it sends a relevant RLC_DM_SETUP message to the AP/CC.
TP/MT/DUC/DS/CA-001	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_SETUP message to the AP/CC. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT message, the IUT replies to the LT with a RLC_DM_CONNECT_ACK message.
TP/MT/DUC/DS/CA-002	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_ACK message to the AP/CC. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_COMPLETE message, the IUT replies to the LT with a RLC_DM_CONNECT_COMPLETE_ACK message.
TP/MT/DUC/DS/CA-003	Reference: TS 101 761-2 [1], clause 5.3.7.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE_ACK message to the AP/CC. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM setup procedure, the U-plane is established between the MT1 and the MT2.

5.3.3.2.1.2 Mobile terminated

TP/MT/DUC/DS/CA-004	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_SETUP message from AP/CC, the IUT replies with a RLC_DM_CONNECT message.
TP/MT/DUC/DS/CA-005	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT message to AP/CC. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_ACK message, the IUT awaits a relevant RLC_DM_CONNECT_COMPLETE message.
TP/MT/DUC/DS/CA-006	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. IUT is awaiting a RLC_DM_CONNECT_COMPLETE message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_COMPLETE message, the IUT sends a relevant RLC_DM_CONNECT_COMPLETE_ACK message.
TP/MT/DUC/DS/CA-007	Reference: TS 101 761-2 [1], clause 5.3.7.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM setup procedure, the U-plane is established between the MT1 and the MT2.

5.3.3.2.2 Direct Mode - Release

5.3.3.2.2.1 Mobile originated

TP/MT/DUC/DR/CA-000	Reference: TS 101 761-2 [1], clause 5.3.8.2 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to release a DM DLC user connection, it sends a relevant RLC_DM_RELEASE message.
TP/MT/DUC/DR/CA-001	Reference: TS 101 761-2 [1], clause 5.3.8.2 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE message to the MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE_ACK message, the IUT considers the DM DLC user connection as released.

5.3.3.2.2.2 Mobile terminated

TP/MT/DUC/DR/CA-002	Reference: TS 101 761-2 [1], clause 5.3.8.1 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE message, the IUT sends a relevant RLC_DM_RELEASE_ACK message.
TP/MT/DUC/DR/CA-003	Reference: TS 101 761-2 [1], clause 5.3.8.1 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM release procedure, the U-plane is released between the MT1 and the MT2.

5.3.3.2.3 Direct Mode - Modify

5.3.3.2.3.1 Mobile originated

TP/MT/DUC/DM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to modify a DM DLC user connection, it sends a relevant RLC_DM_MODIFY_REQ message.
TP/MT/DUC/DM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_REQ message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY message, the IUT replies to the LT with a RLC_DM_MODIFY_ACK message.
TP/MT/DUC/DM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established. IUT has sent an RLC_DM_MODIFY_ACKmessage. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_COMPLETE message, the IUT replies with a relevant RLC_DM_MODIFY_COMPLETE_ACK message.
TP/MT/DUC/DM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.9.2 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM_MODIFY procedure, the IUT considers the DM DLC user connection as modified.

5.3.3.2.3.2 Mobile terminated

TP/MT/DUC/DM/CA-004	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_REQ message, the IUT replies to the LT with a RLC_DM_MODIFY message.
TP/MT/DUC/DM/CA-005	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_ACK message, the IUT awaits a relevant RLC_DM_MODIFY_COMPLETE message.
TP/MT/DUC/DM/CA-006	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_COMPLETE message from, the IUT replies to the LT with a relevant RLC_DM_MODIFY_COMPLETE_ACK message.
TP/MT/DUC/DM/CA-007	Reference: TS 101 761-2 [1], clause 5.3.9.1 Initial condition: DM DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM_MODIFY procedure, the IUT considers the DM DLC user connection as modified.

5.3.3.2.4 Relay Set-up

5.3.3.2.4.1 Mobile originated

TP/MT/DUC/RS/CA-000	Reference: TS 101 761-2 [1], clause 5.3.7.3 Initial condition: MT_Associated_to_AP. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to establish a Relay DM DLC user connection, it sends a relevant RLC_DM_RELAY_SETUP message to the AP/CC.
TP/MT/DUC/RS/CA-001	Reference: TS 101 761-2 [1], clause 5.3.7.3, 5.3.7.2. Initial condition: MT_Associated_to_AP. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_SETUP message from AP/CC, the IUT replies with a RLC_DM_CONNECT message.
TP/MT/DUC/RS/CA-002	Reference: TS 101 761-2 [1], clause 5.3.7.3, 5.3.7.2. Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT message to AP/CC. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_ACK message, the IUT awaits a relevant RLC_DM_CONNECT_COMPLETE message.
TP/MT/DUC/RS/CA-003	Reference: TS 101 761-2 [1], clause 5.3.7.3, 5.3.7.2. Initial condition: MT_Associated_to_AP. IUT is awaiting a RLC_DM_CONNECT_COMPLETE message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_CONNECT_COMPLETE message, the IUT sends a relevant RLC_DM_CONNECT_COMPLETE_ACK message.
TP/MT/DUC/RS/CA-004	Reference: TS 101 761-2 [1], clause 5.3.7.3, 5.3.7.2. Initial condition: MT_Associated_to_AP. IUT has sent a RLC_DM_CONNECT_COMPLETE_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after the IUT has received the RLC_DM_RELAY_SETUP_ACK message, two U-planes are established. One is established between the MT1 and AP/CC and another one is established between the MT2 and AP/CC.

5.3.3.2.5 Relay Release

5.3.3.2.5.1 Mobile originated

TP/MT/DUC/RR/CA-000	Reference: TS 101 761-2 [1], clause 5.3.8.3 Initial condition: DM relay DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to release a DM relay DLC user connection, it sends a relevant RLC_DM_RELAY_RELEASE message.
TP/MT/DUC/RR/CA-001	Reference: TS 101 761-2 [1], clause 5.3.8.3, 5.3.8.1. Initial condition: DM relay DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELEASE message, the IUT sends a relevant RLC_DM_RELEASE_ACK message.
TP/MT/DUC/RR/CA-002	Reference: TS 101 761-2 [1], clause 5.3.8.3, 5.3.8.1. Initial condition: DM relay DUC established between MT1 and MT2. IUT has sent a RLC_DM_RELEASE_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELAY_RELEASE_ACK message, the two DM relay DLC user connections are released.

5.3.3.2.6 Relay Modify

5.3.3.2.6.1 Mobile originated

TP/MT/DUC/RM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.9.3. Initial condition: DM relay DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to modify a DM relay DLC user connection, it sends a relevant RLC_DM_RELAY_MODIFY message.
TP/MT/DUC/RM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.9.3, 5.3.9.1 Initial condition: DM relay DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_REQ message, the IUT replies to the LT with a RLC_DM_MODIFY message.
TP/MT/DUC/RM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.9.3, 5.3.9.1 Initial condition: DM relay DUC established. IUT has sent a RLC_DM_MODIFY message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_ACK message, the IUT awaits a relevant RLC_DM_MODIFY_COMPLETE message.
TP/MT/DUC/RM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.9.3, 5.3.9.1 Initial condition: DM relay DUC established. IUT has sent a RLC_DM_MODIFY message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_MODIFY_COMPLETE message, the IUT replies to the LT with a relevant RLC_DM_MODIFY_COMPLETE_ACK message.
TP/MT/DUC/RM/CA-004	Reference: TS 101 761-2 [1], clause 5.3.9.3, 5.3.9.1 Initial condition: DM relay DUC established. IUT has sent a RLC_DM_MODIFY_COMPLETE_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RELAY_MODIFY_ACK message, the IUT considers the two DM relay DLC user connections as modified.

5.3.3.2.7 Direct Mode - Reset

5.3.3.2.7.1 Mobile originated

TP/MT/DUC/DT/CA-000	Reference: TS 101 761-2 [1], clause 5.3.10.2 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: when the IUT wishes to reset a DM DLC user connection, it sends a relevant RLC_DM_RESET message.
TP/MT/DUC/DT/CA-001	Reference: TS 101 761-2 [1], clause 5.3.10.2 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RESET message. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RESET_ACK message, the IUT considers the DM DLC user connection as established and restarted.

5.3.3.2.7.2 Mobile terminated

TP/MT/DUC/DT/CA-002	Reference: TS 101 761-2 [1], clause 5.3.10.1 Initial condition: DM DUC established between MT1 and MT2. Only for IUT that support the Direct Mode procedures. Check, that: after receiving the RLC_DM_RESET message, the IUT sends a relevant RLC_DM_RESET_ACK message.
TP/MT/DUC/DT/CA-003	Reference: TS 101 761-2 [1], clause 5.3.10.1 Initial condition: DM DUC established between MT1 and MT2. IUT has sent a RLC_DM_RESET_ACK message. Only for IUT that support the Direct Mode procedures. Check, that: after completion of the DM reset procedure, the U-plane is established and restarted between the MT1 and the MT2.

5.3.3.3 Test mode

5.3.3.3.1 Test mode - Set-up

5.3.3.3.1.1 Mobile originated

TP/MT/DUC/TM/CA-000	Reference: TS 101 761-2 [1], clause 5.3.13.2 Initial condition: MT_Associated_to_AP. Check, that: when the IUT wishes to establish a DLC user connection, it sends a relevant RLC_TEST_MODE_SETUP message.
TP/MT/DUC/TM/CA-001	Reference: TS 101 761-2 [1], clause 5.3.13.2 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_TEST_MODE_SETUP message. Check, that: after receiving the RLC_TEST_MODE_CONNECT message, the IUT replies to the LT with a RLC_TEST_MODE_CONNECT_ACK message and considers the test mode connection as established.

5.3.3.3.1.2 Mobile terminated

TP/MT/DUC/TM/CA-002	Reference: TS 101 761-2 [1], clause 5.3.13.1 Initial condition: MT_Associated_to_AP. Check, that: after receiving the RLC_TEST_MODE_SETUP message, the IUT replies to the LT with a RLC_TEST_MODE_CONNECT message.
TP/MT/DUC/TM/CA-003	Reference: TS 101 761-2 [1], clause 5.3.13.1 Initial condition: MT_Associated_to_AP. IUT has sent a RLC_TEST_MODE_CONNECT message. Check, that: after receiving the RLC_TEST_MODE_CONNECT_ACK message, the IUT considers the test mode connection as established.

5.3.4 Unsupported messages

TP/MT/DUC/UM/CA-000	Reference: TS 101 761-2 [1], clause 7 Initial condition: MT_Associated_to_AP. Check, that: after receiving an unsupported DUC message (160 ≤ pdu type), the IUT replies by sending a relevant RLC_NO_SUPPORT message.

5.3.5 Timers and repetitions of messages

TP/MT/DUC/TI-000	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for a DUC procedure initiated by the IUT and when no reply was received, the IUT re-transmits the same message.
TP/MT/DUC/TI-001	Reference: TS 101 761-2 [1], clause 6 Initial condition: MT_Associated_to_AP. Check, that: for a DUC procedure initiated by the IUT and when each time no reply was received, the IUT re-transmits the same message 4 times and stops the initiated procedure.
TP/MT/DUC/TI-002	Reference: TS 101 761-2 [1], clause 6 Only for MT that implement RLC_PROCEEDING procedure. Initial condition: MT_Associated_to_AP. Check, that: for a DUC procedure initiated by the LT that uses either a T_medium timer or T_long timer, the IUT replies with a relevant RLC_PROCEEDING message as an acknowledgement for the received message.

Annex A (informative): Bibliography

- ETSI TS 101 823-1-1: "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Conformance testing for the Data Link Control (DLC) layer; Part 1: Basic data transport functions; Sub-part 1: Protocol Implementation Conformance Statement (PICS) proforma".

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