ETSI TS 102 516 V3.1.1 (2008-02)
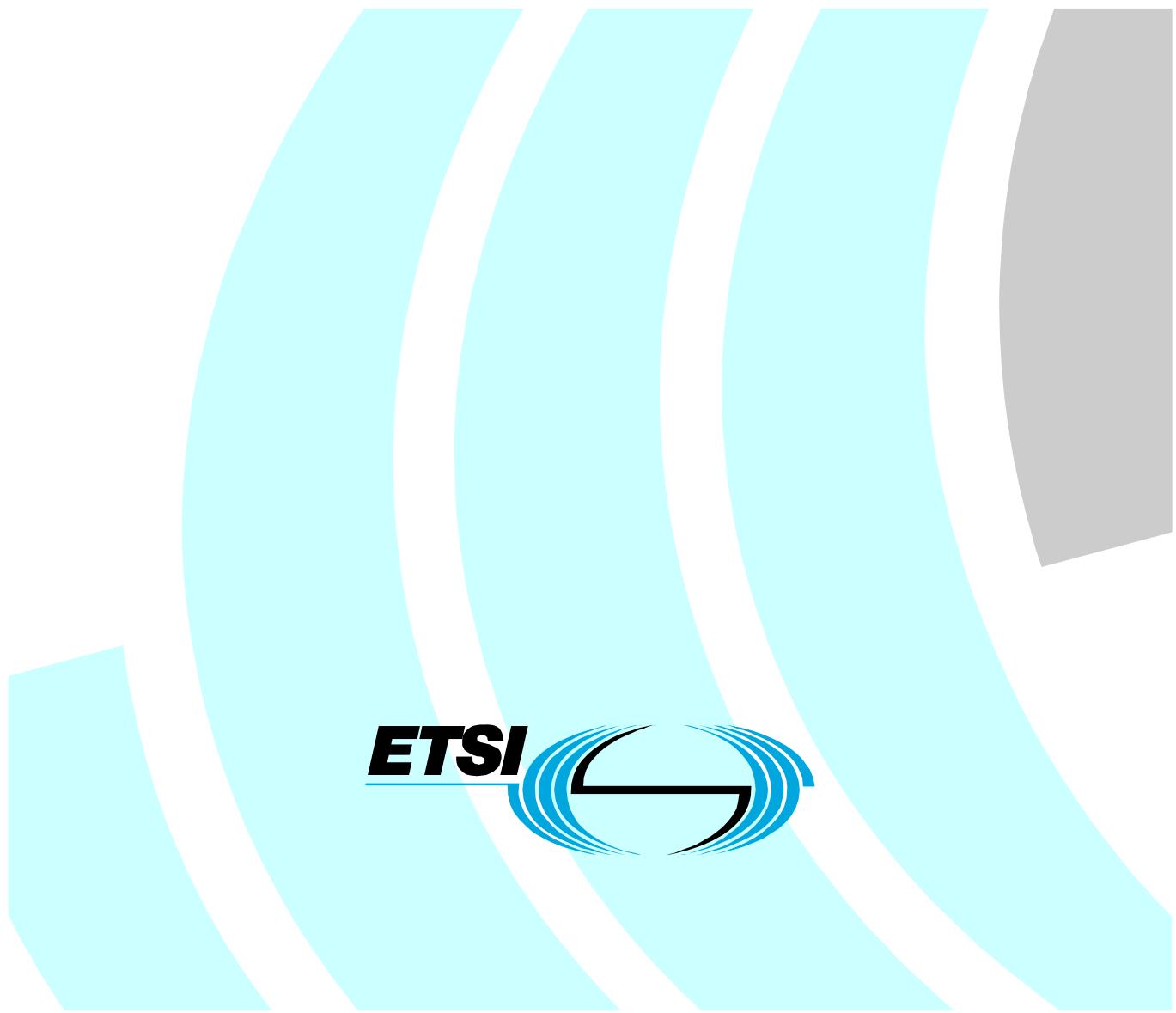
Technical Specification

Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT): IPv6 Core Protocol; Conformance Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma

ETSI

Reference

RTS/MTS-IPT-006[3]-IPv6-CorATS

Keywords

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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00   Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Methods for Testing and Specification (MTS).

1 Scope

The present document specifies the Abstract Test Suite (ATS) for the core functions of the Internet Protocol, Version 6, as defined in the specifications [11] through to [21]. The ATS is based on the requirements defined in the IPv6 requirements catalogue (TS 102 514 [2]) and theIPv6 test purposes (TS 102 515 [3]) and written according to the guidelines of TS 102 514 [2], ISO/IEC 9646-2 [5] and ETS 300 406 [9].

The objective of the present document is to provide a basis for conformance tests for IPv6 equipment giving a high probability of inter-operability between different manufacturer's IPv6 equipments.

Annex A provides the Tree and Tabular Combined Notation (TTCN-3) part of the ATS.

Annex B provides the Partial Protocol Implementation Extra Information for Testing (PIXIT) Proforma of the ATS.

Annex C provides the Protocol Conformance Test Report (PCTR) Proforma of the ATS.

2 References

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2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

[1]   ETSI TS 102 351: "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT); IPv6 Testing: Methodology and Framework".

[2]   ETSI TS 102 514: "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT): IPv6 Core Protocol; Requirements Catalogue".

[3]   ETSI TS 102 515: "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT): IPv6 Core Protocol; Conformance Test Suite Structure and Test Purposes (TSS&TP)".

[4]   ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".

[5]   ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".

[6]   ISO/IEC 9646-4: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 4: Test realization".

[7]   ISO/IEC 9646-5: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 5: Requirements on test laboratories and clients for the conformance assessment process".

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

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

[10]   ETSI ES 201 873-1: "Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 1: TTCN-3 Core Language".

[11]   IETF RFC 1981: "Path MTU Discovery for IP version 6".

[12]   IETF RFC 2374: "An IPv6 Aggregatable Global Unicast Address Format".

[13]   IETF RFC 2460: "Internet Protocol, Version 6 (IPv6) Specification".

[14]   IETF RFC 2461: "Neighbor Discovery for IP Version 6 (IPv6)".

[15]   IETF RFC 2462: "IPv6 Stateless Address Autoconfiguration".

[16]   IETF RFC 2463: "Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification".

[17]   IETF RFC 2675: "IPv6 Jumbograms".

[18]   IETF RFC 2711: "IPv6 Router Alert Option".

[19]   IETF RFC 2894: "Router Renumbering for IPv6".

[20]   IETF RFC 3484: "Default Address Selection for Internet Protocol version 6 (IPv6)".

[21]   IETF RFC 3513: "Internet Protocol Version 6 (IPv6) Addressing Architecture".

[22]   ETSI TS 102 594: "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT): IPv6 Security; Conformance Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma".

[23]   ETSI TS 102 596: "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT): IPv6 Mobility; Conformance Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma".

3   Definitions and abbreviations

3.1   Definitions

For the purposes of the present document, the following terms and definitions given in ISO/IEC 9646-1 [4] apply.

abstract test case

Abstract Test Method (ATM)

Abstract Test Suite (ATS)

Implementation Under Test (IUT)

Lower Tester (LT)

Test Purpose (TP)

3.2   Abbreviations

For the purposes of the present document, the following abbreviations apply:

ATM	Abstract Test Method
ATS	Abstract Test Suite
ETS	Executable Test Suite
IETF	Internet Engineering Task Force
IPv6	Internet Protocol version 6
IUT	Implementation Under Test
MAC	Medium Access Control
MOT	Means Of Testing
MTC	Main Test Component
PCO	Point of Control and Observation
PCTR	Protocol Conformance Test Report
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
PTC	Parallel Test Component
SUT	System Under Test
TC	Test Case
TP	Test Purpose
TRI	TTCN-3 Runtime Interface
TSI	Test System Interface
TSS	Test Suite Structure
UT	Upper Tester

4   Abstract Test Method (ATM)

4.1   IPv6 Test Configuration

Figure 1 shows the IPv6 Test Configuration. More information for the IPv6 Test Configuration is provided below.
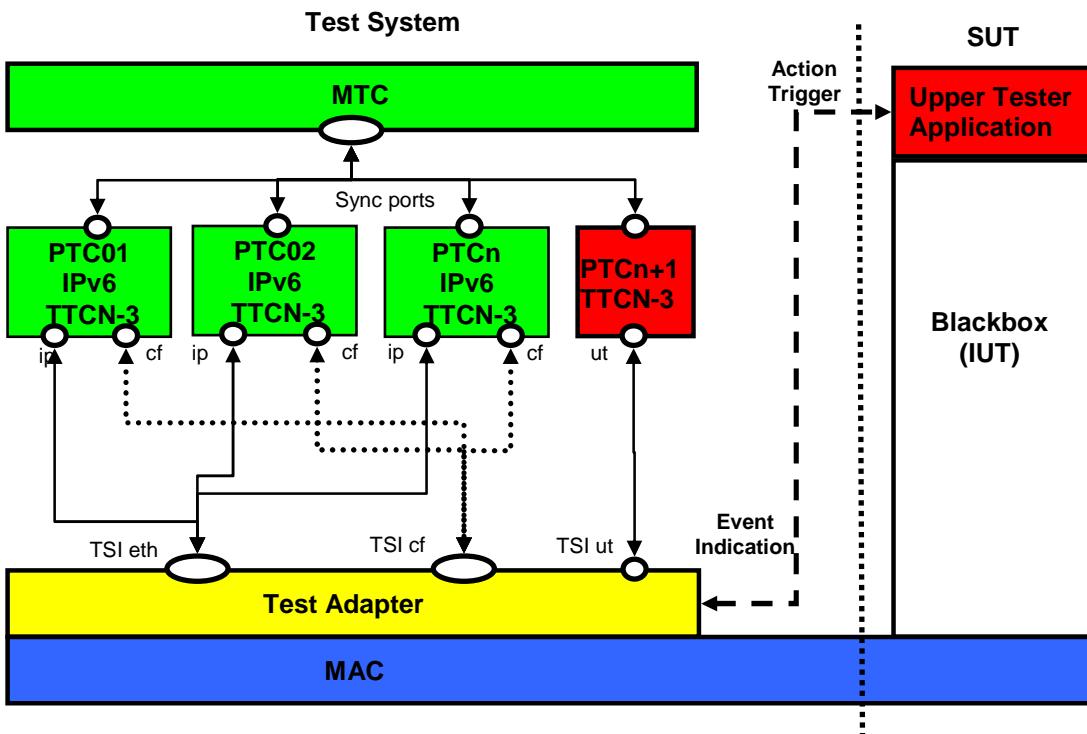
Figure 1: IPv6 Test Configuration

- MTC, PTC01, PTC02 to PTCn run MAC-independent TTCN-3 code.

- Each PTC has 1 cf port and 1 ip port.

- Any IPv6 message (unicast, multicast, all-nodes etc.) is sent via the ip port.

- Configuration messages are sent via the cf port in order to configure the test adapter.

- 1 and the same TSI cf port is mapped to all cf ports.

- 1 and the same TSI eth port is mapped to all ip ports.

- TTCN-3 uses ut port to control the Upper Tester Application.

- The Upper Tester Application allows to configure the IUT, trigger IUT actions and observe IUT events.

- MTC, PTC01, PTC02 to PTCn and its Test Adapter with MAC form the Lower Tester.

- MTC, PTCn + 1 and its Test Adapter with Upper Tester Application form the Upper Tester.

- Upper Tester implementation is not relevant for the prototype.

Test Adapter requirements:

- Test Adapter shall receive the AtsIpv6_TestConfiguration_TypesAndValues.CfMessage from every participating PTC.

- Test Adapter shall set a MAC filter in order to capture IPv6 messages only.

- When receiving an IPv6 message from TRI, the Test Adapter shall:

  - assemble a MAC message containing the IPv6 message and the appropriate Mac Addresses; and

  - send the MAC message to the appropriate network device (MAC interface).

- When receiving a MAC message a network device, the Test Adapter shall:

    - extract the IPv6 message; and

    - enqueue the IPv6 message to the appropriate PTC.

4.2 Test configurations for Core IPv6

This clause describes the ATM used to test the IPv6 core functions as defined in the RFC specifications [11] through to [21]. The three following configurations have been developed to test the two different types of IUT, hosts and routers. Either a simple one-to-one connection between tester and IUT is established which serves as Point of Control and Observation (PCO) or the IUT is connected to two Parallel Test Components (PTCs) that act as router or host respectively.

4.2.1 CF_CORE_01

Figure 2 shows the configuration CF 01. This is the basic configuration for router or host tests. PTC01 simulates HS01 and RT01. This configuration is partly reused in configuration CF_CORE_03 (see figure 4).
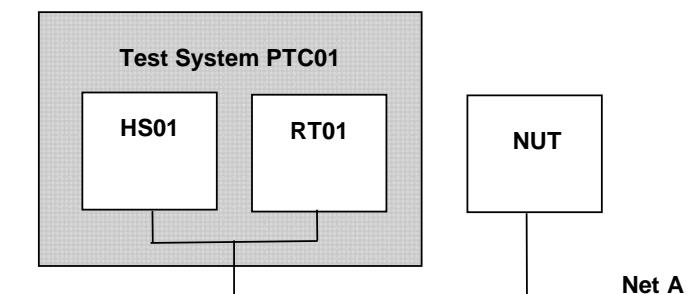
Figure 2: CF_CORE_01

4.2.2 CF_CORE_02

Figure 3 shows CF_CORE_02. The IUT is a router. PTC01 simulates HS01. PTC02 simulate PTC02. CF02_HS01 shall be used in the case where only 1 interface of the IUT is tested.
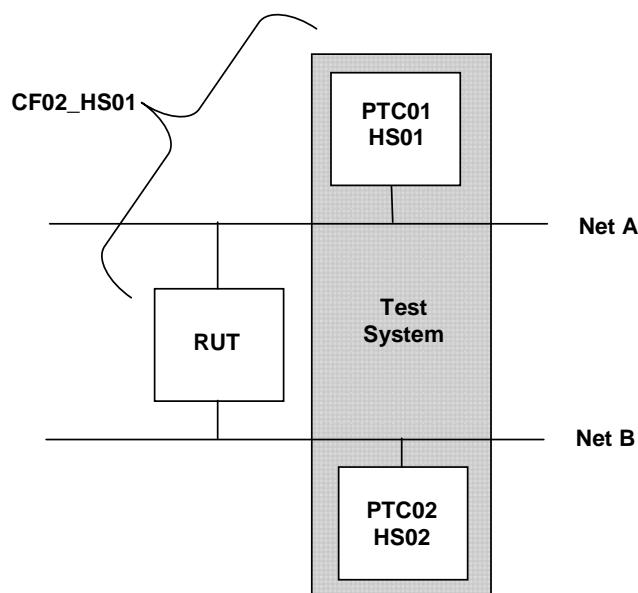
Figure 3: CF_CORE_02

4.2.3   CF_CORE_03

Figure 4 shows CF_CORE_03. The IUT is a host. PTC01 simulates RT01 and HS02. PTC02 simulates RT02 and HS03.
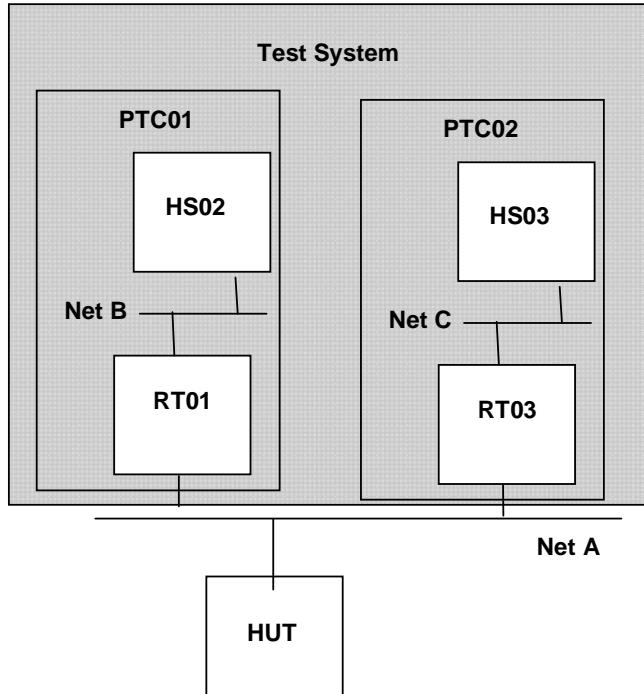
Figure 4: CF_CORE_03

5   Untestable and not implemented Test Purposes (TP)

The ATS is comprised of 271 TC. Those were derived from a total of 396 TP.

5.1   Untestable TP

This clause gives a list of 80 TP, which are not implemented in the ATS due to the chosen ATM or other restrictions:

TP_COR_1092_01, TP_COR_1089_01, TP_COR_1034_01, TP_COR_1008_01, TP_COR_1814_01,
TP_COR_1086_01, TP_COR_1122_01, TP_COR_9012_01, TP_COR_1272_01, TP_COR_9016_01,
TP_COR_9017_01, TP_COR_9018_01, TP_COR_9019_01, TP_COR_8009_01, TP_COR_1225_01,
TP_COR_1276_01, TP_COR_1282_01, TP_COR_1282_02, TP_COR_1256_01, TP_COR_1263_01,
TP_COR_1250_01, TP_COR_1292_01, TP_COR_1471_01, TP_COR_1472_01, TP_COR_1416_01,
TP_COR_1416_02, TP_COR_1416_03, TP_COR_1416_04, TP_COR_1458_01, TP_COR_1448_01,
TP_COR_1444_01, TP_COR_1442_01, TP_COR_8579_01, TP_COR_8492_01, TP_COR_8493_01,
TP_COR_8232_01, TP_COR_8583_01, TP_COR_8387_01, TP_COR_8402_01, TP_COR_8586_01,
TP_COR_8210_01, TP_COR_8246_01, TP_COR_8160_01, TP_COR_8169_01, TP_COR_8168_01,
TP_COR_8805_01, TP_COR_8338_02, TP_COR_8338_03, TP_COR_8338_05, TP_COR_8338_06,
TP_COR_8108_01, TP_COR_1294_01, TP_COR_1245_01, TP_COR_1248_01, TP_COR_1299_01,
TP_COR_9027_01, TP_COR_1304_01, TP_COR_1306_01, TP_COR_1315_01, TP_COR_8578_01,
TP_COR_8560_01, TP_COR_8530_01, TP_COR_8125_01, TP_COR_8126_01, TP_COR_8128_01,
TP_COR_8243_01, TP_COR_8133_01, TP_COR_8379_01, TP_COR_8384_01, TP_COR_8382_01,
TP_COR_1435_01, TP_COR_8577_01, TP_COR_8435_01, TP_COR_8512_01, TP_COR_8516_01,
TP_COR_8235_01, TP_COR_8574_01, TP_COR_8326_01, TP_COR_8297_01, TP_COR_8188_01

5.2 Not implemented TP

44 TP have not been implemented, as the dynamic behaviour that validates their test purposes is already implemented in one or more TC. Table 1 gives the relation between the non-implemented TP and the TC that cover(s) its purpose.

Table 1: List of not implemented TP

TP not implemented	TC that covers the dynamic behaviour
TP_COR_8814_01	TC_COR_8813_01
TP_COR_1455_01	TC_COR_1085_01
TP_COR_8013_01	TC_COR_1225_01
TP_COR_1244_01	TC_COR_1235_01
TP_COR_1239_01	TC_COR_1210_02
TP_COR_8148_01	TC_COR_1280_01
TP_COR_1257_01	TC_COR_1280_01
TP_COR_1419_01	TC_COR_1417_01
TP_COR_1459_01	TC_COR_1468_01
TP_COR_1453_01	TC_COR_1085_01
TP_COR_1453_02	TC_COR_1011_01
TP_COR_1453_03	TC_COR_1020_01
TP_COR_1447_01	TC_COR_1058_01
TP_COR_1447_02	TC_COR_1058_02
TP_COR_8415_01	TC_COR_8146_01
TP_COR_8483_01	TC_COR_8482_01
TP_COR_8491_01	TC_COR_8146_01
TP_COR_8494_01	TC_COR_8464_01
TP_COR_8499_01	TC_COR_8147_01
TP_COR_8504_01	TC_COR_8434_01
TP_COR_8511_01	TC_COR_8434_01, TC_COR_8504_01
TP_COR_8366_01	TC_COR_8507_01
TP_COR_8565_01	TC_COR_8396_01
TP_COR_8162_01	TC_COR_8159_01, TC_COR_8179_01, TC_COR_8180_01
TP_COR_8444_01	TC_COR_8179_01
TP_COR_8452_01	TC_COR_8159_01
TP_COR_8171_01	TC_COR_8461_01
TP_COR_8172_01	TC_COR_8470_01
TP_COR_8410_01	TC_COR_8567_01
TP_COR_8587_01	TC_COR_8592_01
TP_COR_8118_01	TC_COR_8513_01
TP_COR_8113_01	TC_COR_8146_01
TP_COR_8149_01	TC_COR_8146_01
TP_COR_1228_01	Several TC test the behaviour implicitly
TP_COR_1303_01	TC_COR_1298_01
TP_COR_8343_01	TC_COR_8349_01
TP_COR_1042_01	TC_COR_1443_01
TP_COR_8107_01	Several TC test the behaviour implicitly
TP_COR_1419_03	TC_COR_1417_02
TP_COR_8330_01	TC_COR_8586_01
TP_COR_8299_01	TC_COR_9034_01
TP_COR_8315_01	TC_COR_9034_02
TP_COR_8315_02	TC_COR_9034_01
TP_COR_8550_01	TC_COR_8183_01

6 ATS implementation details

The following clauses describe the mapping and cleanup procedures used in the ATS and some ATS value conventions.

Further descriptions of the ATS conventions are found in TS 102 351 [1]. The ATS implementation details for the IPv6 mobility and security test suites are found in TS 102 596 [23] and TS 102 594 [22].

6.1   Mapping IPv6 addresses to MAC addresses

The IPv6 ATS sends and receives IPv6 messages. The test adapter sends and receives MAC messages. The configuration messages in the IPv6 ATS map the IPv6 parameters to the MAC parameters.

The code statement:

```
v_cfMsg.paramsHs02 := f_createParamsHs02(PX_MAC_UCA_RT01_A, true);
```

- creates all relevant IPv6 address properties (IPv6 Link-local address, IPv6 Global address, IPv6 SolNode Multicast address etc) for the given MAC address;

- indicates with the test adapter flag true/false if the information is relevant for the test adapter or not:
  true: this information is relevant on TTCN and test adapter level,
  false: this information is only relevant on TTCN level.

The configuration message allows the test adapter to build Send Maps and Receive Maps. One possible format of Send Maps and Receive Maps is discussed in the following clauses.

6.1.1   The Role of the Send Map in the Send Process

The Send Map provides the information to determine for a given IPv6 source/destination address:

- its related MAC source/destination address;

- the net device on which the related IPv6 message shall be sent out.

The Send Map is shown in table 2.

Table 2: Send Map

Key		Value	
IP@	PTC Reference	NetDeviceId	MAC@

The Send Process is shown in figure 5.
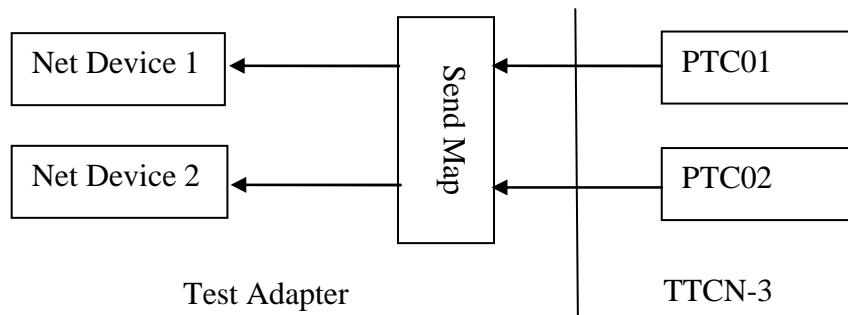
Figure 5: Send Process

The use of the Send Map is shown in figure 6.
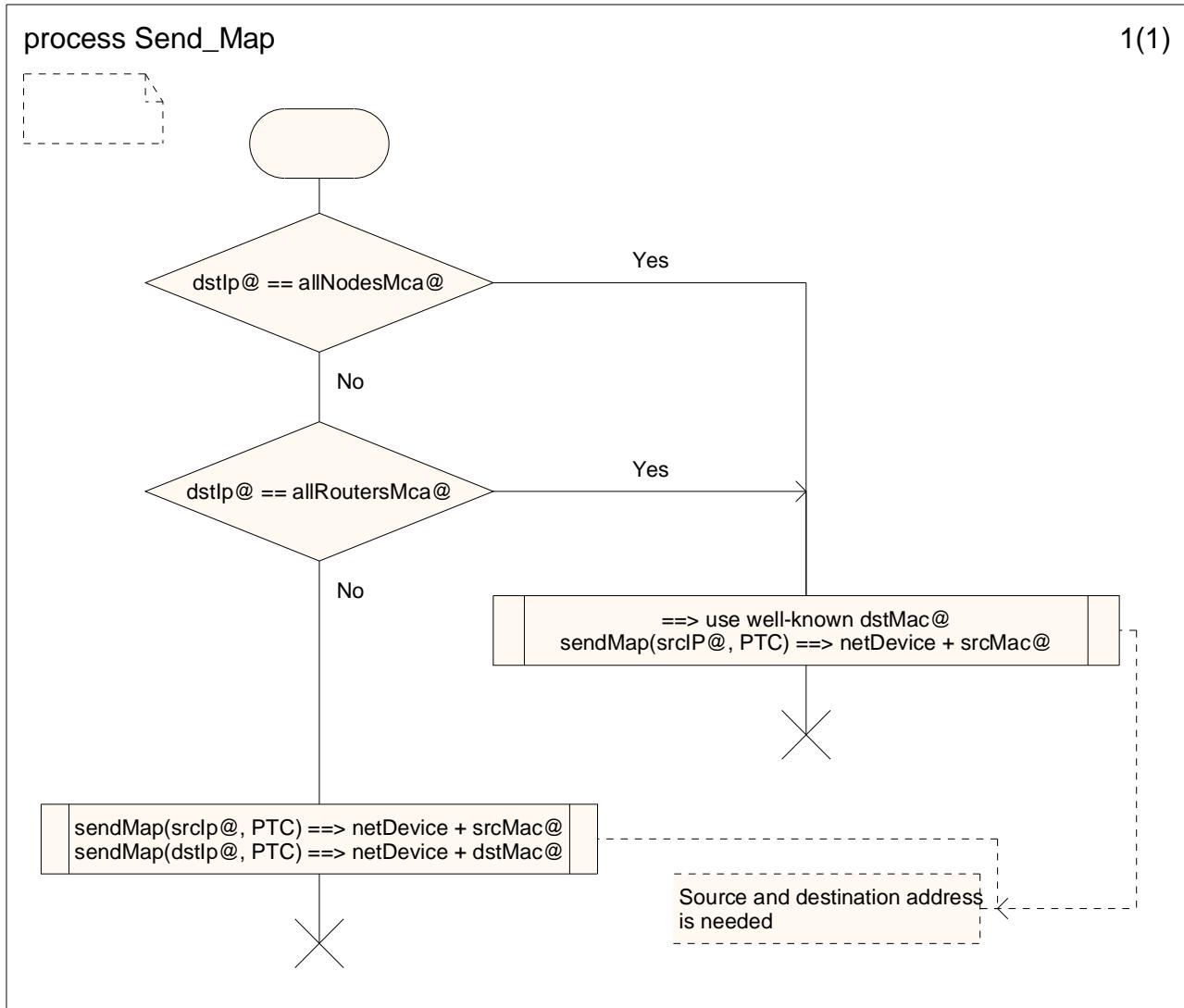
process Send_Map   1(1)

Figure 6: Send Map process

6.1.2   The Role of the Receive Map in the Receive Process

The Receive Map provides the information to determine for a given MAC source/destination address:

- the PTC to which the related IPv6 message shall be sent.

The Receive Map is shown in table 3.

Table 3: Receive Map

Key	Value	
MAC@	PTC	Role

The receive process consists of the following steps:

- Filter all received MAC packets according to v_cfMsg.macFilterList are passed to the Receive Map.

- Queue the IPv6 message to the appropriate PTC.
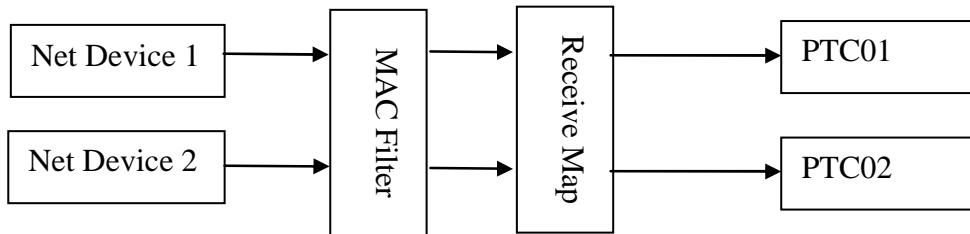
Figure 7: Receive Process

The Mac Filter is shown in figure 8.
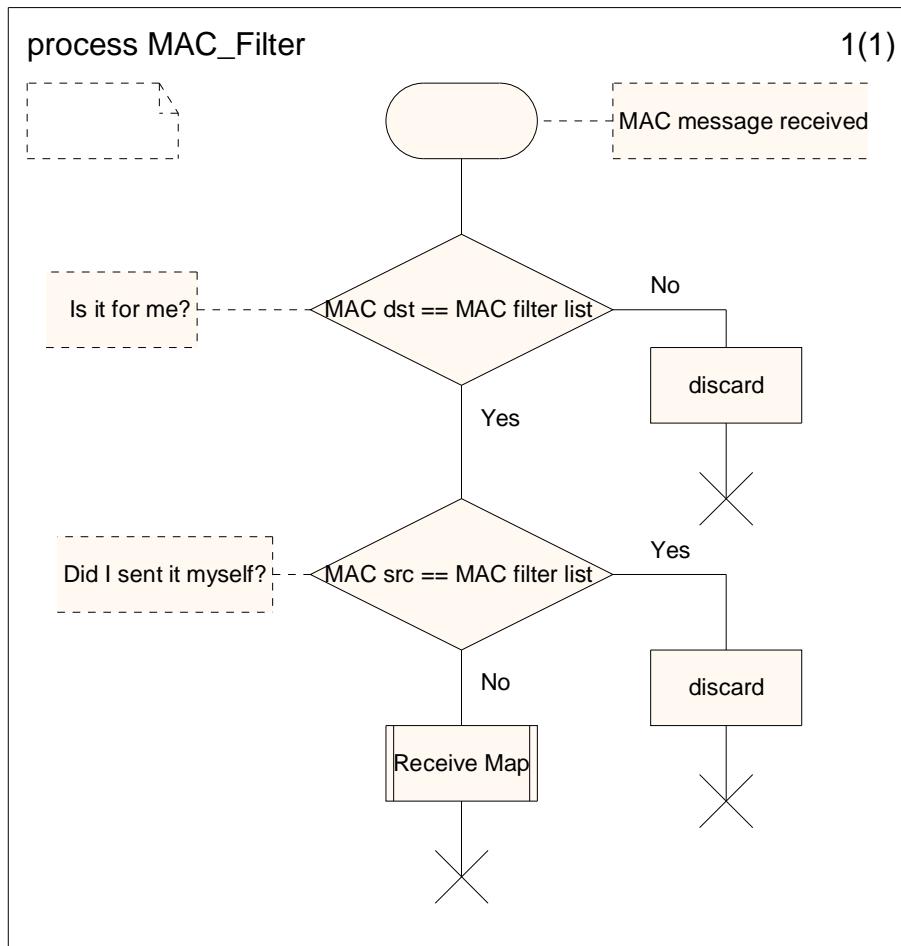
Figure 8: MAC Filter process

The use of the Receive Map is shown in figure 9.

process Receive_Map   1(1)
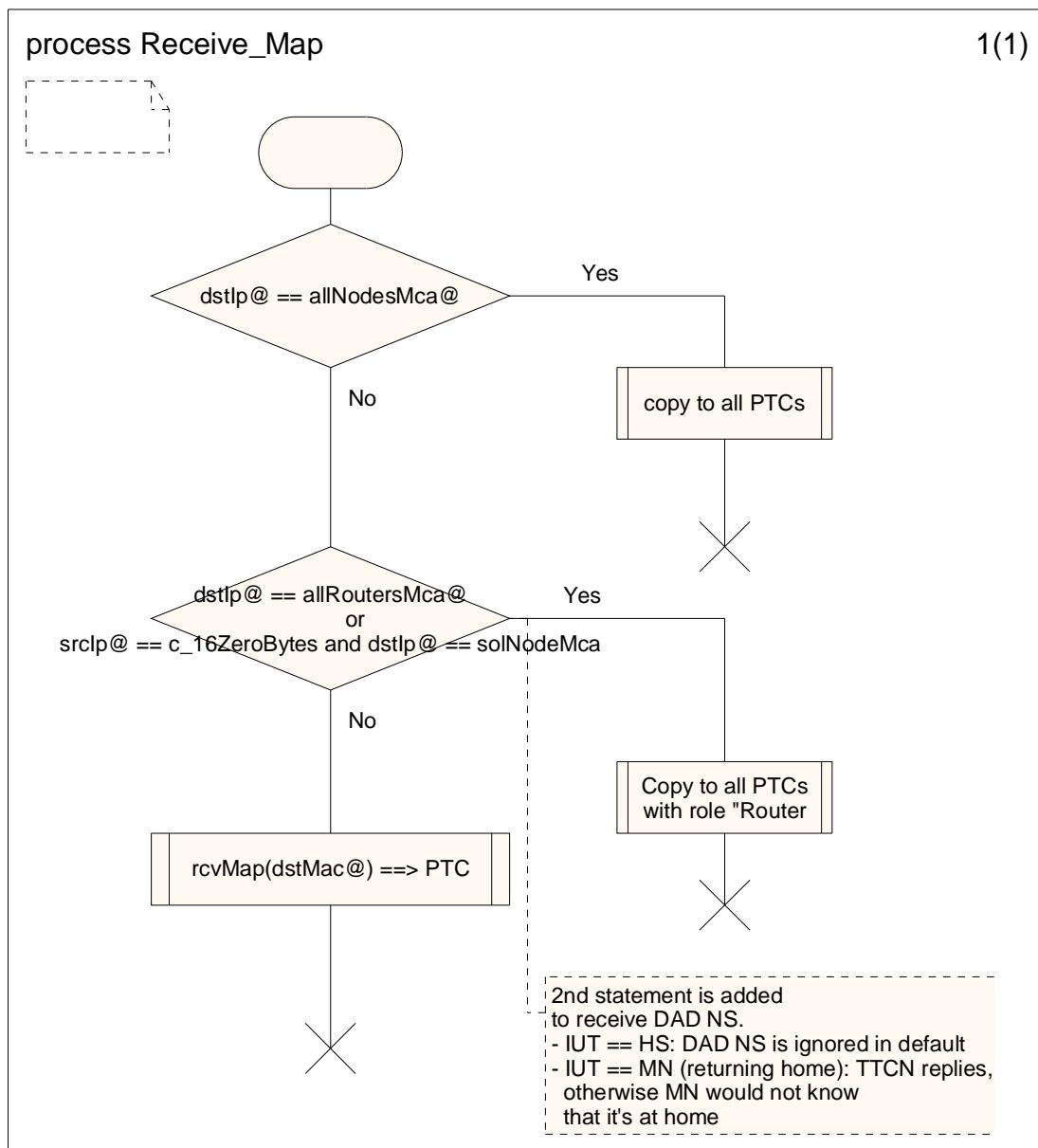
Figure 9: Receive Map process

6.1.3   Example of Send Map and Receive Map

Figure 10 shows a part of a test case testing redirection. The comment boxes show extracts from
AtsIpv6_TestConfiguration.f_createCfMsg_rt01 and AtsIpv6_TestConfiguration.f_createCfMsg_rt03. The test adapter
flag true/false indicates if the information is relevant for the test adapter or not.

Example extracts of the Send Map and the Received Map which the test adapter needs to build for Redirect testing are
shown below in figure 10, tables 4 and 5.

MSC Redirect

CF_CORE_03 is used

f_createParamsRt01(PX_MAC_UCA_RT01_A, false);
f_createParamsHs02(PX_MAC_UCA_RT01_A, false);
f_createParamsIutA(PX_MAC_UCA_IUT_1, true);
f_createParamsRt03(PX_MAC_UCA_RT03_A, true);
f_createParamsHs03(PX_MAC_UCA_RT03_A, true);

Test adapter shall not manag any HS02 and RT01
MAC address information for this PTC

f_createParamsRt01(PX_MAC_UCA_RT01_A, true);
f_createParamsHs02(PX_MAC_UCA_RT01_A, true);
f_createParamsIutA(PX_MAC_UCA_IUT_1, true);
f_createParamsRt03(PX_MAC_UCA_RT03_A, false);
f_createParamsHs03(PX_MAC_UCA_RT03_A, false);

Test adapter shall not manag any HS03 and RT03
MAC address information for this PTC

HUT

HUT default route = RT01

RT01

RT03

ERq
(MAC src = PX_MAC_UCA_RT03_A
MAC dst = PX_MAC_UCA_IUT
IP src = PX_GLA_HS03
IP dst = PX_GLA_IUT)

ERp
(MAC src = PX_MAC_UCA_IUT
MAC dst = PX_MAC_UCA_RT01_A
IP src = PX_GLA_IUT
IP dst = PX_GLA_HS03   )

ICMPv6 Redirect(PX_MAC_UCA_RT03_A)
(MAC src = PX_MAC_UCA_RT01_A
MAC dst = PX_MAC_UCA_IUT
IP src = PX_LLA_RT01_A
IP dst = PX_LLA_IUT)

ERq
(MAC src = PX_MAC_UCA_RT03_A
MAC dst = PX_MAC_UCA_IUT
IP src = PX_GLA_HS03
IP dst = PX_GLA_IUT)

ERp
(MAC src = PX_MAC_UCA_IUT
MAC dst = PX_MAC_UCA_RT03_A
IP src = PX_GLA_IUT
IP dst = PX_GLA_HS03   )

Figure 10: MSC Redirect

Extract of Send Map built from AtsIpv6_TestConfiguration.f_createCfMsg_rt01 and
AtsIpv6_TestConfiguration.f_createCfMsg_rt03.

Table 4: Extract of Send Map

Key		Value	
IP@	PTC Reference	NetDeviceId	MAC@
m_cfRt01			
PX_LLA_RT01_A	PTC1	eth1	PX_MAC_UNI_RT01_A
PX_GLA_RT01_A	PTC1	eth1	PX_MAC_UNI_RT01_A
PX_GLA_HS02	PTC1	eth1	PX_MAC_UNI_RT01_A
m_cfRt03			
PX_LLA_RT03_A	PTC2	eth1	PX_MAC_UNI_RT03_A
PX_GLA_RT03_A	PTC2	eth1	PX_MAC_UNI_RT03_A
PX_LLA_HS03	PTC2	eth1	PX_MAC_UNI_RT03_A

Extract of Receive Map built from AtsIpv6_TestConfiguration.f_createCfMsg_rt01 and AtsIpv6_TestConfiguration.f_createCfMsg_rt03.

Table 5: Extract of Receive Map

Key	Value	
MAC@	PTC	Role
m_cfRt01		
PX_MAC_UNI_RT01_A	PTC1	Router
m_cfRt03		
PX_MAC_UNI_RT03_A	PTC2	Router

6.2   Test Cleanup

The Core Test Cleanup procedure empties the IUT's Neighbor Cache. The Core Test Cleanup procedure is repeated for each Neighbor Cache entry as shown in figure 11.
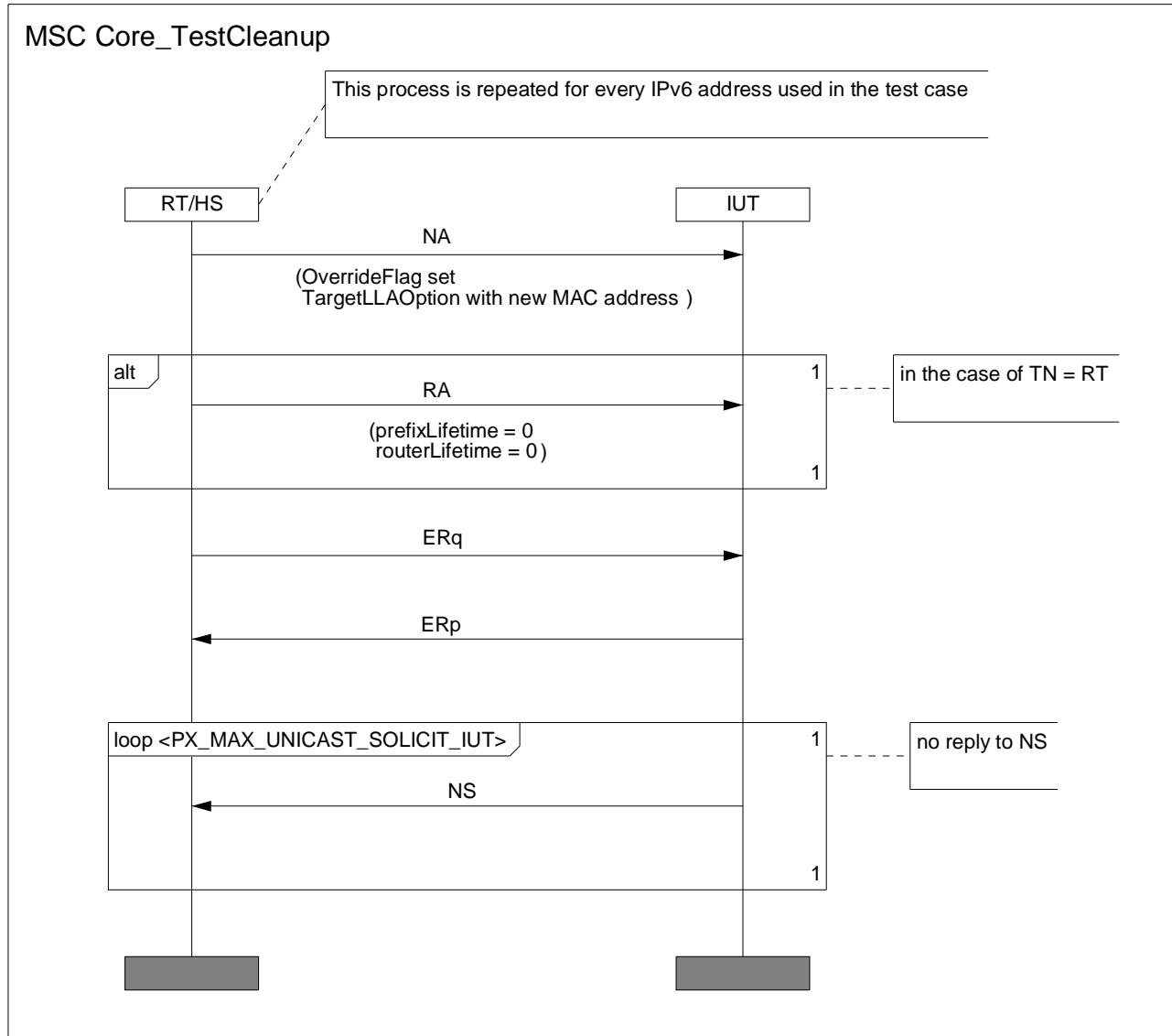
Figure 11: Core Test Cleanup

6.3   Value conventions in IPv6 ATS

6.3.1   Value conventions for IPv6 ATS

The generic approach for sending templates that need specific calculation (checksum, payload length, authenticator etc) is:

1)   Initialize templates with zero values.

2)   Set values appropriate to test case (i.e. error values).

3)   Send function checks:

   -    if zero value, then external function is called in order to calculate the correct value of the field;

   -    if non-zero value, then no external function is called. This allows to send templates with incorrect values.

6.3.2   Value conventions for test adapter

In all call cases except for IPSec the test adapter shall send the templates as they are defined in TTCN.

In the case of IPSec, the TTCN defines the templates in plaintext in order to allow the test operator to see plaintext logging. TTCN provides all necessary security parameters for encryption/decryption to the test adapter. If the test adapter detects any missing information, then it shall not add the missing information by itself, but it shall throw an error exception.

7   PCTR conformance

A test laboratory, when requested by a client to produce a PCTR, is required, as specified in ISO/IEC 9646-5 [7], to produce a PCTR conformant with the PCTR template given in annex B of ISO/IEC 9646-5 [7].

Furthermore, a test laboratory, offering testing for the ATS specification contained in annex C, when requested by a client to produce a PCTR, is required to produce a PCTR conformant with the PCTR proforma contained in annex A.

A PCTR which conforms to this PCTR proforma specification shall preserve the content and ordering of the clauses contained in annex A. Clause A.6 of the PCTR may contain additional columns. If included, these shall be placed to the right of the existing columns. Text in italics may be retained by the test laboratory.

8   PIXIT conformance

A test realizer, producing an executable test suite for the Abstract Test Suite (ATS) specification contained in annex C, is required, as specified in ISO/IEC 9646-4 [6], to produce an augmented partial PIXIT proforma conformant with this partial PIXIT proforma specification.

An augmented partial PIXIT proforma which conforms to this partial PIXIT proforma specification shall, as a minimum, have contents which are technically equivalent to annex B. The augmented partial PIXIT proforma may contain additional questions that need to be answered in order to prepare the Means Of Testing (MOT) for a particular Implementation Under Test (IUT).

A test laboratory, offering testing for the ATS specification contained in annex C, is required, as specified in ISO/IEC 9646-5 [7], to further augment the augmented partial PIXIT proforma to produce a PIXIT proforma conformant with this partial PIXIT proforma specification.

A PIXIT proforma which conforms to this partial PIXIT proforma specification shall, as a minimum, have contents which are technically equivalent to annex B. The PIXIT proforma may contain additional questions that need to be answered in order to prepare the test laboratory for a particular IUT.

9   ATS Conformance

The test realizer, producing a Means Of Testing (MOT) and Executable Test Suite (ETS) for the present document, shall comply with the requirements of ISO/IEC 9646-4 [6]. In particular, these concern the realization of an Executable Test Suite (ETS) based on each ATS. The test realizer shall provide a statement of conformance of the MOT to the present document.

An ETS which conforms to the present document shall contain test groups and test cases which are technically equivalent to those contained in the ATS in annex C. All sequences of test events comprising an abstract test case shall be capable of being realized in the executable test case. Any further checking which the test system might be capable of performing is outside the scope of the present document and shall not contribute to the verdict assignment for each test case.

Test laboratories running conformance test services using this ATS shall comply with ISO/IEC 9646-5 [7].

A test laboratory which claims to conform to this ATS specification shall use an MOT which conforms to this ATS.

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

A.1 The ATS in TTCN-3 core (text) format

This ATS has been produced using the Testing and Test Control Notation (TTCN-3) according to ES 201 873-1 [10].

The TTCN-3 core (text) representation corresponding to this ATS is contained in several ASCII files contained in archive ts_102516v030101p0.zip which accompanies the present document.

Annex B (normative):
Partial PIXIT proforma

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 PIXIT proforma in this annex so that it can be used for its intended purposes and may further publish the completed PIXIT.

The PIXIT Proforma is based on ISO/IEC 9646-6 [8]. Any needed additional information can be found in there.

B.1   Identification summary

Table B.1

PIXIT Number:	
Test Laboratory Name:	
Date of Issue:	
Issued to:	

B.2   ATS summary

Table B.2

Protocol Specification:	
Protocol to be tested:	
ATS Specification:	
Abstract Test Method:	

B.3   Test laboratory

Table B.3

Test Laboratory Identification:	
Test Laboratory Manager:	
Means of Testing:	
SAP Address:	

B.4   Client identification

Table B.4

Client Identification:	
Client Test manager:	
Test Facilities required:	

B.5   SUT

Table B.5

Name:	
Version:	
SCS Number:	
Machine configuration:	
Operating System Identification:	
IUT Identification:	
PICS Reference for IUT:	
Limitations of the SUT:	
Environmental Conditions:	

B.6   Protocol layer information

B.6.1   Protocol identification

Table B.6

Name:	
Version:	
PICS References:	

B.6.2   Generic Setup

Table B.7: Generic Setup

Name	Type	Comments	Value
PX_IUT_ROLE	Router/Host	Is the IUT a router or a host?	
PX_TEST_CAMPAIGN	CampaignType	Selects only TCs that can be run in a campaign.	
PX_CONFIGURATION_ID	ConfigId	The id of the current configuration/topology.	
PX_UTS_AVAILABLE	BOOLEAN	Specifies if Upper Tester Server is available or not.	

B.6.3   Default Values

Table B.8: Default Values

Name	Type	Comments	Value
PX_DAD_DUP_ADDR_DETECT_TRANSMITS_IUT	Integer	Number of DAD packet retransmissions	
PX_MAX_UNICAST_SOLICIT_IUT	Integer	Number of NUD Neighbor Solicitation retransmissions	
PX_MAX_MULTICAST_SOLICIT_IUT	Integer	Number of AR Neighbor Solicitation retransmissions	

B.6.4   Unknown IDs

Table B.9: Unknown IDs

Name	Type	Comments	Value
PX_UNRECOGNIZED_EXT_HEADER_ID	Integer	Id of an IPv6 extension header that the IUT does not recognize.	
PX_NEXT_HEADER_STOPS_PACKET_PROCESSING	Integer	Id of an IPv6 extension header that stops packet processing.	
PX_UNRECOGNIZED_ROUTING_TYPE	Integer	Id of a routing type that the IUT does not recognize.	
PX_UNKNOWN_ICMP_MESSAGE_TYPE	Integer	An ICMPv6 message type that is greater than 129 and unknown to the implementation.	
PX_UNKNOWN_NBRADVOPT_ID	Integer	A Neighbor Advertisement option id that is unknown to the implementation.	
PX_UNKNOWN_NBRSOLOPT_ID	Integer	A Neighbor Solicitation option id that is unknown to the implementation.	
PX_UNKNOWN_RTRSOLOPT_ID	Integer	A Router Solicitation option id that is unknown to the implementation.	
PX_UNKNOWN_REDIRECTOPT_ID	Integer	A Redirect option id that is unknown to the implementation.	
PX_SKIP_OVER_HOP_BY_HOP_OPTION	Integer	A hop by hop option id that is unknown to the implementation ('skip over' type).	
PX_SKIP_OVER_DESTINATION_OPTION	Integer	A destination option id that is unknown to the implementation ('skip over' type).	
PX_DISCARD_PACKET_HOP_BY_HOP_OPTION	Integer	A hop by hop option id that is unknown to the implementation ('discard' type).	
PX_DISCARD_PACKET_DESTINATION_OPTION	Integer	A destination option id that is unknown to the implementation ('discard' type).	
PX_DISCARD_PACKET_HOP_BY_HOP_OPTION_TYPE_10	Integer	A destination option id that is unknown to the implementation ('discard and always send ICMP Parameter Problem message' type).	
PX_DISCARD_PACKET_DESTINATION_OPTION_TYPE_10	Integer	A destination option id that is unknown to the implementation ('discard and always send ICMP Parameter Problem message' type).	

Name	Type	Comments	Value
PX_DISCARD_PACKET_HOP_BY_HOP_ OPTION_TYPE_11	Integer	A destination option id that is unknown to the implementation ('discard and, if not multicast, send ICMP Parameter Problem message' type).	
PX_DISCARD_PACKET_DESTINATION_ OPTION_TYPE_11	Integer	A destination option id that is unknown to the implementation ('discard and, if not multicast, send ICMP Parameter Problem message' type).	

B.6.5   Mac Layer

Table B.10: Mac Layer

Name	Type	Comments	Value
PX_MAC_LAYER	e_atm, e_eth	Transport layer is ATM or Ethernet?	
PX_NET_DEVICE_ID_1	string	Name of the primary TS interface	
PX_NET_DEVICE_ID_2	string	Name of the secondary TS interface	
PX_MAC_OPTION_LEN	Integer	Length of Source Link-Layer and Target Link-Layer options	

B.6.6   Addresses

B.6.6.1   Prefixes

Table B.11: Prefixes

Name	Type	Comments	Value
PX_NET_A_PREFIX	IPv6 Address	Prefix used for NET A	
PX_NET_B_PREFIX	IPv6 Address	Prefix used for NET B	
PX_NET_C_PREFIX	IPv6 Address	Prefix used for NET C	
PX_PREFIX_LENGTH	Integer	Number of bits used for prefix part of IPv6 addresses	

B.6.6.2   IUT Addresses

Table B.12: IUT Addresses

Name	Type	Comments	Value
PX_MAC_UCA_IUT_1	MAC Address	Unicast MAC Address of IUT's primary interface	
PX_MAC_UCA_IUT_2	MAC Address	Unicast MAC Address of IUT's secondary interface	

Table B.13: IUT Addresses – Other

Name	Type	Comments	Value
PX_MAC_BROADCAST_IUT	MAC Address	Mac Broadcast Address of Implementation Under Test	
PX_ANYCAST_IUT	IPv6 Address	Anycast Address that is known to the implementation	
PX_ANYCAST_NOT_IUT	IPv6 Address	Anycast Address that is not known to the implementation	
PX_MAC_ANYCAST_IUT	MAC Address	Mac Anycast Address of Router Under Test	
PX_MAC_ANYCAST_NOT_IUT	MAC Address	Mac Anycast Address of Test Node	
PX_MAC_SOL_ANYCAST_NOT_IUT	MAC Address	Mac Anycast Address of Test Node	
PX_UNICAST_NOT_IUT	IPv6 Address	Unicast Address that is not of the implementation.	
PX_UNICAST_PROXY_IUT	IPv6 Address	Unicast Address for which the NUT proxies.	
PX_UNICAST_UNREACHABLE_IUT	IPv6 Address	Unicast Address to which the IUT cannot deliver packets due to reasons other than congestion.	
PX_UNICAST_UNREACHABLE_NO_ENTRY_IUT	IPv6 Address	Unicast Address to which the IUT cannot deliver packets due to lack of entry in routing table.	
PX_UNICAST_UNREACHABLE_ADMINISTRATIVE_PROHIBITION_IUT	IPv6 Address	Unicast Address to which the IUT cannot deliver packets due to administrative prohibition.	
PX_UNICAST_UNREACHABLE_OTHER_IUT	IPv6 Address	Unicast Address to which the IUT cannot deliver packets due to other reason.	
PX_UNICAST_UNREACHABLE_NO_UPPER_LAYER_PEER_IUT	IPv6 Address	Unicast Address to which the IUT cannot deliver packets due to lack of upper layer peer.	
PX_UNICAST_PROXY_SOLNODE_IUT	IPv6 Address	Solicited Node Multicast Address of PX_UNICAST_PROXY_IUT.	

B.6.6.3   Tester Addresses

B.6.6.3.1   Host 1 (HS_01)

Table B.14: Addresses HS_01

Name	Type	Comments	Value
PX_MAC_UCA_HS01	MAC Address	First unicast MAC Address	
PX_MAC_UCA_HS01_2	MAC Address	Second unicast MAC Address	

B.6.6.3.2   Host 2 (HS_02)

Table B.15: Addresses HS_02

Name	Type	Comments	Value
PX_MAC_UCA_HS02	MAC Address	Unicast MAC Address	

B.6.6.3.3   Host 3 (HS_03)

Table B.16: Addresses HS_03

Name	Type	Comments	Value
PX_MAC_UCA_HS03	MAC Address	Unicast MAC Address	

B.6.6.3.4   Router 1 (RT_01)

Table B.17: Addresses RT_01

Name	Type	Comments	Value
PX_MAC_UCA_RT01_A	MAC Address	Unicast MAC Address Net A	

B.6.6.3.5   Router 3 (RT_03)

Table B.18: Addresses RT_03

Name	Type	Comments	Value
PX_MAC_UCA_RT03_A	MAC Address	Unicast MAC Address Net A	

B.6.7   Timer

Table B.19: Timer

Name	Type	Comments	Value
PX_TIMER_PRECISION	Float	Precision of timers in percentage (default is 5 percent).	
PX_REACHABLE_TIME	Integer	The value to be placed in the Reachable Time field in the Router Advertisement messages sent by the router.	
PX_ADVERTISEMENT_RETRANS_TIMER	Integer	The value to be placed in the Retrans Timer field in the Router Advertisement messages sent by the router.	
PX_MAX_RTR_ADV_INTERVAL	Float	The maximum time allowed between sending unsolicited multicast Router Advertisements from the interface, in seconds.	
PX_MIN_RTR_ADV_INTERVAL	Float	The minimum time allowed between sending unsolicited multicast Router Advertisements from the interface, in seconds.	
PX_ICMP_ERROR_MESSAGE_RATE_LIMIT	Float	The minimum time allowed between sending ICMPv6 error messages, in seconds.	
PX_TDONE	Float	Time to control PTC.stop.	
PX_TAC	Float	Time to control the reception of a message.	
PX_TNOAC	Float	Time to control that IUT sends nothing.	
PX_TWAIT	Float	Time to control that IUT reacts prior to Upper Tester action.	
PX_TSYNC_TIME_LIMIT	Float	Default time limit for a sync client to reach a synchronization point	
PX_TSHUT_DOWN_TIME_LIMIT	Float	Default time limit for a sync client to finish its execution of the shutdown default	
PX_T_BUILD_GLA	Integer	What time does the IUT need to build its global address?	

Annex C (normative):
PCTR proforma

The PCTR proforma is based on ISO/IEC 9646-6 [8]. Any needed additional information can be found in there.

C.1   Identification summary

C.1.1   Protocol conformance test report

Table C.1

PCTR Number:	
PCTR Date:	
Corresponding SCTR Number:	
Corresponding SCTR Date:	
Test Laboratory Identification:	
Test Laboratory Manager:	
Signature:	

C.1.2   IUT identification

Table C.2

Name:	
Version:	
Protocol specification:	
PICS:	
Previous PCTR if any:	

C.1.3 Testing environment

Table C.3

PIXIT Number:	
ATS Specification:	
Abstract Test Method:	
Means of Testing identification:	
Date of testing:	
Conformance Log reference(s):	
Retention Date for Log reference(s):	

C.1.4 Limits and reservation

Additional information relevant to the technical contents or further use of the test report, or the rights and obligations of the test laboratory and the client, may be given here. Such information may include restriction on the publication of the test report.

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C.1.5 Comments

Additional comments may be given by either the client or the test laboratory on any of the contents of the PCTR, for example, to note disagreement between the two parties.

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C.2   IUT Conformance status

This IUT has or has not been shown by conformance assessment to be non conforming to the specified protocol specification.

Strike the appropriate words in this sentence. If the PICS for this IUT is consistent with the static conformance requirements (as specified in clause C.3) and there are no "FAIL" verdicts to be recorded (in clause C.6) strike the words "has or", otherwise strike the words "or has not".

C.3   Static conformance summary

The PICS for this IUT is or is not consistent with the static conformance requirements in the specified protocol.

Strike the appropriate words in this sentence.

C.4   Dynamic conformance summary

The test campaign did or did not reveal errors in the IUT.

Strike the appropriate words in this sentence. If there are no "FAIL" verdicts to be recorded (in clause C.6) strike the words "did or" otherwise strike the words "or did not".

Summary of the results of groups of test:

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C.5   Static conformance review report

If clause C.3 indicates non-conformance, this clause itemizes the mismatches between the PICS and the static conformance requirements of the specified protocol specification.

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C.6 Test campaign report

Table C.4

ATS Reference	Selected?	Run?	Verdict	Observations
1. Node tests (NT)				
1.1 Generate IPv6 packets (GIP)				
1.1.2 Generate IPv6 Header(GIH)				
TC_COR_1000_01				
1.1.3 Discover PMTU(DPMTU)				
TC_COR_1806_01				
TC_COR_1821_01				
TC_COR_1823_01				
1.2 Process IPv6 packets (PIP)				
1.2.1 Process Extension Headers (PEH)				
TC_COR_1010_01				
TC_COR_1011_01				
TC_COR_1016_01				
TC_COR_1093_01				
TC_COR_9030_01				
1.2.1.1 Process Fragment Packets (PFP)				
TC_COR_1082_01				
TC_COR_1083_01				
TC_COR_1085_01				
1.2.1.2 Process Routing Header (PRH)				
TC_COR_1040_01				
TC_COR_1041_01				
TC_COR_1052_01				
TC_COR_1053_01				
TC_COR_1055_01				
TC_COR_1056_01				
TC_COR_1058_01				
TC_COR_1058_02				
1.2.1.3 Process Hop-By-Hop Header (PHBHH)				
TC_COR_8813_01				
TC_COR_1018_01				
1.2.1.4 Process Extension Header Options (PEHO)				
TC_COR_1018_02				
TC_COR_1019_01				
TC_COR_1019_02				
TC_COR_1020_01				
TC_COR_1020_02				
TC_COR_9002_01				
TC_COR_9002_02				
TC_COR_1021_01				
TC_COR_1021_02				
TC_COR_9003_01				
TC_COR_9003_02				
1.3 Initialize (INI)				
1.3.2 Configure Address (CA)				
1.3.2.2 Stateless Autoconfiguration (SLAC)				
TC_COR_1231_01				
1.3.2.5 Detect Duplicate Address (DAD)				
TC_COR_1210_01				
TC_COR_1210_02				
TC_COR_1235_01				
TC_COR_1280_01				
1.5 ICMPv6 Functions (ICF)				
1.5.2 Process ICMPv6 Messages (PIM)				
TC_COR_1412_01				
TC_COR_1417_01				
TC_COR_1421_01				
TC_COR_1424_01				
TC_COR_1425_01				

ATS Reference	Selected?	Run?	Verdict	Observations
TC_COR_1426_01				
1.5.2.1 Process ICMPv6 Information Messages (PIIM)				
1.5.2.1.1 Process Echo Reply Message (PERPM)				
TC_COR_1468_01				
1.5.2.1.2 Process Echo Request Message (PERQM)				
TC_COR_1463_01				
TC_COR_1465_01				
1.5.3 Generate ICMPv6 Messages (GIM)				
1.5.3.3 Determine ICMPv6 Message Source Address (DIMSA)				
TC_COR_1406_01				
TC_COR_1407_01				
TC_COR_1407_02				
1.6 Neighbour Discovery (ND)				
1.6.2 Address Resolution (AR)				
TC_COR_8146_01				
TC_COR_8416_01				
TC_COR_8417_01				
TC_COR_8418_01				
TC_COR_8482_01				
1.6.2.1 Address Resolution Behavior (ARB)				
TC_COR_8434_01				
TC_COR_8457_01				
TC_COR_8458_01				
TC_COR_8459_01				
TC_COR_8460_01				
TC_COR_8462_01				
TC_COR_8463_01				
TC_COR_8594_01				
1.6.3 Neighbor Unreachability Detection (NUD)				
TC_COR_8363_01				
TC_COR_8470_01				
TC_COR_8461_01				
TC_COR_8465_01				
TC_COR_8475_01				
TC_COR_8513_01				
TC_COR_8514_01				
TC_COR_8515_01				
TC_COR_8147_01				
TC_COR_8464_01				
1.6.3.1.3 Invalid Reachability Indications (IRI)				
TC_COR_8501_01				
TC_COR_8500_01				
1.6.3.2 Neighbor Reachability Probing (NRP)				
TC_COR_8503_01				
TC_COR_8509_01				
TC_COR_8510_01				
TC_COR_8510_02				
1.6.4 Next Hop Determination (NHD)				
TC_COR_8507_01				
TC_COR_8364_01				
TC_COR_8365_01				
TC_COR_8367_01				
1.6.5 Using Options in Neighbor Discovery Messages (UONDM)				
TC_COR_8567_01				
TC_COR_8572_01				
TC_COR_8573_01				
1.6.6 Process Neighbor Discovery Messages (PND)				
TC_COR_8591_01				
TC_COR_8592_01				
1.6.6.1 Process Neighbor Solicitation (PND)				
TC_COR_8159_01				
TC_COR_8179_01				
TC_COR_8180_01				
TC_COR_8163_01				

ATS Reference	Selected?	Run?	Verdict	Observations
TC_COR_8177_01				
TC_COR_8103_05				
1.6.6.1.2 Process Proxy NS (PPNS)				
TC_COR_8488_01				
1.6.6.1.5 Process Field Anomalies in NS (NSFA)				
TC_COR_8386_01				
TC_COR_8388_01				
TC_COR_8389_01				
TC_COR_8390_01				
TC_COR_8391_01				
TC_COR_8392_01				
TC_COR_8393_01				
TC_COR_8395_01				
TC_COR_8436_01				
1.6.6.1.6 Process Option Anomalies in NS (NSOA)				
TC_COR_8396_01				
TC_COR_8394_01				
TC_COR_8397_01				
TC_COR_8398_01				
TC_COR_8399_01				
TC_COR_8400_01				
1.6.6.2 Process Neighbor Advertisement (PNA)				
TC_COR_8522_01				
1.6.6.2.1 Process Solicited Neighbor Advertisement (PSNA)				
TC_COR_8407_01				
1.6.6.2.3 Discover Neighbor by NA (DNNA)				
TC_COR_8102_01				
TC_COR_8103_01				
1.6.6.2.4 Process Field Anomalies in NA (PFANA)				
TC_COR_8167_01				
TC_COR_8401_01				
TC_COR_8403_01				
TC_COR_8404_01				
TC_COR_8405_01				
TC_COR_8406_01				
1.6.6.2.5 Process Option Anomalies in NA (POANA)				
TC_COR_8408_01				
TC_COR_8411_01				
TC_COR_8412_01				
TC_COR_8413_01				
TC_COR_8414_01				
1.6.6.3 Process Router Solicitation (PRA)				
1.6.6.3.1 Discover Neighbor by RS (DNRS)				
TC_COR_8103_02				
1.6.6.4 Process Router Advertisement (PRA)				
1.6.6.4.1 Discover Neighbor by RA (DNRA)				
TC_COR_8359_01				
TC_COR_8361_01				
1.6.6.4.4 Process Field Anomalies in RA (PFARA)				
TC_COR_8139_01				
TC_COR_8244_01				
TC_COR_8245_01				
TC_COR_8247_01				
TC_COR_8248_01				
TC_COR_8249_01				
1.6.6.4.5 Process Option Anomalies in RA (PAORA)				
TC_COR_8251_01				
TC_COR_8250_01				
TC_COR_8205_01				
TC_COR_8209_01				
1.6.6.5 Process Redirect Message (PRM)				
TC_COR_8580_01				
1.6.6.5.1 Discover Neighbor by Redirect Message (DNRM)				
TC_COR_8101_01				

ATS Reference	Selected?	Run?	Verdict	Observations
TC_COR_8103_04				
1.6.7 Generate Neighbor Discovery Messages (GNDM)				
1.6.7.1 Generate Neighbor Solicitation (GNS)				
TC_COR_8454_01				
1.6.7.1.1 Generate Neighbor Solicitation Header (GNSH)				
TC_COR_8150_01				
1.6.7.1.2 Generate Neighbor Solicitation Option (GNSO)				
TC_COR_8155_01				
TC_COR_8156_01				
1.6.7.1.3 Generate NS for Address Resolution (GNSAR)				
TC_COR_8423_01				
1.6.7.2 Generate Neighbor Advertisement (GNA)				
1.6.7.2.2 Form Neighbor Advertisement Header (FNAH)				
TC_COR_8161_01				
1.8 Jumbograms (JG)				
1.8.3 Process Jumbograms (PJG)				
TC_COR_8806_01				
TC_COR_8809_01				
TC_COR_8810_01				
TC_COR_8811_01				
TC_COR_8812_01				

ATS Reference	Selected?	Run?	Verdict	Observations
2. Host (HS)				
2.3 Initialize (INI)				
TC_COR_8338_01				
TC_COR_8338_04				
2.3.2 Configure Address (CA)				
2.3.2.6 Assign Global Address (GA)				
2.3.2.6.1 Use of M-bit (UMB)				
TC_COR_1298_01				
2.3.2.6.3 Process the Prefix Information Option (PFX)				
TC_COR_1305_01				
TC_COR_1306_01				
TC_COR_1307_01				
TC_COR_1309_01				
TC_COR_1310_01				
2.6 Neighbour Discovery (ND)				
2.6.6 Process Neighbor Discovery Messages (PND)				
2.6.6.1.4 Process NS for Address Resolution (PNSAR)				
TC_COR_8446_01				
2.6.6.3.3 Host Processing of RS (HPRS)				
TC_COR_8233_01				
2.6.6.4.1 Discover Neighbor by RA (DNRA)				
TC_COR_8103_03				
2.6.6.4.3 Host Processing of RA (HPRA)				
TC_COR_8385_01				
TC_COR_8231_01				
TC_COR_8346_01				
TC_COR_8348_01				
TC_COR_8349_01				
TC_COR_8343_01				
TC_COR_8345_01				
TC_COR_8360_01				
TC_COR_8362_01				
TC_COR_8358_01				
2.6.6.4.5 Process Option Anomalies in RA (POARA)				
TC_COR_8224_01				
TC_COR_8221_01				
2.6.6.5.3 Host Processing of Redirect Message (HPRM)				
TC_COR_8557_01				
TC_COR_8558_01				
TC_COR_8556_01				

ATS Reference	Selected?	Run?	Verdict	Observations
TC_COR_8560_01				
TC_COR_8561_01				
TC_COR_8559_01				
TC_COR_8533_01				
2.6.6.5.4 Process Field Anomalies in Redirect Message (PFARM)				
TC_COR_8528_01				
TC_COR_8529_01				
TC_COR_8531_01				
TC_COR_8532_01				
TC_COR_8534_01				
TC_COR_8535_01				
TC_COR_8536_01				
TC_COR_8537_01				
TC_COR_8539_01				
TC_COR_8545_01				
2.6.6.5.5 Process Option Anomalies in Redirect Message (POARM)				
TC_COR_8538_01				
TC_COR_8218_01				
TC_COR_8540_01				
TC_COR_8541_01				
TC_COR_8542_01				

ATS Reference	Selected?	Run?	Verdict	Observations
3. Router (RT)				
3.2 Process IPv6 packets (PIP)				
3.2.1.2 Process Routing Header (PRH)				
TC_COR_1059_01				
3.3 Initialize (INI)				
3.3.2 Configure Address (CA)				
TC_COR_1246_01				
3.3.2.2 Stateless Autoconfiguration (SAC)				
TC_COR_1229_01				
3.5 ICMPv6 Functions (ICF)				
3.5.2 Process ICMPv6 Messages (PIM)				
TC_COR_1416_05				
TC_COR_1416_06				
TC_COR_1416_07				
TC_COR_1416_08				
TC_COR_1417_02				
TC_COR_1421_02				
TC_COR_1424_02				
TC_COR_1425_02				
TC_COR_1426_02				
3.5.3.2.2 Generate Time Exceeded Message (GTEM)				
TC_COR_1449_01				
TC_COR_1450_01				
3.5.3.2.3 Generate Message Too Big Message (GMTBM)				
TC_COR_1443_01				
TC_COR_1443_02				
TC_COR_1443_04				
3.5.3.2.4 Generate Destination Unreachable Message (GTEM)				
TC_COR_1432_01				
3.5.3.2.4.1 Destination Unreachable Code Field Value (DUCFV)				
TC_COR_1436_01				
TC_COR_1437_01				
TC_COR_1438_01				
TC_COR_1441_01				
3.6 Neighbour Discovery (ND)				
3.6.6.1.4 Process NS for Address Resolution (PNSAR)				
TC_COR_8445_01				
3.6.6.3 Process Router Solicitation (PRS)				
TC_COR_9033_01				
TC_COR_9033_02				

ATS Reference	Selected?	Run?	Verdict	Observations
TC_COR_9034_01				
TC_COR_9034_02				
3.6.6.3.1 Discover Neighbor by RS (DNRS)				
TC_COR_8327_01				
3.6.6.3.2 Router Processing of RS (RPRS)				
TC_COR_8112_01				
TC_COR_8229_01				
TC_COR_8319_01				
TC_COR_8320_01				
TC_COR_8321_01				
3.6.6.3.4 Process Field Anomalies in RS (PFARS)				
TC_COR_8131_01				
TC_COR_8234_01				
TC_COR_8236_01				
TC_COR_8237_01				
TC_COR_8238_01				
3.6.6.3.5 Process Option Anomalies in RS (POARS)				
TC_COR_8204_01				
TC_COR_8215_01				
TC_COR_8222_01				
TC_COR_8227_01				
TC_COR_8239_01				
TC_COR_8240_01				
TC_COR_8241_01				
3.6.6.5.2 Router Processing of Redirect Message (RPRM)				
TC_COR_8552_01				
3.6.7 Generate Neighbor Discovery Messages (GNDM)				
3.6.7.2 Generate Neighbor Advertisement (GNA)				
TC_COR_8201_01				
3.6.7.2.1.2 Generate Unsolicited Proxy NA (GUPNA)				
TC_COR_8486_01				
3.6.7.4 Generate Router Advertisement (GRA)				
TC_COR_8111_01				
3.6.7.4.1 Form Router Advertisement Header (FRAH)				
TC_COR_8135_01				
3.6.7.4.2 Form Router Advertisement Options (FRAO)				
TC_COR_8253_01				
3.6.7.4.2.1 RA MTU Option (RAMTUO)				
TC_COR_8223_01				
3.6.7.4.2.2 RA Source Link-layer Address Option (RASLAO)				
TC_COR_8200_01				
3.6.7.4.2.3 RA Prefix Information Option (RAPIO)				
TC_COR_8302_01				
3.6.7.4.3 Router Advertisement Behavior (RAB)				
TC_COR_8309_01				
3.6.7.4.3.1 Startup Router Advertisement Behavior (SRAB)				
TC_COR_8303_01				
3.6.7.4.3.1.2 AdvDefaultLifetime (ADL)				
TC_COR_8284_01				
TC_COR_8286_01				
3.6.7.4.3.1.3 AdvManagedFlag (AMF)				
TC_COR_8265_01				
3.6.7.4.3.1.4 AdvOtherConfigFlag (AOCF)				
TC_COR_8268_01				
TC_COR_8269_01				
3.6.7.4.3.1.5 AdvReachableTime (ART)				
TC_COR_8274_01				
TC_COR_8275_01				
3.6.7.4.3.1.6 AdvRetransTimer (ADRT)				
TC_COR_8277_01				
TC_COR_8278_01				
3.6.7.4.3.1.7 MaxRtrAdvInterval (MAXRAI)				
TC_COR_8259_01				
TC_COR_8260_01				

ATS Reference	Selected?	Run?	Verdict	Observations
3.6.7.4.3.1.8 MinRtrAdvInterval (MINRAI)				
TC_COR_8262_01				
TC_COR_8263_01				
3.6.7.5 Generate Redirect Message (GRM)				
TC_COR_8182_01				
TC_COR_8183_01				
TC_COR_8551_01				
3.6.7.5.1 Generate Redirect Options (GRO)				
TC_COR_8191_01				
TC_COR_8217_01				
TC_COR_8544_01				
TC_COR_8544_02				

C.7   Void

C.8   Observations

Additional information relevant to the technical content of the PCTR is given here.

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History

Document history		
V1.1.1	April 2006	Publication
V1.2.1	April 2007	Publication
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