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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 Network Interoperability Test Description for IPv6 only services over 5G, as defined below:

Part 1: "Test purposes";

Part 2: "Test Description";

Part 3: "Abstract Test Suite".

Modal verbs terminology

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1 Scope

The present document defines the Test Purpose for IPv6-only services over 5G, covers roaming and non-roaming test scenarios.

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] <u>ETSI TS 123 501</u>: "5G; System architecture for the 5G System (5GS); (3GPP TS 23.501)".
- [2] <u>ETSI TS 123 502</u>: "5G; Procedures for the 5G System (5GS); (3GPP TS 23.502)".
- [3] <u>IETF RFC 6877</u>: "464XLAT: Combination of Stateful and Stateless Translation".
- [4] <u>ETSI ES 203 119-4</u>: "Methods for Testing and Specification (MTS); The Test Description Language (TDL); Part 4: Structured Test Objective Specification (Extension)".

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.

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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] IETF RFC 6146: "Stateful NAT64: Network Address and Protocol Translation from IPv6 Clients to IPv4 Servers".
- [i.3] <u>IETF RFC 6147</u>: "DNS64: DNS Extensions for Network Address Translation from IPv6 Clients to IPv4 Servers".
- [i.4] <u>IETF RFC 7050</u>: "Discovery of the IPv6 Prefix Used for IPv6 Address Synthesis".
- [i.5] <u>IETF RFC 7915</u>: "IP/ICMP Translation Algorithm".

3 Definition of terms, symbols and abbreviations

6

3.1 Terms

For the purposes of the present document, the terms given in ETSI TS 123 501 [1], IETF RFC 6146 [i.2], IETF RFC 6147 [i.3], IETF RFC 6877 [3], IETF RFC 7050 [i.4], IETF RFC 7915 [i.5] and the following apply:

Abstract Test Method (ATM): Refer to ISO/IEC 9646-1 [i.1].

Abstract Test Suite (ATS): Refer to ISO/IEC 9646-1 [i.1].

Implementation Under Test (IUT): Refer to ISO/IEC 9646-1 [i.1].

Test Purpose (TP): Refer to ISO/IEC 9646-1 [i.1].

3.2 Symbols

Void.

3.3 Abbreviations

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

3GPP	3 rd Generation Partnership Project
5GC	5G Core
5GC_A	5G Core for A network
5GC_B	5G Core for B network
AC4	ACcess of Internet IPv4 servers
AC6	ACcess of Internet IPv6 servers
AMF	Access and Mobility Function
ATM	Abstract Test Method
ATS	Abstract Test Suite
CLAT	Customer-side transLATor
DN	Data Network
DNN	Data Network Name
DNS	Domain Name Service
DNS64	DNS with translation from IPv4 to IPv6
DNSAA	DNS/DNS64 Address Allocation
E2E	End to End
HPLMN	Home Public Land Mobile Network
HR	Home Routing
IP	Internet Protocol
IPAA	IPv6 Address Allocation
IUT	Implementation Under Test
LBO	Local Break Out
N6	Network reference point 6
NRMI	Non-RoaMIng
PCF	Policy Control Function
PDU	Protocol Data Unit
PICS	Partial Implementation Conformance Statement
PRFD	PReFix Discovery
RMH	RoaMing with Home routed
RMIH	RoaMIng with Home routed
RMIL	RoaMIng with Local break out
SMF	Service Management Function
TDL	Test Description Language
TDL-TO	Test Description Language - Test Objective extension
TP	Test Purposes
TSS	Test Suite Structure

UE	User Equipment
UPF	User Plane Function
VPLMN	Visited Public Land Mobile Network

4 Test Configurations

4.1 General

Test purposes of the present document address the 5GS and IPv6-only functional entities. CLAT is at the UE, sharing an interface with UE. DNS64 and NAT64 are accessible via N6. N6a represents the interface between NAT64 and DN to observe translation behaviours.





Figure 1: Test configuration CF_5G_IPv6only_NRMI

Configuration CF_5G_IPv6only_NRMI is used for a network where users are registered to their home network. The suffix NRMI stands for non-roaming scenario. PDU session establishment procedures of UEs are performed locally in their own home network.

Configuration CF_5G_IPv6only_NRMI shall have CLAT, NAT64 and DNS64 function in the home network. UE shall have CLAT function.



Figure 2: Test configuration CF_5G_IPv6only_RMIL

Configuration CF_5G_IPv6only_RMIL describes the roaming scenario with Local Breakout (LBO). UE connects to the visited network 5GC_A. In the case of LBO, the PDU session establishment procedure is as in the case of non-roaming with the difference that the AMF, the SMF, the UPF and the PCF are located in the visited network.

Configuration CF_5G_IPv6only_ RMIL shall have CLAT, NAT64 and DNS64 function in the visited network. UE shall have CLAT function.



Figure 3: Test configuration CF_5G_IPv6only_RMIH

Configuration CF_5G_IPv6only_RMIH describes the Home-Routed (HR) roaming scenario. UE connects to the visited network 5GC_A. The PDU session is supported by a SMF function under control of the HPLMN, by a SMF function under control of the VPLMN, by at least one UPF under control of the HPLMN and by at least one UPF under control of the VPLMN.

Configuration CF_5G_IPv6only_ RMIH shall have NAT64 and DNS64 function in the home network. UE shall have CLAT function.

NOTE: PDU Sessions for Emergency services are never established in Home Routed mode. The local network which UE connects shall have NAT64 and DNS64 function.

Table 1 depicts network capabilities where the network shall have to provide IPv6-only connectivity service.

E2E scenarios	UE	Home network	Visited network
Non-roaming	CLAT	NAT64 DNS64	
Roaming with	CLAT		NAT64 DNS64
Local Breakout			
Roaming with	CLAT	NAT64 DNS64	
Home Routing			

Table 1: Network capabilities for IPv6-only E2E scenarios

5 Test Suite Structure (TSS)

5.1 Structure for IPv6 only services over 5G test purposes

Table 2 shows the Test Suite Structure (TSS) including its subgroups defined for interoperability testing of test purposes of IPv6 only services over 5G.

- UE IPv6 address allocation in 5G core network
- DNS64 address allocation
- NAT64 prefix discovery
- Access of Internet IPv4 servers
- Access of Internet IPv6 servers

Non-roaming UE IPv6 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with local UE IPv6 address allocation breakout DNS64 address allocation NAT64 prefix discovery Access of Internet IPv6 servers Roaming with local UE IPv6 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation NAT64 prefix discovery Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers	Test group	Scope
DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with local breakout UE IPv6 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation NAT64 prefix discovery Access of Internet IPv4 servers	Non-roaming	UE IPv6 address allocation
NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with local UE IPv6 address allocation breakout DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers		DNS64 address allocation
Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with local UE IPv6 address allocation breakout DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation NAT64 prefix discovery Access of Internet IPv6 servers DNS64 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv4 servers		NAT64 prefix discovery
Access of Internet IPv6 servers Roaming with local UE IPv6 address allocation breakout DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv6 servers DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers		Access of Internet IPv4 servers
Roaming with local UE IPv6 address allocation breakout DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation DNS64 address allocation DNS64 address allocation DNS64 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv6 servers		Access of Internet IPv6 servers
breakout DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers UE IPv6 address allocation UE IPv6 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv6 servers	Roaming with local	UE IPv6 address allocation
NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home routed UE IPv6 address allocation DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv4 servers Access of Internet IPv6 servers	breakout	DNS64 address allocation
Access of Internet IPv4 servers Access of Internet IPv6 servers Roaming with home UE IPv6 address allocation routed DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers		NAT64 prefix discovery
Access of Internet IPv6 servers Roaming with home UE IPv6 address allocation routed DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers Access of Internet IPv6 servers		Access of Internet IPv4 servers
Roaming with home UE IPv6 address allocation routed DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers		Access of Internet IPv6 servers
routed DNS64 address allocation NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers	Roaming with home	UE IPv6 address allocation
NAT64 prefix discovery Access of Internet IPv4 servers Access of Internet IPv6 servers	routed	DNS64 address allocation
Access of Internet IPv4 servers Access of Internet IPv6 servers		NAT64 prefix discovery
Access of Internet IPv6 servers		Access of Internet IPv4 servers
		Access of Internet IPv6 servers

Table 2: TSS for IPv6 only services over 5G TPs

6 Test Purposes (TP)

6.1 General

6.1.1 Test strategy

The test purposes were generated as a result of analysis of the base documents [1], [2], [3].

6.1.2 TP naming convention

TPs are numbered, starting at 01, within each group. Groups are organized according to the TSS.

Identifier: <t< th=""><th colspan="6">Identifier: <tp>_<group>_<scope>_<nn></nn></scope></group></tp></th></t<>	Identifier: <tp>_<group>_<scope>_<nn></nn></scope></group></tp>					
<tp></tp>	=	Test Purpose:	fixed to "TP"			
<group></group>	=	test group:	RMIL	Roaming with local breakout		
			RMH	Roaming with home routed		
			NRMI	Non-roaming		
<scope></scope>	=	subgroup:	IPAA	UE IPv6 address allocation		
			DNSAA	DNS/DNS64 address allocation		
			PRFD	NAT64 prefix discovery		
			AC4	Access of Internet IPv4 servers		
			AC6	Access of Internet IPv6 servers		
<nn></nn>	=	sequential number:	(01 to 99)			

Table 3: TP identifier naming convention scheme

6.1.3 TP structure

Each TP has been written in TDL-TO and thus in a structured manner which is consistent with all other TPs. The intention of this is to make the TPs more formal. In addition, a more readable format is provided by generating tables out of the TDL-TO format. The defined structure, that has been used, is illustrated in table 4. This table should be read in conjunction with any TP. All structures are defined formally in the TDL Specification ETSI ES 203 119-4 [4].

TP part	Text	Example
Header	<identifier> <test objective=""> <reference> <pics reference=""></pics></reference></test></identifier>	"The IUT is responding on a correctly set"
Initial condition (optional)	Free text description of the condition that the IUT has reached before the test purpose applies.	the IUT is in the initial state
Start point	Describes the full logic of the test purpose. Includes trigger and expected behaviour of the IUT.	Expected behaviour ensure that { }
Trigger	One or more actions that trigger an expected response of the IUT. Mostly a set of different messages the IUT receives.	when { the IUT entity receives an INVITE request message containing CSeq indicating value 1 }
Expected behaviour	Describes the response that the IUT sends after receiving a certain (set of) messages. This response describes the pass criteria	then { the IUT entity sends a 100 Trying response message containing CSeq indicating value 1 }

Table 4: Structure of a single TP

6.2 Test Purposes

6.2.1 Test Purposes in the non-roaming scenario

TP ld	TP_NMRI_IPAA_01
Test Objective	Verify that the 5GC provides the IPv6 prefixes to the UE
Reference	NONE
Configuration	CF_5G_IPv6only_NMRI
PICS Selection	NONE
	Initial Conditions
with {	
the 5GC has a	a UE registered to it which is provisioned with the IPv6 only DNN
and	
the 5GC is p	rovisioned with selectable DNN configurations for IPv6 PDU session type
}	
	Expected Behaviour
ensure that {	
when {	
the 5GC	receives a PDU session request from the UE
}	
then {	
the 5GC	only sends the IPv6 prefixes to the UE
}	
}	

TP ld	TP_NMRI_DNSAA_01					
Test Objective	Verify that the 5GC provides the DNS64 server address to the UE					
Reference	NONE					
Configuration	CF_5G_IPv6only_NMRI					
PICS Selection	NONE					
	Initial Conditions					
with {						
the 5GC has	a UE registered to it which is provisioned with the IPv6 only DNN					

and the 5 l	GC is	s pro	visio	oned w	vith	selectable DNN configurations for IPv6 PDU session type
J						Expected Behaviour
ensure tha	ıt {					
when	{					
	the !	5GC r	eceiv	ves a	PDU	session request from the UE
	}					
then	{					
	the !	5GC o	nly s	sends	the	DNS64 server address to the UE
	}					
}						

TP ld	[P_NMRI_PRFD_01						
Test Objective	Verify that the UE discovers NAT64 prefixes						
Reference	NONE						
Configuration	CF_5G_IPv6only_NMRI						
PICS Selection	NONE						
	Initial Conditions						
with {							
the UE is pr	ovisioned with the IPv6 only DNN						
and	-						
the UE is re	gistered to the 5GC which is provisioned with selectable DNN configurations for						
IPv6 PDU ses	sion type						
and							
the UE has r	eceived the DNS64 server address from the 5GC						
and							
the IF generater IDV6 addresses							
J	Expected Behaviour						
ensure that {							
when {							
the UF	sends a DNS guery for AAAA resource records of well-known IBy4-only domain name						
"iputonlu ar	Sends a DAS query for AAAA resource records of wert known reve only domain name						
ipv40my.ar	pa.						
then (
the UE	reactives NATEA profiles which can be extracted from the DNCA reasons.						
LILE UE	receives which prefixes which can be extracted from the buso4 response						
}							
}							

TP ld		TP NMRI AC4 01				
Test Object	ive	Verify the UE accesses IPv4 servers successfully through 5GC				
Reference	-	NONE				
Configuration	on	CF 5G IPv6only NMRI				
PICS Select	ion	NONE				
	-	Initial Conditions				
with {						
the U	E is pr	ovisioned with the IPv6 only DNN				
and						
the U	E is re	gistered to the 5GC which is provisioned with selectable DNN configurations for				
IPv6 1	PDU ses	sion type				
and						
the U	E has r	eceived the DNS64 server address from the 5GC				
and						
the U	E gener	ates IPv6 addresses				
}						
		Expected Behaviour				
ensure that	t {					
when	{					
	the UE	accesses IPv4 servers				
	}					
then	{					
the UE		gets contents from IPv4 servers				
	}					
}						

TP ld	TP_NMRI_AC6_01		
Test Objective	Verify that the UE accesses IPv6 servers successfully through 5GC		
Reference	NONE		
Configuration	CF_5G_IPv6only_NMRI		
PICS Selection	NONE		
	Initial Conditions		
with {			
the UE is pr	ovisioned with the IPv6 only DNN		
and			
the UE is re	the UE is registered to the 5GC which is provisioned with selectable DNN configurations for		
IPv6 PDU ses	sion type		
and			
the UE has r	the UE has received the DNS64 server address from the 5GC		
and	and		
the UE gener	the UE generates IPv6 addresses		
}			
	Expected Behaviour		
ensure that {			
when {			
the UE	accesses IPv6 servers		
}			
then {			
the UE	gets contents from IPv6 servers		
}			
}			

6.2.2 Test Purposes in the roaming with local breakout scenario

TP ld	TP_RMIL_IPAA_01		
Test Objective	Verify that the 5GC_A provides the IPv6 prefixes to the UE		
Reference	NONE		
Configuration	CF_5G_IPv6only_RMIL		
PICS Selection	NONE		
	Initial Conditions		
with {			
the 5GC_A ha	the 5GC_A has a UE registered to it which is provisioned with the IPv6 only DNN		
and			
the 5GC_A is	provisioned with selectable DNN configurations for IPv6 PDU session type		
}			
	Expected Behaviour		
ensure that {			
when {			
the 5GC	_A receives a PDU session request from the UE		
}			
then {			
the 5GC	_A only sends the IPv6 prefixes to the UE		
}			
}			

TP ld	TP_RMIL_DNSAA_01		
Test Objective	Verify that the 5GC_A provides the DNS64 server address to the UE		
Reference	NONE		
Configuration	CF_5G_IPv6only_RMIL		
PICS Selection	NONE		
	Initial Conditions		
with {			
the 5GC_A ha	s a UE registered to it which is provisioned with the IPv6 only DNN		
and			
the 5GC_A is	the 5GC_A is provisioned with selectable DNN configurations for IPv6 PDU session type		
}			
	Expected Behaviour		
ensure that {			
when {			
the 5GC	_A receives a PDU session request from the UE		
}			
then {			

```
the 5GC_A only sends the DNS64 server address to the UE
}
```

TP ld		TP_RMIL_PRFD_01	
Test O	bjective	Verify that the UE discovers NAT64 prefixes	
Refere	ence	NONE	
Config	uration	CF_5G_IPv6only_RMIL	
PICS S	Selection	NONE	
		Initial Conditions	
with {			
t	he UE is pr	ovisioned with the IPv6 only DNN	
a	and		
t	the UE is registered to the 5GC_A which is provisioned with selectable DNN configurations for		
I	Pv6 PDU ses	sion type	
a	and		
t	he UE has r	eceived the DNS64 server address from the 5GC_A	
a	and		
t	he UE gener	ates IPv6 addresses	
}	•		
		Expected Behaviour	
ensure	e that {		
W	<i>r</i> hen {		
	the UE	sends a DNS query for AAAA resource records of well-known IPv4-only domain name	
"	ipv4only.ar	pa."	
	}		
t	hen {		
	the UE :	receives NAT64 prefixes which can be extracted from the DNS64 response	
	}		
}	•		

TP ld		TP_RMIL_AC4_01	
Test (Objective	Verify the UE accesses IPv4 servers successfully through 5GC_A	
Refer	ence	NONE	
Confi	guration	CF_5G_IPv6only_RMIL	
PICS	Selection	NONE	
		Initial Conditions	
with	{		
	the UE is pr	ovisioned with the IPv6 only DNN	
	and		
	the UE is re	gistered to the 5GC_A which is provisioned with selectable DNN configurations for	
	IPv6 PDU ses	sion type	
	and		
	the UE has r	eceived the DNS64 server address from the 5GC_A	
	and		
	the UE gener	ates IPv6 addresses	
	}		
		Expected Behaviour	
ensur	re that {		
	when {		
	the UE	accesses IPv4 servers	
	}		
	then {		
1	the UE	gets contents from IPv4 servers	
	}		
1	}		

TP ld	TP_RMIL_AC6_01			
Test Objective	Verify that the UE accesses IPv6 servers successfully through 5GC_A			
Reference	NONE			
Configuration	CF_5G_IPv6only_RMIL			
PICS Selection	NONE			
	Initial Conditions			
with {				
the UE is provisioned with the IPv6 only DNN				
and				
the UE is re	gistered to the 5GC_A which is provisioned with selectable DNN configurations for			

```
IPv6 PDU session type
and
the UE has received the DNS64 server address from the 5GC_A
and
the UE generates IPv6 addresses
}
<u>Expected Behaviour</u>
ensure that {
when {
the UE accesses IPv6 servers
}
the UE accesses IPv6 servers
}
```

6.2.3 Test Purposes in the roaming with home routed scenario

TP ld	TP_RMIH_IPAA_01
Test Objective	Verify that the 5GC_B provides the IPv6 prefixes to the UE
Reference NONE	
Configuration	CF_5G_IPv6only_RMIH
PICS Selection	NONE
	Initial Conditions
with {	
the 5GC_A ha	s a UE registered to it which is provisioned with the IPv6 only DNN
and	
the 5GC_B is	provisioned with selectable DNN configurations for IPv6 PDU session type
}	
	Expected Behaviour
ensure that {	
when {	
the 5GC	_B receives a PDU session request from the UE
}	
then {	
the 5GC	_B only sends the IPv6 prefixes to the UE
}	
}	

TP Id	TP_RMIH_DNSAA_01
Test Objective	Verify that the 5GC_B provides the DNS64 server address to the UE
Reference	NONE
Configuration	CF_5G_IPv6only_RMIH
PICS Selection	NONE
	Initial Conditions
with { the 5GC_A ha	as a UE registered to it which is provisioned with the IPv6 only DNN
the 5GC_B is	provisioned with selectable DNN configurations for IPv6 PDU session type
	Expected Behaviour
ensure that {	C_B receives a PDU session request from the UE C_B only sends the DNS64 server address to the UE

TP ld	TP_RMIH_PRFD_01		
Test Objective	Verify that the UE discovers NAT64 prefixes		
Reference	NONE		
Configuration	CF_5G_IPv6only_RMIH		
PICS Selection	NONE		
	Initial Conditions		
with {			
the UE is pr	covisioned with the IPv6 only DNN		
and			
the UE is re	the UE is registered to the 5GC_B which is provisioned with selectable DNN configurations for		
IPv6 PDU ses	ssion type		
and			
the UE has 1	received the DNS64 server address from the 5GC_A		
and			
the UE gener	the UE generates IPv6 addresses		
}			
	Expected Behaviour		
ensure that {			
when {			
the UE	sends a DNS query for AAAA resource records of well-known IPv4-only domain name		
"ipv4only.ar	rpa."		
}			
then {			
the UE	receives NAT64 prefixes which can be extracted from the DNS64 response		
}			
}			

TP ld		TP_RMIH_AC4_01		
Test Obje	ective	Verify the UE accesses IPv4 servers successfully		
Reference NONE		NONE		
Configura	ation	CF 5G IPv6only RMIH		
PICS Sele	ection	NONE		
		Initial Conditions		
with {				
the	UE is pr	ovisioned with the IPv6 only DNN		
and				
the	the UE is registered to the 5GC_A which is provisioned with selectable DNN configurations for			
IPv	6 PDU ses	sion type		
and	and			
the	the UE has received the DNS64 server address from the 5GC_B			
and	and			
the	the UE generates IPv6 addresses			
}	}			
		Expected Behaviour		
ensure t	hat {			
whe	n {			
	the UE	accesses IPv4 servers		
	}			
the	n {			
	the UE	gets contents from IPv4 servers		
	}			
}				

TDI		
Test	Objective	Verify that the UE accesses IPv6 servers successfully
Reference		NONE
Configuration		CF_5G_IPv6only_RMIH
PICS	Selection	NONE
		Initial Conditions
with	{	
	the UE is pr	ovisioned with the IPv6 only DNN
	and	
	the UE is re	gistered to the 5GC_A which is provisioned with selectable DNN configurations for
	IPv6 PDU ses	sion type
	and	
	the UE has r	eceived the DNS64 server address from the 5GC_B
	and	

the UE generates IPv6 addresses	
}	
Expected Behaviour	
ensure that {	
when {	
the UE accesses IPv6 servers	
}	
then {	
the UE gets contents from IPv6 servers	
}	
}	

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History

Document history		
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