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TECHNICAL SPECIFICATION

**Core Network and Interoperability Testing (INT);
5G NGAP Conformance Testing for the N2 interface;
(3GPP™ Release 16);
Part 1: Protocol Implementation
Conformance Statement (PICS)**

Reference

DTS/INT-00197

Keywords

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Core Network and Interoperability Testing (INT).

The present document is part 1 of a multi-part deliverable covering the test specifications for the 5G NGAP Conformance Testing for the N2 interface, as identified below:

- Part 1: "Protocol Implementation Conformance Statement (PICS)";**
- Part 2: "Test Suite Structure (TSS) and Test Purposes (TP)";
- Part 3: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) pro forma specification".

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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Introduction

To evaluate protocol conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called a Protocol Implementation Conformance Statement (PICS).

1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) pro forma for the test specification for the NGAP protocol on the N2 interface as specified in ETSI TS 138 413 [1] in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [2] and ETSI ETS 300 406 [i.2].

The supplier of a protocol implementation which is claimed to conform to ETSI TS 138 413 [1] is required to complete a copy of the PICS pro forma provided in annex A of the present document and is required to provide the information necessary to identify both the supplier and the implementation.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

- [1] [ETSI TS 138 413 \(V16.14.0\)](#): "5G; NG-RAN; NG Application Protocol (NGAP) (3GPP TS 38.413 version 16.14.0 Release 16)".
- [2] [ISO/IEC 9646-7](#): "Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 7: Implementation Conformance Statements".
- [3] [ETSI TS 123 501 \(V16.6.0\)](#): "5G; System architecture for the 5G System (5GS) (3GPP TS 23.501 version 16.6.0 Release 16)".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] [ISO/IEC 9646-1](#): "Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 1: General concepts".
- [i.2] [ETSI ETS 300 406](#): "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the terms given in ETSI TS 138 413 [1] and the following apply:

PICS pro forma: document, in the form of a questionnaire, designed by the protocol specifier or conformance test suite specifier, which, when completed for an OSI implementation or system, becomes the PICS

NOTE: See ISO/IEC 9646-1 [i.1].

Protocol Implementation Conformance Statement (PICS): statement made by the supplier of an Open Systems Interconnection (OSI) implementation or system, stating which capabilities have been implemented for a given OSI protocol

NOTE: See ISO/IEC 9646-1 [i.1].

static conformance review: review of the extent to which the static conformance requirements are met by the IUT, accomplished by comparing the PICS with the static conformance requirements expressed in the relevant standard(s)

NOTE: See ISO/IEC 9646-1 [i.1].

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in ETSI TS 138 413 [1] apply.

4 Conformance

A PICS pro forma which conforms to this PICS pro forma specification shall be technically equivalent to annex A, and shall preserve the numbering and ordering of the items in annex A.

A PICS which conforms to this PICS pro forma specification shall:

- a) describe an implementation which claims to conform to ETSI TS 138 413 [1];
- b) be a conforming ICS pro forma which has been completed in accordance with the instructions for completion given in clause A.1;
- c) include the information necessary to uniquely identify both the supplier and the implementation.

Annex A (normative): PICS pro forma

A.1 The right to copy

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the PICS pro forma in this annex so that it can be used for its intended purposes and may further publish the completed PICS pro forma.

A.2 Guidance for completing the ICS pro forma

A.2.1 Purposes and structure

The purpose of this PICS pro forma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in relevant specifications may provide information about the implementation in a standardized manner.

The PICS pro forma is subdivided into clauses for the following categories of information:

- instructions for completing the PICS pro forma;
- identification of the implementation;
- identification of the protocol;
- PICS pro forma tables.

EXAMPLE: Major capabilities, etc.

A.2.2 Abbreviations and conventions

This annex does not reflect dynamic conformance requirements but static ones. In particular, a condition for support of a PDU parameter does not reflect requirements about the syntax of the PDU (i.e. the presence of a parameter) but the capability of the implementation to support the parameter.

In the sending direction, the support of a parameter means that the implementation is able to send this parameter (but it does not mean that the implementation always sends it).

In the receiving direction, it means that the implementation supports the whole semantic of the parameter that is described in the related protocol specification.

As a consequence, PDU parameter tables in this annex are not the same as the tables describing the syntax of a PDU in the reference specification.

The PICS pro forma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7.

Item column

The item column contains a number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Reference column

The reference column gives reference to the relevant sections in core specifications.

Status column

The various status used in this annex are in accordance with the rules in table A.1.

Table A.1: Key to status codes

Status code	Status name	Meaning
m	mandatory	The capability shall be supported. It is a static view of the fact that the conformance requirements related to the capability in the reference specification are mandatory requirements. This does not mean that a given behaviour shall always be observed (this would be a dynamic view), but that it shall be observed when the implementation is placed in conditions where the conformance requirements from the reference specification compel it to do so. For instance, if the support for a parameter in a sent PDU is mandatory, it does not mean that it shall always be present, but that it shall be present according to the description of the behaviour in the reference specification (dynamic conformance requirement).
o	optional	The capability may or may not be supported. It is an implementation choice.
n/a	not applicable	It is impossible to use the capability. No answer in the support column is required.
c.<integer>	conditional	The requirement on the capability ("m", "o", "n/a") depends on the support of other optional or conditional items. <integer> is the identifier of the conditional expression.
o.<integer>	qualified optional	For mutually exclusive or selectable options from a set. <integer> is the identifier of the group of options, and the logic of selection of the options.

Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7, are used for the support column:

- Y or y supported by the implementation.
- N or n not supported by the implementation.
- N/A, n/a or - no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional status).

References to items

For each possible item answer (answer in the support column) within the PICS pro forma there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table.

EXAMPLE: A.3/4 is the reference to the answer of item 4 in table A.3.

A.2.3 Instructions for completing the PICS pro forma

The supplier of the implementation may complete the PICS pro forma in each of the spaces provided. More detailed instructions are given at the beginning of the different clauses of the PICS pro forma.

A.3 Identification of the Network Equipment

A.3.1 Introduction

Identification of the Network Equipment should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the PICS should be named as the contact person.

A.3.2 Date of the statement

.....

A.3.3 Network Equipment Under Test identification

Name:

.....

.....

Hardware configuration:

.....

.....

.....

Software configuration:

.....

.....

.....

A.3.4 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....
.....
.....

A.3.5 Client

Name:

.....

Address:

.....
.....
.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....
.....
.....

A.3.6 PICS contact person

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....

A.4 Identification of the protocol

This PICS pro forma applies to the following specification:

- ETSI TS 138 413.

A.5 Global statement of conformance

The implementation described in this PICS meets all the mandatory requirements of the referenced standard?

Yes

No

NOTE: Answering "No" to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming. Explanations may be entered in the comments field at the bottom of each table or on attached pages.

In the tabulations which follow, all references are to ETSI TS 138 413 unless another numbered reference is explicitly indicated.

A.6 PICS pro forma tables for the N2 interface

A.6.1 Roles

Table A.2: Roles for the NGAP interface

Item	Roles	Reference	Status	Support
1	NG-RAN node		o.1	
1.1	gNB		o.2	
1.2	ng-eNB		o.2	
2	AMF		o.1	
o.1:	At least one of these roles shall be supported.			
o.2:	At least one of these NG-RAN node roles shall be supported.			

A.6.2 PICS Items for NG-RAN nodes

A.6.2.1 System Capabilities for NG-RAN nodes

Table A.3 need only to be completed for NG-RAN node implementations, where item A.2/1 above is supported.

Table A.3: System Capabilities for gNB

Item	Does the IUT support ...	Reference	Status	Support
1	PDU Session Management procedures?	8.2	m	
1.1	procedures on receipt of PDU SESSION RESOURCE SETUP REQUEST messages?	8.2.1	m	
1.1.1	interruption of the PDU Session Resource Setup procedure if a handover becomes necessary?	8.2.1.2	o	
1.2	procedures on receipt of PDU SESSION RESOURCE RELEASE COMMAND messages?	8.2.2	m	
1.3	procedures on receipt of PDU SESSION RESOURCE MODIFY REQUEST messages?	8.2.3	m	
1.3.1	interruption of the PDU Session Resource Modify procedure if a handover becomes necessary?	8.2.3.2	o	
1.4	procedures for sending PDU SESSION RESOURCE NOTIFY messages?	8.2.4	m	
1.4.1	inclusion of alternative fulfillable QoS parameters sets in the <i>Current QoS Parameters Set Index</i> IE for QoS flows indicated as not fulfilled anymore?	8.2.4.2	o	
1.5	procedures for sending PDU SESSION RESOURCE MODIFY INDICATION messages?	8.2.5	m	
2	UE Context Management procedures?	8.3	m	
2.1	procedures on receipt of INITIAL CONTEXT SETUP REQUEST messages?	8.3.1	m	
2.1.1	emergency service fallback related mobility actions on receipt of an <i>Emergency Fallback Indicator</i> IE included in the INITIAL CONTEXT SETUP REQUEST message?	8.3.1.2 ETSI TS 123 501, 5.16.4.11	o	
2.2	procedures for sending UE CONTEXT RELEASE REQUEST messages?	8.3.2	m	
2.3	procedures on receipt of UE CONTEXT RELEASE COMMAND messages?	8.3.3	m	
2.4	procedures on receipt of UE CONTEXT MODIFICATION REQUEST messages?	8.3.4	m	
2.4.1	emergency service fallback related mobility actions on receipt of an <i>Emergency Fallback Indicator</i> IE included in the UE CONTEXT MODIFICATION REQUEST message?	8.3.4.2 ETSI TS 123 501, 5.16.4.11	o	
2.5	procedures for sending RRC INACTIVE TRANSITION REPORT messages?	8.3.5	m	
2.6	procedures on receipt of CONNECTION ESTABLISHMENT INDICATION messages?	8.3.6	c.1	
2.7	procedures on receipt of AMF CP RELOCATION INDICATION messages?	8.3.7	c.1	
2.7.1	initiation of NAS Non Delivery Indication procedure(s) in case that the UE's connection is to be relocated to another NG-RAN node?	8.3.7.2	c.2	
2.8	procedures for sending RAN CP RELOCATION INDICATION messages?	8.3.8	c.1	
2.9	procedures for sending RETRIEVE UE INFORMATION messages?	8.3.9	c.1	
2.10	procedures on receipt of UE INFORMATION TRANSFER messages?	8.3.10	c.1	
2.11	procedures for sending UE CONTEXT SUSPEND REQUEST messages?	8.3.11	c.1	
2.12	procedures for sending UE CONTEXT RESUME REQUEST messages?	8.3.12	c.1	
3	UE Mobility Management procedures?	8.4	m	
3.1	procedures for sending HANDOVER REQUIRED messages?	8.4.1	m	
3.1.1	initiation of the Handover Cancel procedure if no HANDOVER COMMAND message is received?	8.4.1.3	o	
3.2	procedures on receipt of HANDOVER REQUEST messages?	8.4.2	m	
3.2.1	inclusion of the <i>DL Forwarding UP TNL Information</i> IE in the HANDOVER REQUEST ACKNOWLEDGE message in case of acceptance of downlink data forwarding during intra-system handover?	8.4.2.2	o	

Item	Does the IUT support ...	Reference	Status	Support
3.2.2	inclusion of the <i>UL Forwarding UP TNL Information</i> IE in the HANDOVER REQUEST ACKNOWLEDGE message in case of acceptance of uplink data forwarding during intra-system handover?	8.4.2.2	o	
3.2.3	initiation of the requested location reporting functionality procedure after receiving a <i>Location Reporting Request Type</i> IE in the HANDOVER REQUEST message?	8.4.2.2, 8.12, 9.3.1.65	o	
3.3	procedures for sending HANDOVER NOTIFY messages?	8.4.3	m	
3.4	procedures for sending PATH SWITCH REQUEST messages?	8.4.4	m	
3.5	procedures for sending HANDOVER CANCEL messages?	8.4.5	m	
3.6	procedures for sending UPLINK RAN STATUS TRANSFER messages?	8.4.6	m	
3.6.1	inclusion of missing and received uplink SDUs in the <i>Receive Status of UL PDCP SDUs</i> IE?	8.4.6.2	o	
3.7	procedures on receipt of DOWNLINK RAN STATUS TRANSFER messages?	8.4.7	m	
3.8	procedures on receipt of HANDOVER SUCCESS messages?	8.4.8	m	
3.9	procedures for sending UPLINK RAN EARLY STATUS TRANSFER messages?	8.4.9	m	
3.10	procedures on receipt of DOWNLINK RAN EARLY STATUS TRANSFER messages?	8.4.10	m	
4	Paging procedures?	8.5	m	
4.1	procedures on receipt of PAGING messages?	8.5.1	m	
5	Transport of NAS Messages procedures?	8.6	m	
5.1	procedures for sending INITIAL UE MESSAGE messages?	8.6.1	m	
5.2	procedures on receipt of DOWNLINK NAS TRANSPORT messages?	8.6.2	m	
5.3	procedures for sending UPLINK NAS TRANSPORT messages?	8.6.3	m	
5.4	procedures for sending NAS NON DELIVERY INDICATION messages?	8.6.4	m	
5.5	procedures on receipt of REROUTE NAS REQUEST messages?	8.6.5	m	
6	Interface Management procedures?	8.7	m	
6.1	procedures for sending NG SETUP REQUEST messages?	8.7.1	m	
6.2	procedures for sending RAN CONFIGURATION UPDATE messages?	8.7.2	m	
6.3	procedures on receipt of AMF CONFIGURATION UPDATE messages?	8.7.3	m	
6.4	procedures on receipt of NG RESET messages?	8.7.4	m	
6.5	procedures on receipt of ERROR INDICATION messages?	8.7.5	m	
6.6	procedures on receipt of AMF STATUS INDICATION messages?	8.7.6	m	
6.7	procedures on receipt of OVERLOAD START messages?	8.7.7	m	
6.8	procedures on receipt of OVERLOAD STOP messages?	8.7.8	m	
7	Configuration Transfer procedures?	8.8	m	
7.1	procedures for sending UPLINK RAN CONFIGURATION TRANSFER messages?	8.8.1	m	
7.2	procedures on receipt of DOWNLINK RAN CONFIGURATION TRANSFER messages?	8.8.2	m	
8	Warning Message Transmission procedures?	8.9	m	
8.1	procedures on receipt of WRITE-REPLACE WARNING REQUEST messages?	8.9.1	m	
8.2	procedures on receipt of PWS CANCEL REQUEST messages?	8.9.2	m	
8.3	procedures for sending PWS RESTART INDICATION messages?	8.9.3	m	

Item	Does the IUT support ...	Reference	Status	Support
8.4	procedures for sending PWS FAILURE INDICATION messages?	8.9.4	m	
9	NRPPa Transport procedures?	8.10	m	
9.1	procedures on receipt of DOWNLINK UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.1	m	
9.2	procedures for sending UPLINK UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.2	m	
9.3	procedures on receipt of DOWNLINK NON UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.3	m	
9.4	procedures for sending UPLINK NON UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.4	m	
10	Trace procedures	8.11	m	
10.1	procedures on receipt of TRACE START messages?	8.11.1	m	
10.2	procedures for sending TRACE FAILURE INDICATION messages?	8.11.2	m	
10.3	procedures on receipt of DEACTIVATE TRACE messages?	8.11.3	m	
10.4	procedures for sending CELL TRAFFIC TRACE messages?	8.11.4	m	
11	Location Reporting procedures?	8.12	m	
11.1	procedures on receipt of LOCATION REPORTING CONTROL messages?	8.12.1	m	
11.2	procedures for sending LOCATION REPORTING FAILURE INDICATION messages?	8.12.2	m	
11.3	procedures for sending LOCATION REPORT messages?	8.12.3	m	
12	UE TNLA Binding procedures?	8.13	m	
12.1	procedures on receipt of UE TNLA BINDING RELEASE REQUEST messages?	8.13.1	m	
13	UE Radio Capability Management procedures?	8.14	m	
13.1	procedures for sending UE RADIO CAPABILITY INFO INDICATION messages?	8.14.1	m	
13.1.1	inclusion of paging specific UE radio capability information in the <i>UE Radio Capability for Paging IE</i> ?	8.14.1.2	o	
13.2	procedures on receipt of UE RADIO CAPABILITY CHECK REQUEST messages?	8.14.2	m	
13.3	procedures for sending UE RADIO CAPABILITY ID MAPPING REQUEST messages?	8.14.3	m	
14	Data Usage Reporting procedures?	8.15	m	
14.1	procedures for sending SECONDARY RAT DATA USAGE REPORT messages?	8.15.1	m	
15	RIM Information Transfer procedures?	8.16	m	
15.1	procedures for sending UPLINK RIM INFORMATION TRANSFER messages?	8.16.1	m	
15.2	procedures on receipt of DOWNLINK RIM INFORMATION TRANSFER messages?	8.16.2	m	
16	handling of Unknown, Unforeseen and Erroneous Protocol Data?	10	m	
16.1	handling of transfer syntax errors?	10.2	m	
16.1.1	initiation of the Error Indication procedure on occurrence of a transfer syntax error?	10.2, 8.7.5	o	
16.2	handling of abstract syntax errors?	10.3	m	
16.3	handling of logical errors?	10.4	m	
16.4	error handling exceptions?	10.5	m	
16.5	procedures on receipt of erroneous local AP IDs?	10.6	m	
c.1:	m, if A.2/1.2 (ng-eNB) supported, else n/a.			
c.2:	o, if A.3/2.7 supported, else n/a.			

A.6.3 PICS Items for AMF

A.6.3.1 System Capabilities for AMF

Table A.4 need only to be completed for AMF implementations, where item A.2/2 above is supported.

Table A.4: System Capabilities for AMF

Item	Does the IUT support ...	Reference	Status	Support
1	PDU Session Management procedures?	8.2	m	
1.1	procedures for sending PDU SESSION RESOURCE SETUP REQUEST messages?	8.2.1	m	
1.1.1	inclusion of the <i>UE Aggregate Maximum Bit Rate</i> IE?	8.2.1.2	o	
1.2	procedures for sending PDU SESSION RESOURCE RELEASE COMMAND messages?	8.2.2	m	
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1.4	procedures on receipt of PDU SESSION RESOURCE NOTIFY messages?	8.2.4	m	
1.5	procedures on receipt of PDU SESSION RESOURCE MODIFY INDICATION messages?	8.2.5	m	
1.5.1	inclusion of the associated UL transport layer address(s) in the Additional NG-U UP TNL Information IE in the PDU Session Resource Modify Confirm Transfer IE in the PDU SESSION RESOURCE MODIFY CONFIRM message?	8.2.5.2	o	
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2.1	procedures for sending INITIAL CONTEXT SETUP REQUEST messages?	8.3.1	m	
2.2	procedures on receipt of UE CONTEXT RELEASE REQUEST messages?	8.3.2	m	
2.2.1	initiation of the UE Context Release procedure on receipt of a UE CONTEXT RELEASE REQUEST message?	8.3.2.2	o	
2.3	procedures for sending UE CONTEXT RELEASE COMMAND messages?	8.3.3	m	
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2.8	procedures on receipt of RAN CP RELOCATION INDICATION messages?	8.3.8	m	
2.9	procedures on receipt of RETRIEVE UE INFORMATION messages?	8.3.9	m	
2.10	procedures for sending UE INFORMATION TRANSFER messages?	8.3.10	m	
2.11	procedures on receipt of UE CONTEXT SUSPEND REQUEST messages?	8.3.11	m	
2.12	procedures on receipt of UE CONTEXT RESUME REQUEST messages?	8.3.12	m	
3	UE Mobility Management procedures?	8.4	m	
3.1	procedures on receipt of HANDOVER REQUIRED messages?	8.4.1	m	
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3.4	procedures on receipt of PATH SWITCH REQUEST messages?	8.4.4	m	
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Item	Does the IUT support ...	Reference	Status	Support
3.6	procedures on receipt of UPLINK RAN STATUS TRANSFER messages?	8.4.6	m	
3.7	procedures for sending DOWNLINK RAN STATUS TRANSFER messages?	8.4.7	m	
3.8	procedures for sending HANDOVER SUCCESS messages?	8.4.8	m	
3.9	procedures on receipt of UPLINK RAN EARLY STATUS TRANSFER messages?	8.4.9	m	
3.10	procedures for sending DOWNLINK RAN EARLY STATUS TRANSFER messages?	8.4.10	m	
4	Paging procedures?	8.5	m	
4.1	procedures for sending PAGING messages?	8.5.1	m	
5	Transport of NAS Messages procedures?	8.6	m	
5.1	procedures on receipt of INITIAL UE MESSAGE messages?	8.6.1	m	
5.2	procedures for sending DOWNLINK NAS TRANSPORT messages?	8.6.2	m	
5.3	procedures on receipt of UPLINK NAS TRANSPORT messages?	8.6.3	m	
5.4	procedures on receipt of NAS NON DELIVERY INDICATION messages?	8.6.4	m	
5.5	procedures for sending REROUTE NAS REQUEST messages?	8.6.5	m	
6	Interface Management procedures?	8.7	m	
6.1	procedures on receipt of NG SETUP REQUEST messages?	8.7.1	m	
6.1.1	rejection of an unacceptable NG SETUP REQUEST message with an NG SETUP FAILURE message?	8.7.1.3	o	
6.2	procedures on receipt of RAN CONFIGURATION UPDATE messages?	8.7.2	m	
6.3	procedures for sending AMF CONFIGURATION UPDATE messages?	8.7.3	m	
6.4	procedures for sending NG RESET messages?	8.7.4	m	
6.5	procedures for sending ERROR INDICATION messages?	8.7.5	m	
6.6	procedures for sending AMF STATUS INDICATION messages?	8.7.6	m	
6.7	procedures for sending OVERLOAD START messages?	8.7.7	m	
6.8	procedures for sending OVERLOAD STOP messages?	8.7.8	m	
7	Configuration Transfer procedures?	8.8	m	
7.1	procedures on receipt of UPLINK RAN CONFIGURATION TRANSFER messages?	8.8.1	m	
7.2	procedures for sending DOWNLINK RAN CONFIGURATION TRANSFER messages?	8.8.2	m	
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8.1	procedures for sending WRITE-REPLACE WARNING REQUEST messages?	8.9.1	m	
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8.3	procedures on receipt of PWS RESTART INDICATION messages?	8.9.3	m	
8.4	procedures on receipt of PWS FAILURE INDICATION messages?	8.9.4	m	
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9.1	procedures for sending DOWNLINK UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.1	m	
9.2	procedures on receipt of UPLINK UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.2	m	
9.3	procedures for sending DOWNLINK NON UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.3	m	
9.4	procedures on receipt of UPLINK NON UE ASSOCIATED NRPPA TRANSPORT messages?	8.10.2.4	m	
10	Trace procedures	8.11	m	
10.1	procedures for sending TRACE START messages?	8.11.1	m	

Item	Does the IUT support ...	Reference	Status	Support
10.2	procedures on receipt of TRACE FAILURE INDICATION messages?	8.11.2	m	
10.3	procedures for sending DEACTIVATE TRACE messages?	8.11.3	m	
10.4	procedures on receipt of CELL TRAFFIC TRACE messages?	8.11.4	m	
11	Location Reporting procedures?	8.12	m	
11.1	procedures for sending LOCATION REPORTING CONTROL messages?	8.12.1	m	
11.2	procedures on receipt of LOCATION REPORTING FAILURE INDICATION messages?	8.12.2	m	
11.3	procedures on receipt of LOCATION REPORT messages?	8.12.3	m	
12	UE TNLA Binding procedures?	8.13	m	
12.1	procedures for sending UE TNLA BINDING RELEASE REQUEST messages?	8.13.1	m	
13	UE Radio Capability Management procedures?	8.14	m	
13.1	procedures on receipt of UE RADIO CAPABILITY INFO INDICATION messages?	8.14.1	m	
13.2	procedures for sending UE RADIO CAPABILITY CHECK REQUEST messages?	8.14.2	m	
13.3	procedures on receipt of UE RADIO CAPABILITY ID MAPPING REQUEST messages?	8.14.3	m	
14	Data Usage Reporting procedures?	8.15	m	
14.1	procedures on receipt of SECONDARY RAT DATA USAGE REPORT messages?	8.15.1	m	
15	RIM Information Transfer procedures?	8.16	m	
15.1	procedures on receipt of UPLINK RIM INFORMATION TRANSFER messages?	8.16.1	m	
15.2	procedures for sending DOWNLINK RIM INFORMATION TRANSFER messages?	8.16.2	m	
16	handling of Unknown, Unforeseen and Erroneous Protocol Data?	10	m	
16.1	handling of transfer syntax errors?	10.2	m	
16.1.1	initiation of the Error Indication procedure on occurrence of a transfer syntax error?	10.2, 8.7.5	o	
16.2	handling of abstract syntax errors?	10.3	m	
16.3	handling of logical errors?	10.4	m	
16.4	error handling exceptions?	10.5	m	
16.5	procedures on receipt of erroneous local AP IDs?	10.6	m	

History

Document history		
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