Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_01		
Objective:	Check that EUTs correctly handle uncompressed 6LoWPAN packets (EUI-64 link-local)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 8; RFC 6775 5.6		
Pre-test conditions:	• Header compression is disabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use EUI-64		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes
	1	Check	• EUT1 sends an uncompressed 6LoWPAN packet containing the Echo Request message to EUT2's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Both source and destination addresses are EUI-64 link-local
	2	Verify	EUT2 receives the Echo Request message from EUT1
	3	Check	• EUT2 sends an uncompressed 6LoWPAN packet containing the Echo Reply message to EUT1's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Both source and destination addresses are EUI-64 link-local
	4	Verify	EUT1 receives the Echo Reply message from EUT2
	5	Check	The data received in the echo reply message is identical to that sent in EUT1's echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_02		
Objective:	Check that EUTs correctly handle uncompressed 6LoWPAN packets (16-bit short link-local)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 8; RFC 6775 5.6		
Pre-test conditions:	• Header compression is disabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use 16-bit short address		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes
	1	Check	• EUT1 sends an uncompressed 6LoWPAN packet containing the Echo Request message to EUT2's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Both source and destination addresses are 16-bit short link-local
	2	Verify	EUT2 receives the Echo Request message from EUT1
	3	Check	• EUT2 sends an uncompressed 6LoWPAN packet containing the Echo Reply message to EUT1's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Both source and destination addresses are 16-bit short link-local
	4	Verify	EUT1 receives the Echo Reply message from EUT2
	5	Check	The data received in the echo reply message is identical to that sent in EUT1's echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_03		
Objective:	Check that EUTs correctly handle uncompressed 6LoWPAN fragmented packets		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 5.3; RFC 6775 5.6		
Pre-test conditions:	Header compression is disabled on both EUT1 and EUT2		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 253 bytes, total IPv6 size 301 bytes
	1	Check	• EUT1 sends a sequence of uncompressed 6LoWPAN packets containing the Echo Request fragments to EUT2 • EUT1 correctly fragments the Echo Request: • a 6LoWPAN FRAG1 header (dispatch 11000xxx) is included in the first packet • a 6LoWPAN FRAGN header (dispatch 11100xxx) is included in all following packets • the offsets form a contiguous sequence • all fragments except the last one must be multiples of 8 bytes
	2	Verify	EUT2 reassembles correctly the fragments and receives the Echo Request message from EUT1
	3	Check	• EUT2 sends a sequence of uncompressed 6LoWPAN packets containing the Echo Reply message to EUT1 • EUT1 correctly fragments the Echo Reply: • a 6LoWPAN FRAG1 header (dispatch 11000xxx) is included in the first packet • a 6LoWPAN FRAGN header (dispatch 11100xxx) is included in all following packets • the offsets form a contiguous sequence • all fragments except the last one must be multiples of 8 bytes • The data in the echo reply message packets is identical to that sent in the echo request message packets
	4	Verify	EUT1 correctly reassembles the fragments and receives the Echo Reply message from EUT2
	5	Verify	The data in the received echo reply message is identical to that sent in the echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_04		
Objective:	Check that EUTs correctly handle maximum size uncompressed 6LoWPAN fragmented packets		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 5.3; RFC 6775 5.6		
Pre-test conditions:	Header compression is disabled on both EUT1 and EUT2		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 1232 bytes, total IPv6 size 1280 bytes
	1	Check	• EUT1 sends a sequence of uncompressed 6LoWPAN packets containing the Echo Request fragments to EUT2 • EUT1 correctly fragments the Echo Request: • a 6LoWPAN FRAG1 header (dispatch 11000xxx) is included in the first packet • a 6LoWPAN FRAGN header (dispatch 11100xxx) is included in all following packets • the offsets form a contiguous sequence • all fragments except the last one must be multiples of 8 bytes
	2	Verify	EUT2 reassembles correctly the fragments and receives the Echo Request message from EUT1
	3	Check	• EUT2 sends a sequence of uncompressed 6LoWPAN packets containing the Echo Reply message to EUT1 • EUT1 correctly fragments the Echo Reply: • a 6LoWPAN FRAG1 header (dispatch 11000xxx) is included in the first packet • a 6LoWPAN FRAGN header (dispatch 11100xxx) is included in all following packets • the offsets form a contiguous sequence • all fragments except the last one must be multiples of 8 bytes • The data in the echo reply message packets is identical to that sent in the echo request message packets
	4	Verify	EUT1 correctly reassembles the fragments and receives the Echo Reply message from EUT2
	5	Verify	The data in the received echo reply message is identical to that sent in the echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_05		
Objective:	Check that EUTs correctly handle uncompressed 6LoWPAN multicast to all-nodes (16-bit short link-local)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 8; RFC 6775 5.6		
Pre-test conditions:	• Header compression is disabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use 16-bit short address		
Test Sequence:	Step	Type	Description
	0	Stimulus	EUT1 initiates an echo request to the link-local all-nodes multicast address (FF02::1) (ICMP payload = 4 bytes, total IPv6 size 52 bytes)
	1	Check	EUT1 sends an uncompressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “01000001”
	3	Verify	EUT2 receives the Echo Request message from EUT1
	4	Check	EUT2 sends an uncompressed 6LoWPAN packet containing the Echo Reply message to EUT1
	5	Check	Dispatch value in 6LowPAN packet is “01000001”
	6	Verify	EUT1 receives the Echo Reply message from EUT2
	7	Check	The data in the echo reply message is identical to that in the echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_06		
Objective:	Check that EUTs correctly handle uncompressed 6LoWPAN multicast to all-nodes (EUI-64 link-local)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 8; RFC 6775 5.6		
Pre-test conditions:	• Header compression is disabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use EUI-64		
Test Sequence:	Step	Type	Description
	0	Stimulus	EUT1 initiates an echo request to the link-local all-nodes multicast address (FF02::1) (ICMP payload = 4 bytes, total IPv6 size 52 bytes)
	1	Check	EUT1 sends an uncompressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “01000001”
	3	Verify	EUT2 receives the Echo Request message from EUT1
	4	Check	EUT2 sends an uncompressed 6LoWPAN packet containing the Echo Reply message to EUT1
	5	Check	Dispatch value in 6LowPAN packet is “01000001”
	6	Verify	EUT1 receives the Echo Reply message from EUT2
	7	Check	The data in the echo reply message is identical to that in the echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_07		
Objective:	Check that EUTs correctly handle uncompressed 6LoWPAN packets (EUI-64 to 16-bit short link-local)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 8; RFC 6775 5.6		
Pre-test conditions:	• Header compression is disabled on both EUT1 and EUT2 • EUT1 is configured to use EUI-64 and EUT2 is configured to use 16-bit short address		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes
	1	Check	• EUT1 sends an uncompressed 6LoWPAN packet containing the Echo Request message to EUT2's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Source address is EUI-64 link-local • Destination address is 16-bit short link-local
	2	Verify	EUT2 receives the Echo Request message from EUT1
	3	Check	• EUT2 sends an uncompressed 6LoWPAN packet containing the Echo Reply message to EUT1's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Source address is 16-bit short link-local • Destination address is EUI-64 link-local
	4	Verify	EUT1 receives the Echo Reply message from EUT2
	5	Check	The data received in the echo reply message is identical to that sent in EUT1's echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_08		
Objective:	Check that EUTs correctly handle uncompressed 6LoWPAN packets (16-bit short to EUI-64 link-local)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 4944 5.1, 8; RFC 6775 5.6		
Pre-test conditions:	• Header compression is disabled on both EUT1 and EUT2 • EUT1 is configured to use 16-bit short address and EUT2 is configured to use EUI-64		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes
	1	Check	• EUT1 sends an uncompressed 6LoWPAN packet containing the Echo Request message to EUT2's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Source address is 16-bit short link-local • Destination address is EUI-64 link-local
	2	Verify	EUT2 receives the Echo Request message from EUT1
	3	Check	• EUT2 sends an uncompressed 6LoWPAN packet containing the Echo Reply message to EUT1's link-local address • Dispatch value in 6LowPAN packet is “01000001” • Source address is EUI-64 link-local • Destination address is 16-bit short link-local
	4	Verify	EUT1 receives the Echo Reply message from EUT2
	5	Check	The data received in the echo reply message is identical to that sent in EUT1's echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_FORMAT_09		
Objective:	Check that EUTs correctly handle token passing/maintenance at 115.2 kbit/s and correctly handle a basic 6Lo packet (link-local)		
Configuration:	6LBR-2Host, bus topology		
Technologies:	6LoBAC only		
Level:	basic		
References:	BACnet Clause 9 [10], BACnet MS/TP Conformance Test [11], RFC 6282, draft-ietf-6lobac		
Pre-test conditions:	• EUTs conform to the MS/TP data link specification • EUTs are configured to use 115,200 bit/s • LBR is configured at address 0, Host 1 is at address 1, Host 2 is at address 2 • Nmax_master is configured to 8 in all EUTs		
Test Sequence:	Step	Type	Description
	0	Check	LBR sends token to Host 1, Host 1 sends token to Host 2, Host 2 sends token to LBR
	1	Check	Every 50 rotations of the token, Host 2 performs Poll for Master procedure
	2	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes
	3	Check	• EUT1 sends a 6LoBAC packet containing the Echo Request message to EUT2's link-local address • Both source and destination addresses are link-local
	4	Verify	EUT2 receives the Echo Request message from EUT1 (may not be visible in EUR2 ➔ optional)
	5	Check	• EUT2 sends a 6LoBAC packet containing the Echo Reply message to EUT1's link-local address • Both source and destination addresses are link-local
	6	Verify	EUT1 receives the Echo Reply message from EUT2
	7	Check	The data received in the echo reply message is identical to that sent in EUT1's echo request message

Interoperability Test Description			
Identifier:	TD_6Lo_HC_01		
Objective:	Check that EUTs correctly handle compressed 6LoWPAN packets (EUI-64 or other long address link-local, hop limit=64)		
Configuration:	Node-Node		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	basic		
References:	RFC 6282 section 3; RFC 6775 5.6		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use EUI-64 or other long address • EUT1 and EUT2 are configured with a default hop limit of 64		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	1	Check	EUT1 sends a compressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	6	Verify	EUT2 receives the Echo Request message from EUT1
	7	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	8	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	9	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	12	Verify	EUT1 receives the Echo Reply message from EUT2
Notes:	• The feature tests check that best compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_02		
Objective:	Check that EUTs correctly handle compressed 6LoWPAN packets (16-bit or other short address link-local, hop limit=64)		
Configuration:	Node-Node		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	basic		
References:	RFC 6282 section 3; RFC 6775 5.6		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use 16-bit or other short address • EUT1 and EUT2 are configured with a default hop limit of 64		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	1	Check	EUT1 sends a compressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	6	Verify	EUT2 receives the Echo Request message from EUT1
	7	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	8	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	9	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	12	Verify	EUT1 receives the Echo Reply message from EUT2
Notes:	• The feature tests check that best compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_03		
Objective:	Check that EUTs correctly handle compressed 6LoWPAN packets (EUI-64 or other long address link-local, hop limit=63)		
Configuration:	Node-Node		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	basic		
References:	RFC 6282 section 3; RFC 6775 5.6		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use EUI-64 or other long address • EUT1 and EUT2 are configured with a default hop limit of 63		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 63, no traffic class or flow label is being used
	1	Check	EUT1 sends a compressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 00 and the hop limit field is carried in-line
	5	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	6	Verify	EUT2 receives the Echo Request message from EUT1
	7	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	8	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	9	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	10	Feature	In IP_HC, HLIM (HL) is 00 and the hop limit field is carried in-line
	11	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	12	Verify	EUT1 receives the Echo Reply message from EUT2
Notes:	• The feature tests check that best compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_04		
Objective:	Check that EUTs correctly handle compressed 6LoWPAN packets (16-bit or other short address link-local, hop limit=63)		
Configuration:	Node-Node		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	basic		
References:	RFC 6282 section 3; RFC 6775 5.6		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use 16-bit or other short address • EUT1 and EUT2 are configured with a default hop limit of 63		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 63, no traffic class or flow label is being used
	1	Check	EUT1 sends a compressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 00 and the hop limit field is carried in-line
	5	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	6	Verify	EUT2 receives the Echo Request message from EUT1
	7	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	8	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	9	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	10	Feature	In IP_HC, HLIM (HL) is 00 and the hop limit field is carried in-line
	11	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	12	Verify	EUT1 receives the Echo Reply message from EUT2
Notes:	• The feature tests check that best compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_05		
Objective:	Check that EUTs correctly handle compressed UDP packets (EUI-64 or other long address, server port 5683)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	basic		
References:	RFC 6282, 4.3		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use EUI-64 address • A CoAP ping server is installed on port 5683 of the host		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR initiates a CoAP Ping request to Host's CoAP Ping server
	1	Check	6LR sends a 6LoWPAN packet containing the CoAP Ping message to Host
	2	Feature	NH is set, NHC is 111100x0, the source port is compressed to 8 bits (x=1) or uncompressed (x=0), the destination port is uncompressed 5683
	3	Verify	Host receives the CoAP Ping message from 6LR
	4	Check	Host sends a 6LoWPAN packet containing the CoAP Reset message to 6LR
	5	Feature	NH is set, NHC is 1111000x, the source port is uncompressed 5683, the destination port is compressed to 8 bits (x=1) or uncompressed (x=0)
	6	Verify	6LR receives the CoAP Reset message from Host
Notes:	The feature tests check that best compression is used (but this is not a requirement for interoperability)		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_06		
Objective:	Check that EUTs correctly handle compressed UDP packets (16-bit or other short address, server port 5683)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	basic		
References:	RFC 6282, 4.3		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use 16-bit address • A CoAP ping server is installed on port 5683 of the host		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR initiates a CoAP Ping request to Host's CoAP Ping server
	1	Check	6LR sends a 6LoWPAN packet containing the CoAP Ping message to Host
	2	Feature	NH is set, NHC is 111100x0, the source port is compressed to 8 bits (x=1) or uncompressed (x=0), the destination port is uncompressed 5683
	3	Verify	Host receives the CoAP Ping message from 6LR
	4	Check	Host sends a 6LoWPAN packet containing the CoAP Reset message to 6LR
	5	Feature	NH is set, NHC is 1111000x, the source port is uncompressed 5683, the destination port is compressed to 8 bits (x=1) or uncompressed (x=0)
	6	Verify	6LR receives the CoAP Reset message from Host
Notes:	The feature tests check that best compression is used (but this is not a requirement for interoperability)		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_07		
Objective:	Check that EUTs correctly handle compressed UDP packets (EUI-64 or other long address, server port 61616)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	basic		
References:	RFC 6282, 4.3		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use EUI-64 address • A CoAP ping server is installed on port 61616 of the host		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR initiates a CoAP Ping request to Host's CoAP Ping server
	1	Check	6LR sends a 6LoWPAN packet containing the CoAP Ping message to Host
	2	Feature	NH is set, NHC is 111100x1, the destination port is compressed to 4 bits of 0000 (x=1) or 8 bits of 0xb0 (x=0)
	3	Verify	Host receives the CoAP Ping message from 6LR
	4	Check	Host sends a 6LoWPAN packet containing the CoAP Reset message to 6LR
	5	Feature	NH is set, NHC is 1111001x, the source port is compressed to 4 bits of 0000 (x=1) or 8 bits of 0xb0 (x=0)
	6	Verify	6LR receives the CoAP Reset message from Host
Notes:	The feature tests check that best compression is used (but this is not a requirement for interoperability)		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_08		
Objective:	Check that EUTs correctly handle compressed UDP packets (16-bit or other short address, server port 61616)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	basic		
References:	RFC 6282, 4.3		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use 16-bit address • A CoAP ping server is installed on port 61616 of the host		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR initiates a CoAP Ping request to Host's CoAP Ping server
	1	Check	6LR sends a 6LoWPAN packet containing the CoAP Ping message to Host
	2	Feature	NH is set, NHC is 111100x1, the destination port is compressed to 4 bits of 0000 (x=1) or 8 bits of 0xb0 (x=0)
	3	Verify	Host receives the CoAP Ping message from 6LR
	4	Check	Host sends a 6LoWPAN packet containing the CoAP Reset message to 6LR
	5	Feature	NH is set, NHC is 1111001x, the source port is compressed to 4 bits of 0000 (x=1) or 8 bits of 0xb0 (x=0)
	6	Verify	6LR receives the CoAP Reset message from Host
Notes:	The feature tests check that best compression is used (but this is not a requirement for interoperability)		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_09		
Objective:	Check that EUTs correctly handle compressed 6LoWPAN packets (EUI-64 or other long address to 16-bit or other short address link-local, hop limit=64)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 6282 section 3; RFC 6775 5.6		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 is configured to use EUI-64 and EUT2 is configured to use 16-bit short address		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	1	Check	EUT1 sends a compressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	6	Verify	EUT2 receives the Echo Request message from EUT1
	7	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	8	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	9	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	12	Verify	EUT1 receives the Echo Reply message from EUT2
Notes:	• The feature tests check that best compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_10		
Objective:	Check that EUTs correctly handle compressed 6LoWPAN packets (16-bit or other short address to EUI-64 or other long address link-local, hop limit=64)		
Configuration:	Node-Node		
Technologies:	6LoWPAN only		
Level:	basic		
References:	RFC 6282 section 3; RFC 6775 5.6		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 is configured to use 16-bit short address and EUT2 is configured to use EUI-64		
Test Sequence:	Step	Type	Description
	0	Stimulus	• EUT1 initiates an echo request to EUT2's link-local address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	1	Check	EUT1 sends a compressed 6LoWPAN packet containing the Echo Request message to EUT2
	2	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	6	Verify	EUT2 receives the Echo Request message from EUT1
	7	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	8	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	9	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	In IP_HC, SAC=0, SAM=11; DAC=0; DAM=11
	12	Verify	EUT1 receives the Echo Reply message from EUT2
Notes:	• The feature tests check that best compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_HC_11		
Objective:	Check that EUTs correctly handle NH=0 compressed TCP packets (EUI-64 or other long address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	advanced		
References:	RFC 6282, 3.1.1		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use EUI-64 address • A TCP server (e.g., a HTTP server) is installed on port 80 of the host		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR initiates a TCP SYN request (connect) to Host's TCP server
	1	Check	6LR sends a 6LoWPAN packet containing the TCP SYN packet to Host
	2	Check	NH=0
	3	Verify	Host receives the TCP SYN packet from 6LR
	4	Check	Host sends a 6LoWPAN packet containing a TCP SYN/ACK message to 6LR
	5	Check	NH=0
	6	Verify	6LR receives the TCP SYN/ACK from Host

Interoperability Test Description			
Identifier:	TD_6Lo_HC_12		
Objective:	Check that EUTs correctly handle NH=0 compressed TCP packets (16-bit or other short address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	advanced		
References:	RFC 6282, 3.1.1		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use 16-bit address • A TCP server (e.g., a HTTP server) is installed on port 80 of the host		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR initiates a TCP SYN request (connect) to Host's TCP server
	1	Check	6LR sends a 6LoWPAN packet containing the TCP SYN packet to Host
	2	Check	NH=0
	3	Verify	Host receives the TCP SYN packet from 6LR
	4	Check	Host sends a 6LoWPAN packet containing a TCP SYN/ACK message to 6LR
	5	Check	NH=0
	6	Verify	6LR receives the TCP SYN/ACK from Host

Interoperability Test Description			
Identifier:	TD_6Lo_ND_01		
Objective:	Check that a host is able to register its global IPv6 address (EUI-64 or other long address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	basic		
References:	RFC 6775 10.2		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use EUI-64 or other long address		
Test Sequence:	Step	Type	Description
	0	Stimulus	Initialize the network interface of the Host
	1	Check	The Host sends a Router Solicitation to all-routers multicast address with SLLAO (EUI-64 or other long address). Source = link local based on EUI-64 or other long address
	2	Verify	The Router receives the Router Solicitation from the host.
	3	Check	• The Router sends a unicast Router Advertisement containing PIO and optionally 6COs to the host. • Link local addresses are used. • The L bit is not set.
	4	Verify	The host receives the Router Advertisement from the router
	5	Check	The host configures its tentative global IPv6 address based on the PIO information in RA from the Router (EUI-64 or other long address)
	6	Check	The host registers its tentative address by sending a unicast Neighbor Solicitation containing ARO and SLLAO. Source = GP64
	7	Verify	The Router receives the Neighbor Solicitation from the host.
	8	Check	The Router sends a Neighbor Advertisement with Status set to 0 (Dest = GP64)
	9	Verify	The host updates the status of the tentative address
	10	Stimulus	• The Router initiates an echo request to the Host's new global address, using its own global address as the source • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	11	Check	The Router sends a 6LoWPAN packet containing the Echo Request message to the Host
	12	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	13	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	14	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	15	Verify	The Host receives the Echo Request message from the Router
	16	Check	The Host sends a 6LoWPAN packet containing the Echo Reply message to the Router
	17	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	18	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	19	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	20	Verify	The Router receives the Echo Reply message from the Host
Notes:	The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_02		
Objective:	Check that a host is able to register its global IPv6 address (16-bit or other short address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	basic		
References:	RFC 6775 10.2		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use 16-bit or other short address		
Test Sequence:	Step	Type	Description
	0	Stimulus	Initialize the network interface of the Host
	1	Check	The Host sends a Router Solicitation to all-routers multicast address with SLLAO (EUI-64 or other long address). Source = link local based on EUI-64 or other long address
	2	Verify	The Router receives the Router Solicitation from the host.
	3	Check	• The Router sends a unicast Router Advertisement containing PIO and optionally 6COs to the host. • Link local addresses are used. • The L bit is set (6LoBAC); the L bit is not set (NFC, LoWPANz).
	4	Verify	The host receives the Router Advertisement from the router
	5	Check	The host configures its tentative global IPv6 address based on the PIO information in RA from the Router (16-bit or other short address)
	6	Check	The host registers its tentative address by sending a unicast Neighbor Solicitation containing ARO and SLLAO. Source = GP16
	7	Verify	The Router receives the Neighbor Solicitation from the host.
	8	Check	The Router sends a Neighbor Advertisement with Status set to 0 (Dest = GP16)
	9	Verify	The host updates the status of the tentative address
	10	Stimulus	• The Router initiates an echo request to the Host's new global address, using its own global address as the source • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	11	Check	The Router sends a 6LoWPAN packet containing the Echo Request message to the Host
	12	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	13	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	14	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	15	Verify	The Host receives the Echo Request message from the Router
	16	Check	The Host sends a 6LoWPAN packet containing the Echo Reply message to the Router
	17	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	18	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	19	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	20	Verify	The Router receives the Echo Reply message from the Host
Notes:	The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_03		
Objective:	Check Host NUD behavior		
Configuration:	Host-6LR		
Technologies:	all		
Level:	basic		
References:	RFC 6775 5.5		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is up and registered its global address with the Router		
Test Sequence:	Step	Type	Description
	0	Stimulus	Host sends a sequence of echo requests to 2001:db8::1
	1	Verify	Host sends a unicast NS message to the 6LR to perform NUD

Interoperability Test Description			
Identifier:	TD_6Lo_ND_04		
Objective:	Check 6LR NUD behavior (ICMP version)		
Configuration:	Host-6LR		
Technologies:	all		
Level:	basic		
References:	RFC 6775 5.5		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is up and registered its global address with the Router		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR sends a sequence of echo requests to Host
	1	Stimulus	After 10 seconds, echo reply function is disabled on host
	2	Verify	6LR sends a unicast NS message to the host to perform NUD
Notes:	Optional, as not all hosts allow disabling echo reply function		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_05		
Objective:	Check 6LR NUD behavior (UDP version)		
Configuration:	Host-6LR		
Technologies:	all		
Level:	basic		
References:	RFC 6775 5.5		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • A CoAP ping server is installed on port 5683 of the host • Host is up and registered its global address with the Router		
Test Sequence:	Step	Type	Description
	0	Stimulus	6LR sends a sequence of CoAP pings to Host
	1	Stimulus	After 10 seconds, CoAP server function is disabled on host
	2	Verify	6LR sends a unicast NS message to the host to perform NUD
Notes:	Optional, as not all hosts allow disabling CoAP server function		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_06		
Objective:	Check host behavior under multiple prefixes (EUI-64 or other long address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	advanced		
References:	RFC 4861 3.1		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use EUI-64 or other long address • Router is configured with multiple prefixes		
Test Sequence:	Step	Type	Description
	0	Stimulus	Initialize the network interface of the Host
	1	Check	The Host sends a Router Solicitation to all-routers multicast address with SLLAO (EUI-64 or other long address). Source = link local based on EUI-64 or other long address
	2	Verify	The Router receives the Router Solicitation from the host.
	3	Check	• The Router sends a unicast Router Advertisement containing PIO with multiple prefixes and optionally 6COs to the host. • Link local addresses are used. • The L bit is not set.
	4	Verify	The host receives the Router Advertisement from the router
	5	Check	The host configures a number of tentative global IPv6 address based on the PIO information in RA from the Router (EUI-64 or other long address)
	6	Check	The host registers its tentative addresses by sending unicast Neighbor Solicitations containing ARO and SLLAO. Source = GP64
	7	Verify	The Router receives the Neighbor Solicitations from the host.
	8	Check	The Router sends Neighbor Advertisements with Status set to 0 (Dest = GP64)
	9	Verify	The host updates the status of the tentative addresses
	10	Stimulus	• The Router initiates an echo request to one of the Host's new global addresses, using the appropriate own global address as the source • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	11	Check	The Router sends a 6LoWPAN packet containing the Echo Request message to the Host
	12	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	13	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	14	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	15	Verify	The Host receives the Echo Request message from the Router
	16	Check	The Host sends a 6LoWPAN packet containing the Echo Reply message to the Router
	17	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	18	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	19	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	20	Verify	The Router receives the Echo Reply message from the Host
Notes:	• Optional, as not all 6lrs and hosts allow multiple prefixes • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_07		
Objective:	Check host behavior under multiple prefixes (16-bit or other short address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	advanced		
References:	RFC 4861 3.1		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both Host and Router • Host is configured to use 16-bit or other short address • Router is configured with multiple prefixes		
Test Sequence:	Step	Type	Description
	0	Stimulus	Initialize the network interface of the Host
	1	Check	The Host sends a Router Solicitation to all-routers multicast address with SLLAO (EUI-64 or other long address). Source = link local based on EUI-64 or other long address
	2	Verify	The Router receives the Router Solicitation from the host.
	3	Check	• The Router sends a unicast Router Advertisement containing PIO with multiple prefixes and optionally 6COs to the host. • Link local addresses are used. • The L bit is set (6LoBAC); the L bit is not set (NFC, LoWPANz).
	4	Verify	The host receives the Router Advertisement from the router
	5	Check	The host configures a number of tentative global IPv6 address based on the PIO information in RA from the Router (16-bit or other short address)
	6	Check	The host registers its tentative addresses by sending unicast Neighbor Solicitations containing ARO and SLLAO. Source = GP16
	7	Verify	The Router receives the Neighbor Solicitations from the host.
	8	Check	The Router sends Neighbor Advertisements with Status set to 0 (Dest = GP16)
	9	Verify	The host updates the status of the tentative addresses
	10	Stimulus	• The Router initiates an echo request to one of the Host's new global addresses, using the appropriate own global address as the source • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	11	Check	The Router sends a 6LoWPAN packet containing the Echo Request message to the Host
	12	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	13	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	14	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	15	Verify	The Host receives the Echo Request message from the Router
	16	Check	The Host sends a 6LoWPAN packet containing the Echo Reply message to the Router
	17	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	18	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	19	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	20	Verify	The Router receives the Echo Reply message from the Host
Notes:	• Optional, as not all 6lrs and hosts allow multiple prefixes • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_HC_01		
Objective:	Check that EUTs make use of context 0 (EUI-64 or other long address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	advanced		
References:	RFC 6775 5.4, RFC 6282 3.1.1		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use EUI-64 or other long address • EUT1 and EUT2 are configured with a default hop limit of 64		
Test Sequence:	Step	Type	Description
	0	Stimulus	Host is set up with 6LR and receives context 0 for the global prefix
	1	Stimulus	• EUT1 initiates an echo request to EUT2's GP64 address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	2	Check	EUT1 sends a 6LoWPAN packet containing the Echo Request message to EUT2
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=01/11)
	6	Feature	The context identifier extension is not present (CID = 0)
	7	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	8	Verify	EUT2 receives the Echo Request message from EUT1
	9	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=01/11)
	12	Feature	The context identifier extension is not present (CID = 0)
	13	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
Notes:	• The feature tests check that good compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_HC_02		
Objective:	Check that EUTs make use of context 0 (16-bit or other short address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	advanced		
References:	RFC 6775 5.4, RFC 6282 3.1.1		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use 16-bit or other short address • EUT1 and EUT2 are configured with a default hop limit of 64		
Test Sequence:	Step	Type	Description
	0	Stimulus	Host is set up with 6LR and receives context 0 for the global prefix
	1	Stimulus	• EUT1 initiates an echo request to EUT2's GP16 address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	2	Check	EUT1 sends a 6LoWPAN packet containing the Echo Request message to EUT2
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=10/11)
	6	Feature	The context identifier extension is not present (CID = 0)
	7	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	8	Verify	EUT2 receives the Echo Request message from EUT1
	9	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=10/11)
	12	Feature	The context identifier extension is not present (CID = 0)
	13	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
Notes:	• The feature tests check that good compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_HC_03		
Objective:	Check that EUTs make use of context ≠ 0 (EUI-64 or other long address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, BTLE, DECT		
Level:	advanced		
References:	RFC 6775 5.4, RFC 6282 3.1.2		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use EUI-64 or other long address • EUT1 and EUT2 are configured with a default hop limit of 64		
Test Sequence:	Step	Type	Description
	0	Stimulus	Host is set up with 6LR and receives context ≠ 0 for the global prefix
	1	Stimulus	• EUT1 initiates an echo request to EUT2's GP64 address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	2	Check	EUT1 sends a 6LoWPAN packet containing the Echo Request message to EUT2
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=01/11)
	6	Check	A Context Identifier Extension (CID) is used for this
	7	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	8	Verify	EUT2 receives the Echo Request message from EUT1
	9	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=01/11)
	12	Check	A Context Identifier Extension (CID) is used for this
	13	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
Notes:	• The feature tests check that good compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		

Interoperability Test Description			
Identifier:	TD_6Lo_ND_HC_04		
Objective:	Check that EUTs make use of context ≠ 0 (16-bit or other short address)		
Configuration:	Host-6LR		
Technologies:	6LoWPAN, 6LoBAC, NFC, LoWPANz		
Level:	advanced		
References:	RFC 6775 5.4, RFC 6282 3.1.2		
Pre-test conditions:	• (6LoWPAN:) Header compression is enabled on both EUT1 and EUT2 • EUT1 and EUT2 are configured to use 16-bit or other short address • EUT1 and EUT2 are configured with a default hop limit of 64		
Test Sequence:	Step	Type	Description
	0	Stimulus	Host is set up with 6LR and receives context ≠ 0 for the global prefix
	1	Stimulus	• EUT1 initiates an echo request to EUT2's GP16 address • ICMP payload = 4 bytes, total IPv6 size 52 bytes • Hop Limit is 64, no traffic class or flow label is being used
	2	Check	EUT1 sends a 6LoWPAN packet containing the Echo Request message to EUT2
	3	Feature	In IP_HC, TF is 11 and the ecn, dscp and flow label fields are compressed away
	4	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	5	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=10/11)
	6	Check	A Context Identifier Extension (CID) is used for this
	7	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
	8	Verify	EUT2 receives the Echo Request message from EUT1
	9	Check	EUT2 sends a compressed 6LoWPAN packet containing the Echo Reply message to EUT1
	10	Feature	In IP_HC, HLIM (HL) is 10 and the hop limit field is compressed away
	11	Feature	The compression makes use of the global prefix (SAC/DAC = 1, SAM/DAM=10/11)
	12	Check	A Context Identifier Extension (CID) is used for this
	13	Check	Dispatch value in 6LowPAN packet is “011TFxHL”
Notes:	• The feature tests check that good compression is used (but this is not a requirement for interoperability) • The Echo Reply message might use a different hop limit in some implementations, then the HLIM value might also be different.		