	FRRouting 10.5.0	Holo 2025-12-23
Type	FRR	HOLO
Commit ID	c41ba20	01a2982
Commit Date	2025-11-10	2025-12-23
ANVL-ISISV6-1.1 **MUST**	ISO/IEC 10589:1992(E)s9.5 p49 Level 1 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU Level 1 LAN IS to IS hello PDU must have 1. Intra-domain Routing Protocol Discriminator = 0x83 2. PDU type = 15 3. Version/Protocol ID extension = 1 4. Version = 1	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.2 **MUST**	ISO/IEC 10589:1992(E)s9.5 p49 Level 1 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU Bit 6-8 of PDU Type (5th octet), Reserved (7th octet), bit 3-8 of Reserved/Circuit Type (9th octet) and 8th bit of Priority are reserved which are always set to zero in Level 1 LAN IS to IS hello PDU.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.3 **MUST**	ISO/IEC 10589:1992(E)s9.5 p49 Level 1 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU The valid ID Length field shall take any one of these following values: 1. An Integer between 1 and 8, inclusive, indicating an ID field of the corresponding length 2. The Value zero, which indicates a six octet ID, field length 3. The Value 255, which means a null ID field (i.e., zero length)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.4 **MUST**	ISO/IEC 10589:1992(E)s9.5 p49-50 Level 1 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU In a LAN Level 1 IIH the Circuit Type must be either 1 or 3	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.5 **MUST**	ISO/IEC 10589:1992(E)s9.5 p50 Level 1 LAN IS to IS hello PDU RFC 1195 s5.3.1 p37-38 Level 1 LAN IS to IS hello PDU RFC 5308 p2-4 s2 IPv6 Reachability TLV s3 IPv6 Interface Address TLV s4 IPv6 NLPID	
	Level 1 LAN IS to IS Hello PDU The valid Codes that must be present in the VARIABLE LENGTH FIELD of Level 1 LAN IS to IS hello PDU are: Area Address Authentication Information Protocols Supported IPv6 Interface Address	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.6 **MUST**	RFC 1195 s4.4 p32 Maintaining Router Adjacencies s5.2 p34 Overview of IP-specific Information for IS-IS	
	Level 1 LAN IS to IS Hello PDU The Protocol supported field must be present in all IS-IS Hello Packets send by IP-only routers	
	Debian 12: pass	Debian 12: pass

	FRRouting 10.5.0	Holo 2025-12-23
ANVL-ISISV6-1.7 **MUST**	NEGATIVE : RFC 1195 s4.4 p32 Maintaining Router Adjacencies	
	Level 1 LAN IS to IS Hello PDU The Protocol Supported field must be present in all IS-IS Hello Packets send by IP-only routers	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.8 **MUST**	ISO/IEC 10589:1992(E)s9.6 p51 Level 2 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU Level 2 LAN IS to IS hello PDU must have 1. Intra-domain Routing Protocol Discriminator = 0x83 2. PDU type = 16 3. Version/Protocol ID extension = 1 4. Version = 1	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.9 **MUST**	ISO/IEC 10589:1992(E)s9.6 p51 Level 2 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU Bit 6-8 of PDU Type (5th octet), Reserved (7th octet), bit 3-8 of Reserved/Circuit Type (9th octet) and 8th bit of Priority are reserved which are always set to zero in Level 2 LAN IS to IS hello PDU.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.10 **MUST**	ISO/IEC 10589:1992(E)s9.6 p51 Level 2 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU The valid ID Length field shall take any one of these following values: 1. An Integer between 1 and 8, inclusive, indicating an ID field of the corresponding length 2. The Value zero, which indicates a six octet ID, field length 3. The Value 255, which means a null ID field (i.e., zero length)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.11 **MUST**	ISO/IEC 10589:1992(E)s9.6 p51 Level 2 LAN IS to IS hello PDU	
	Level 1 LAN IS to IS Hello PDU In a LAN Level 2 IIH the Circuit Type must be either 2 or 3	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.12 **MUST**	ISO/IEC 10589:1992(E)s9.6 p51-52 Level 2 LAN IS to IS hello PDU RFC 1195 s5.3.2 p38-39 Level 2 LAN IS to IS hello PDU RFC 5308 p2-4 s2 IPv6 Reachability TLV s3 IPv6 Interface Address TLV s4 IPv6 NLPID	
	Level 1 LAN IS to IS Hello PDU The valid Codes that must be present in the VARIABLE LENGTH FIELD of Level 2 LAN IS to IS hello PDU are: Area Address Protocols Supported IPv6 Interface Address	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.13 **MUST**	RFC 1195 s4.4 p32 Maintaining Router Adjacencies s5.2 p34 Overview of IP-specific Information for IS-IS	
	Level 1 LAN IS to IS Hello PDU The Protocol supported field must be present in all IS-IS Hello Packets send by IP-only routers	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-1.14 **MUST**	NEGATIVE : RFC 1195 s4.4 p32 Maintaining Router Adjacencies	
	Level 1 LAN IS to IS Hello PDU The Protocol Supported field must be present in all IS-IS Hello Packets send by IP-only routers	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.19 **MUST**	RFC 1195 s3.1 p15 Exchange of Routing information RFC 5308 s4 p4 IPv6 NLPID	
	Level 1 LAN IS to IS Hello PDU IP capable routers need to know what network layer protocols are supported by other routers in their area	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.20 **MUST**	RFC 1195 s4.2 p31 Multiple IP Addresses per Interface RFC 5308 s3 p3 IPv6 Interface Address TLV	
	Level 1 LAN IS to IS Hello PDU Each interface corresponding to the SNPA over which is transmitted can have maximum of 15 IPv6 addresses We necessarily modify the contents to be 0-15 16 octet IPv6 interface addresses instead of 0-63 4 octet IPv4 interface address.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.21 **MUST**	RFC 1195 s3.1 p15 Exchange of Routing information RFC 5308 s4 p4 IPv6 NLPID	
	Level 1 LAN IS to IS Hello PDU IP capable routers need to know what network layer protocols are supported by other routers in their area	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.22 **MUST**	RFC 1195 s4.2 p31 Multiple IP Addresses per Interface RFC 5308 s3 p3 IPv6 Interface Address TLV	
	Level 1 LAN IS to IS Hello PDU Each interface corresponding to the SNPA over which is transmitted can have maximum of 15 IPv6 addresses We necessarily modify the contents to be 0-15 16 octet IPv6 interface addresses instead of 0-63 4 octet IPv4 interface address.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.23 **MUST**	NEGATIVE :RFC 1195 s4.2 p31 Multiple IP Addresses per Interface RFC 5308 s3 p3 IPv6 Interface Address TLV	
	Level 1 LAN IS to IS Hello PDU Each Interface corresponding to the SNPA over which a L1 LAN IIH PDU is transmitted can have a maximum of 15 IPv6 Addresses We necessarily modify the contents to be 0-15 16 octet IPv6 interface addresses instead of 0-63 4 octet IPv4 interface address.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.24 **MUST**	NEGATIVE :RFC 1195 s4.2 p31 Multiple IP Addresses per Interface RFC 5308 s3 p3 IPv6 Interface Address TLV	
	Level 1 LAN IS to IS Hello PDU Each Interface corresponding to the SNPA over which a L1 LAN IIH PDU is transmitted can have a maximum of 15 IPv6 Addresses We necessarily modify the contents to be 0-15 16 octet IPv6 interface addresses instead of 0-63 4 octet IPv4 interface address.	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-1.25 **MUST**	RFC 5308 s3 p4 IPv6 Interface Address TLV	
	Level 1 LAN IS to IS Hello PDU For LSPs the "Interfaces Address" TLVs MUST contain only the non-link-local IPv6 addresses assigned to the IS.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-1.26 **MUST**	RFC 5308 s3 p4 IPv6 Interface Address TLV	
	Level 1 LAN IS to IS Hello PDU For LSPs the "Interfaces Address" TLVs MUST contain only the non-link-local IPv6 addresses assigned to the IS.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.1 **MUST**	ISO/IEC 10589:1992(E) s9.8 p54 Level 1 LSPDU	
	Level 1 LSPDU Test that the level 1 LSP must have Intradomaim Routing Protocol Discriminator = 0x83, PDU Type = 18, Version/Protocol ID extension (2nd octet) = 1 and Version (6th octet) = 1 in the Header	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.2 **MUST**	ISO/IEC 10589:1992(E) s9.8 p54 Level 1 Link State PDU	
	Level 1 LSPDU Bit 6-8 of PDU Type (5th octet) and Reserved (7th octet) are reserved which are always set to zero in Level 1 Link State PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.3 **MUST**	ISO/IEC 10589:1992(E) s9.8 p54-55 Level 1 Link State PDU	
	Level 1 LSPDU The valid ID Length field shall take any one of these following values: 1. An integer between 1 and 8 ,inclusive, indicating an ID field of coresponding length 2. The value zero, which indicates a six octet ID, field length 3. The value 255, which means a null ID field (i.e., zero length)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.4 **MUST**	ISO/IEC 10589:1992(E) s9.8 p54-55 Level 1 Link State PDU RFC 1195 s5.3.4, p40-43 Level 1 Link State PDU RFC 5308 p2-4 s2 IPv6 Reachability TLV s3 IPv6 Interface Address TLV s4 IPv6 NLPID	
	Level 1 LSPDU The valid codes that must be present in the VARIABLE LENGTH FIELD of level 1 link state PDU are: Area Addresses Intermediate system Neighbors Protocols Supported IPv6 Reachability Information	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-2.11 **MUST**	ISO/IEC 10589:1992(E) s9.9 p57 Level 2 LSPDU	
	Level 1 LSPDU Test that the level 2 LSP must have Intradomaim Routing Protocol Discriminator =0x83, PDU Type=20,Version/Protocol ID extension(3rd octet) = 1 and Version (6th octet) = 1 in the Header	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-2.12 **MUST**	ISO/IEC 10589:1992(E) s9.9 p57 Level 2 Link State PDU	
	Level 1 LSPDU Bit 6-8 of PDU Type (5th octet) and Reserved (7th octet) are reserved which are always set to zero in Level 2 Link State PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.13 **MUST**	ISO/IEC 10589:1992(E) s9.9 p57 Level 2 Link State PDU	
	Level 1 LSPDU The valid ID Length field shall take any one of these following values: 1. An integer between 1 and 8 ,inclusive, indicating an ID field of coresponding length 2. The value zero, which indicates a six octet ID, field length 3. The value 255, which means a null ID field (i.e., zero length)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.14 **MUST**	ISO/IEC 10589:1992(E) s9.9 p57-59 Level 2 Link State PDU RFC 1195 s5.3.5,p43-48 Level 2 Link State PDU RFC 5308 p2-4 s2 IPv6 Reachability TLV s3 IPv6 Interface Address TLV s4 IPv6 NLPID	
	Level 1 LSPDU The valid codes that must be present in the VARIABLE LENGTH FIELD of level 2 link state PDU are: Area Addresses Intermediate system Neighbors Protocols Supported IPv6 Reachability Information	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.17 **MUST**	RFC 1195 S3.1 P15 Exchange of routing information	
	Level 1 LSPDU IS-IS requires that any codes in a received PDU that are not recognized are ignored and passed through unchanged	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-2.18 **MUST**	RFC 1195 S3.1 P15 Exchange of routing information	
	Level 1 LSPDU IS-IS requires that any codes in a received PDU that are not recognized are ignored and passed through unchanged	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.1 **MUST**	ISO/IEC 10589:1992(E) s9.10 p60 Level 1 complete sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU Level 1 complete sequence number PDU must have Intra-domain Routing protocol Discriminator = 0x83, PDU Type = 24, Version/Protocol ID extension (3rd octet) = 1 and Version (6th octet) = 1 in the header	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.2 **MUST**	ISO/IEC 10589:1992(E) s9.10 p60 Level 1 Complete sequence number PDU	
	Level 1 Complete Sequence Numbers PDU Bit 6-8 of PDU Type (5th octet) and Reserved(7th octet) are reserved which are always set to zero in Level 1 complete sequence	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-3.3 **MUST**	ISO/IEC 10589:1992(E) s9.10 p57 Level 1 complete sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU The valid ID Length field in a Level 1 Complete Sequence Number PDU shall take any one of these following values: 1. An integer between 1 and 8, inclusive, indicating an ID field of coresponding length 2. The value zero, which indicates a six octet ID,field length 3. The value 255, which means a null ID field (i.e., zero length)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.4 **MUST**	ISO/IEC 10589:1992(E) s9.10 p60-61 Level 1 complete sequence numbers PDU RFC 1195 s5.3.6,p48-49 Level 1 complete sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU The valid codes that must be present in the VARIABLE LENGTH FIELD of level 1 complete sequence numbers PDU are: 1. LSP Entries 2. Authentication Information	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.5 **MUST**	ISO/IEC 10589:1992(E) s9.10 p61-62 Level 2 complete sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU Level 2 complete sequence number PDU must have Intra-domain Routing protocol Discriminator = 0x83, PDU Type = 25, Version/Protocol ID extension (3rd octet) = 1 and Version (6th octet) = 1 in the header	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.6 **MUST**	ISO/IEC 10589:1992(E) s9.11 p62 Level 2 Complete sequence number PDU	
	Level 1 Complete Sequence Numbers PDU Bit 6-8 of PDU Type (5th octet) and Reserved(7th octet) are reserved which are always set to zero in Level 2 complete sequence numbers PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.7 **MUST**	ISO/IEC10589:1992(E) s9.11 p61-62 Level 2 complete sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU The valid ID Length field in a Level 2 Complete Sequence Number PDU shall take any one of these following values: 1. An integer between 1 and 8, inclusive, indicating an ID field of coresponding length 2. The value zero, which indicates a six octet ID, field length 3. The value 255, which means a null ID field (i.e., zero length)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.8 **MUST**	ISO/IEC 10589:1992(E) s9.11 p62 Level 2 complete sequence numbers PDU RFC 1195 s5.3.7,p49 Level 2 complete sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU The valid codes that must be present in the VARIABLE LENGTH FIELD of level 2 complete sequence numbers PDU are: 1. LSP Entries 2. Authentication Information	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-3.9 **MUST**	ISO/IEC 10589(E) s9.12 p62-63 Level 1 partial sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU Level 1 partial sequence number PDU must have Intra-domain Routing protocol Discriminator=0x83, PDU Type=26, Version/Protocol ID extension (3rd octet)=1 and Version (6th octet)=1 in the header	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.10 **MUST**	ISO/IEC 10589:1992(E) s9.12 p63 Level 1 partial sequence number PDU	
	Level 1 Complete Sequence Numbers PDU Bit 6-8 of PDU Type (5th octet) and Reserved (7th octet) are reserved which are always set to zero in Level 1 partial sequence numbers PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.11 **MUST**	ISO/IEC 10589:1992(E) s9.12 p63 Level 1 partial sequence number PDU	
	Level 1 Complete Sequence Numbers PDU The valid ID Length field shall take any one of these following values: 1. An integer between 1 and 8 , inclusive, indicating an ID field of coresponding length 2. The value zero, which indicates a six octet ID,field length 3. The value 255, which means a null ID field (i.e., zero length)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.12 **MUST**	ISO/IEC 10589:1992(E) s9.12 p63 Level 1 partial sequence number PDU RFC 1195 s5.3.8,p49 Level 1 partial sequence number PDU	
	Level 1 Complete Sequence Numbers PDU The valid codes that must be present in the VARIABLE LENGTH FIELD of level 1 partial sequence numbers PDU are: 1. LSP Entries 2. Authentication Information	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.13 **MUST**	ISO/IEC 10589(E) s9.12 p64-65 Level 2 partial sequence numbers PDU	
	Level 1 Complete Sequence Numbers PDU Level 2 partial sequence number PDU must have Intra-domain Routing protocol Discriminator=0x83, PDU Type=27, Version/Protocol ID extension (3rd octet)=1 and Version (6th octet)=1 in the header	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.14 **MUST**	ISO/IEC 10589:1992(E) s9.12 p64 Level 2 partial sequence number PDU	
	Level 1 Complete Sequence Numbers PDU Bit 6-8 of PDU Type (5th octet) and Reserved(7th octet) are reserved which are always set to zero in Level 2 partial sequence numbers PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-3.15 **MUST**	ISO/IEC 10589:1992(E) s9.12 p64 Level 2 partial sequence number PDU	
	Level 1 Complete Sequence Numbers PDU The valid ID Length field shall take any one of these following values: 1. An integer between 1 and 8 ,inclusive,indicating an ID field of coresponding length 2. The value zero, which indicates a six octet ID,field length 3. The value 255,which means anull ID field(ie zero length)	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-3.16 **MUST**	ISO/IEC 10589:1992(E) s9.12 p64 Level 2 partial sequence number PDU RFC 1195 s5.3.9,p49 Level 2 partial sequence number PDU	
	Level 1 Complete Sequence Numbers PDU The valid codes that must be present in the VARIABLE LENGTH FIELD of level 2 partial sequence numbers PDU are: 1. LSP Entries 2. Authentication Information	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.1 **MUST**	ISO/IEC 10589:1992(E), s7.2.4, p14, Links	
	Links IS discover neighbours and forms adjacencies by exchanging ISIS Hello PDUs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.2 **MUST**	RFC 1195, s5.1, p33, Overview of ISIS PDUs	
	Links Hello packets are used to initialize and maintain adjacencies between neighbouring ISs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.3 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Links An L1 IS shall transmit only L1 LAN IIHs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.4 **SHOULD**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Links An L1 IIH sent by L1 IS should contain the manualAreaAddresses and LAN Addresses of L1 IS adjacencies.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.5 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Links An L1 IS shall transmit L1 LAN IIHs to the multi-destination address AllL1ISs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.6 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Links L1 ISs shall listen on the multi-destination address AllL1ISs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.7 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Links L1 ISs shall reject any L1 LAN IIH that doesn"t have the destination as AllL1ISs.	
	Debian 12: FAIL	Debian 12: FAIL

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ANVL-ISISV6-4.8 **SHOULD**	ISO/IEC 10589:1992(E), s8.4.2.1, p44, IIH PDU acceptance tests	
	Links If the IDLength of the L1 IIH is not equal to the value of the IS routingDomainIDLength, it should be discarded.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.9 **SHOULD**	ISO/IEC 10589:1992(E), s8.4.2.2, p45, Receipt of L1 LAN IIH PDUs ISO/IEC 10589:1992(E), s8.2.4.2, p38, IIH PDU Processing	
	Links If the received L1 IIH"s areaAddresses do not match any of the manualAreaAddresses of the L1 IS, it should reject the adjacency.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.10 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.2, p45, Receipt of L1 IIH PDUs ISO/IEC 10589:1992(E), s8.2.4.2, p38, IIH PDU Processing	
	Links If the received L1 IIHs areaAddress field matches any of the values from the manualAreaAddresses of the L1 IS, it shall accept the adjacency.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.11 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.2, p45, Receipt of L1 IIH PDUs ISO/IEC 10589:1992(E), s8.2.4.2, p38, IIH PDU Processing	
	Links If the received L1 IIHs maximumAreaAddresses value is equal to the ISs maximumAreaAddresses, accept the PDU.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.12 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.2, p45, Receipt of L1 IIH PDUs	
	Links If the L1 ISs maximumAreaAddresses is not 3, then it will discard all L1 IIH with non matching maximumAreaAddresses value.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.14 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.5.1, p45, New Adjacencies	
	Links When an L1 IS receives an L1 LAN IIH from another IS (R), then the next L1 IIH generated by the IS will include R.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.15 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.5.1, p45, New Adjacencies	
	Links When an L1 IS receives an L1 LAN IIH with its own entry, then it shall create an adjacency.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-4.16 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.5.2, p45, New Adjacencies	
	Links If a neighbour is not heard within the Holding Time, the L1 IS shall purge it from the database.	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-5.1 **MUST**	ISO/IEC 10589:1992(E), s7.2.4, p14, Links	
	Broadcast Subnetwork IIH PDUs IS discover neighbours and forms adjacencies by exchanging ISIS Hello PDUs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.2 **MUST**	RFC 1195, s5.1, p33, Overview of ISIS PDUs	
	Broadcast Subnetwork IIH PDUs Hello packets are used to initialize and maintain adjacencies between neighbouring ISs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.3 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Broadcast Subnetwork IIH PDUs An L2 IS shall transmit only L2 LAN IIHs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.4 **SHOULD**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Broadcast Subnetwork IIH PDUs An L2 IIH sent by L2 IS should contain the manual Area Addresses and LAN Addresses of L2 IS adjacencies.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.5 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Broadcast Subnetwork IIH PDUs An L2 IS shall transmit L2 LAN IIHs to the multi-destination address AllL2ISs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.6 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Broadcast Subnetwork IIH PDUs L2 ISs shall listen on the multi-destination address AllL2ISs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.7 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	Broadcast Subnetwork IIH PDUs L2 ISs shall reject any L2 LAN IIH that doesn"t have the destination as AllL2ISs.	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-5.8 **SHOULD**	ISO/IEC 10589:1992(E), s8.4.2.1, p44, IIH PDU acceptance tests	
	Broadcast Subnetwork IIH PDUs If the IDLength of the L2 IIH is not equal to the value of the ISs routingDomainIDLength, it should be discarded.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.9 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.5.1, p45, New Adjacencies	
	Broadcast Subnetwork IIH PDUs When an L2 IS receives an L2 LAN IIH from another IS (R), then the next L2 IIH generated by the IS will include R.	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-5.10 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.5.1, p45, New Adjacencies	
	Broadcast Subnetwork IIH PDUs When an L2 IS receives an L2 LAN IIH with its own entry, then it shall create an adjacency.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-5.11 **MUST**	ISO/IEC 10589:1992(E), s8.4.2.5.2, p45, New Adjacencies	
	Broadcast Subnetwork IIH PDUs If a neighbour is not heard within the Holding Time, the L2 IS shall purge it from the database.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-6.1 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	More Broadcast Subnetwork IIH PDUs An L1/L2 IS shall create separate adjacencies on receipt of L1 and L2 LAN IIH.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-6.2 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	More Broadcast Subnetwork IIH PDUs An L1/L2 IS shall transmit both L1 and L2 LAN IIHs.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-6.3 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	More Broadcast Subnetwork IIH PDUs An L1/L2 IS shall listen on the multi-destination address AllL1ISs and AllL2ISs for L1 and L2 LAN IIHs respectively.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-6.4 **MUST**	ISO/IEC 10589:1992(E), s8.4.2, p44, Broadcast subnetwork IIH PDUs	
	More Broadcast Subnetwork IIH PDUs An L1/L2 IS shall reject any LAN IIH that doesn"t have the destination as AllL1ISs or AllL2ISs.	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-7.1 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Broadcast Subnetwork Election process of level 1 designated IS is done by verifying priority field in the IIH	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-7.2 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Broadcast Subnetwork Election process of level 1 designated IS is done by verifying priority field in the IIH	
	Debian 12: FAIL	Debian 12: pass

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ANVL-ISISV6-7.3 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Broadcast Subnetwork Election process of level 1 designated IS is done by verifying priority field in the IIH and the MAC address	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-7.4 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Broadcast Subnetwork Election process of level 1 designated IS is done by verifying priority field in the IIH and the MAC address	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-7.5 **MUST**	ISO/IEC 10589:1992(E) s8.4.5 p46 LAN designated IS	
	Broadcast Subnetwork An L1 IS becomes an L1 Designated IS, it shall transmit L1 pseudonode LSP	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-7.6 **MUST**	ISO/IEC 10589:1992(E) s8.4.5 p47 LAN designated ISs	
	Broadcast Subnetwork An L1 IS shall transmit L1 LAN IIHs with the LAN ID field set to the LAN ID of the designated L1 IS	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-8.1 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Designated Routers and Pseudonodes Election process of level 2 designated IS is done by verifying priority field in the IIH	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-8.2 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Designated Routers and Pseudonodes Election process of level 2 designated IS is done by verifying priority field in the IIH	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-8.3 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Designated Routers and Pseudonodes Election process of level 2 designated IS is done by verifying priority field in the IIH and the MAC address	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-8.4 **MUST**	ISO/IEC 10589:1992(E) s7.2.3 p14 Broadcast subnetwork RFC 1195 s4.3 p31 Designated routers and Pseudonodes	
	Designated Routers and Pseudonodes Election process of level 2 designated IS is done by verifying priority field in the IIH and the MAC address	
	Debian 12: FAIL	Debian 12: pass

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ANVL-ISISV6-8.5 **MUST**	ISO/IEC 10589:1992(E) s8.4.5 p46 LAN designated IS	
	Designated Routers and Pseudonodes An L2 IS becomes an L2 Designated IS,it shall transmit L2 pseudonode LSP	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-8.6 **MUST**	ISO/IEC 10589:1992(E) s8.4.5 p47 LAN designated ISs	
	Designated Routers and Pseudonodes An L2 IS shall transmit L2 LAN IIHs with the LAN ID field set to the LAN ID of the designated L2 IS	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-9.1 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p44 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Acceptance Tests If authentication is enabled on a circuit and the received L1 LAN IIH doesn"t contain the authentication information field, the L1 IS shall discard the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-9.2 **MUST**	ISO/IEC 10589:1992(E) s8.4.4 p46 Transmission of LAN IIH PDUs RFC 1195 s3.9 p25 Authentication	
	Acceptance Tests An L1 IS will include authentication information of type Password containing the circuitTransmitPassword as the authentication value in its L1 LAN IIH PDU if authentication is enabled on the circuit	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-9.3 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p45 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Acceptance Tests If authentication is enabled on a circuit and the received L1 LAN IIH contains authentication information of type Password, and if this Password matches any of the circuitReceivePasswords, then the L1 IS accepts the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-9.4 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p45 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Acceptance Tests If authentication is enabled on a circuit and the received L1 LAN IIH contains authentication information of type Password, and if this Password does not match any of the circuitReceivePasswords, then the L1 IS discards the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-9.5 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p45 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Acceptance Tests If authentication is enabled on a circuit and the received L1 LAN IIH contains authentication information of a type that the IS doesn"t implement, then the IS discards the PDU	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-10.1 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p45 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Authentication If authentication is enabled on a circuit and the received L2 LAN IIH doesn"t contain the authentication information field, the L2 IS shall discard the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-10.2 **MUST**	ISO/IEC 10589:1992(E) s8.4.4 p46 Transmission of LAN IIH PDUs RFC 1195 s3.9 p25 Authentication	
	Authentication An L2 IS will include authentication information of type Password containing the circuitTransmitPassword as the authentication value in its L2 LAN IIH PDU if authentication is enabled on the circuit	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-10.3 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p45 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Authentication If authentication is enabled on a circuit and the received L2 LAN IIH contains authentication information of type Password, and if this Password matches any of the circuitReceivePasswords, then the L2 IS accepts the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-10.4 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p45 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Authentication If authentication is enabled on a circuit and the received L2 LAN IIH contains authentication information of type Password, and if this Password does not match any of the circuitReceivePasswords, then the L2 IS discards the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-10.5 **MUST**	ISO/IEC 10589:1992(E) s8.4.2.1 p45 IIH PDU Acceptance Tests RFC 1195 s3.9 p25 Authentication	
	Authentication If authentication is enabled on a circuit and the received L2 LAN IIH contains authentication information of a type that the IS doesn"t implement, then the IS discards the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-11.1 **MUST**	ISO/IEC 10589:1992(E) s7.3.2 p19-p20 Generation of local link state information	
	Generation of Local Link State Information The update process is responsible for generating Link State PDUs under the following circumtances. - Upon Timer Expiration (LSPGenerationTimer)	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-11.2 **MUST**	ISO/IEC 10589:1992(E) s7.3.5 p21 Periodic LSP Generation	
	Generation of Local Link State Information The Intermediate System shall regenerate every LSP at intervals of atmost maximum LSPGeneration interval	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-11.3 **MUST**	ISO/IEC 10589:1992(E) s7.3.5 p21 Periodic LSP Generation	

	`Generation of Local Link State Information`
	`The Intermediate System shall regenerate every LSP at intervals`
	`of atmost maximum LSPGeneration interval`	

	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-11.4 **SHOULD**	ISO/IEC 10589:1992(E) s7.3.16.1 p29 Sequence number	

	`Generation of Local Link State Information`
	`When the sequence number reaches the Sequence Modulus, the routing`
	`module should be disabled for a period of at least MaxAge +`
	`ZeroAgeLifetime`	

	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-11.5 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.3-4 p29 Remaining LifeTime Field & LSP Expiration synchronization	

	`Generation of Local Link State Information`
	`If the Remaining LifeTime field of the received LSP is zero`
	`the system shall purge that LSP from its database and synchronizes`
	`by flooding an expired LSP`	

	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-11.6 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.3-4 p29 Remaining LifeTime Field & LSP Expiration synchronization	

	`Generation of Local Link State Information`
	`If the Remaining LifeTime field of the received LSP is zero`
	`the system shall purge that LSP from its database and synchronizes`
	`by flooding an expired LSP`	

	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-11.7 **MUST**	ISO/IEC 10589:1992(E) s7.3.2 p19-p20 Generation of local link state information	

	`Generation of Local Link State Information`
	`The update process is responsible for generating Link State PDUs`
	`under the following circumtances.`
	`- Upon Timer Expiration (LSPGenerationTimer)`	

	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-11.8 **SHOULD**	ISO/IEC 10589:1992(E) s7.3.16.1 p29 Sequence number	

	`Generation of Local Link State Information`
	`When the sequence number reaches the Sequence Modulus, the routing`
	`module should be disabled for a period of at least MaxAge +`
	`ZeroAgeLifetime`	

	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-17.2 **MUST**	ISO/IEC 10589:1992(E) S7.3.4 P21 Multiple LSPs	

	`Multiple LSPs`
	`If an LSP becomes empty because of all the adjacencies reported`
	`in that LSP no longer exists, an IS may purge that LSP instead`
	`of re-issuing it`	

	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-17.5 **MUST**	ISO/IEC 10589:1992(E) s7.2.8.1 p15 Computing routes through overloaded Intermediate systems	
	Multiple LSPs The Decision Process shall not utilise a link to an Intermediate system neighbour from an IS whose LSPs have the LSP Data-base Overload indication set.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-17.8 **MUST**	ISO/IEC 10589:1992(E) S7.3.4 P21 Multiple LSPs	
	Multiple LSPs If an LSP becomes empty because of all the adjacencies reported in that LSP no longer exists, an IS may purge that LSP instead of re-issuing it	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-17.11 **MUST**	ISO/IEC 10589:1992(E) s7.2.8.1 p15 Computing routes through overloaded Intermediate systems	
	Multiple LSPs The Decision Process shall not utilise a link to an Intermediate system neighbour from an IS whose LSPs have the LSP Data-base Overload indication set.	
	Debian 12: pass	Debian 12: unpredict
ANVL-ISISV6-17.13 **MUST**	RFC 5308, s2, p2 IPv6 Reachability TLV	
	Multiple LSPs The external bit in IPv6 Reachability TLV must be set to 0 to indicate internal metric	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-17.14 **MUST**	RFC 5308, s2, p2 IPv6 Reachability TLV	
	Multiple LSPs The external bit in IPv6 Reachability TLV must be set to 0 to indicate internal metric	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-17.15 **MUST**	RFC 5308, s2, p3 IPv6 Reachability TLV	
	Multiple LSPs If a prefix is advertised with a metric larger than MAX_V6_PATH_METRIC (0xFE000000), this prefix MUST not be considered during the normal SPF computation.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-18.1 **MUST**	ISO/IEC 10589:1992(E) S7.2.5 P14 Multiple LSPs for the same system	
	Propagation of LSPs The following information shall be taken only from LSP with LSP number zero and disregarded if the LSP number is non-zero 1. The setting of the LSP Database Overload bit 2. The value of the IS Type field 3. The Area Addresses option field	
	Debian 12: FAIL	Debian 12: FAIL

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ANVL-ISISV6-18.2 **MUST**	ISO/IEC 10589:1992(E) S7.3 P19 Update process	
	Propagation of LSPs The update process is responsible for generating and propagating Link State information reliably throughout the routing domain	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-18.3 **MUST**	ISO/IEC 10589:1992(E) S7.3.2 P19-20 Generation of local link state " information	
	Propagation of LSPs The update process is responsible for generating Link State PDUs under the following circumstances: - When notified by the subnetwork dependent functions of an adjacency database change	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-18.4 **MUST**	ISO/IEC 10589:1992(E) S7.3.8 P22 Generation of level 1 pseudonode LSPs	
	Propagation of LSPs The Area Addresses option will not be present when an IS generates a level 1 Link State PDU on behalf of pseudonode	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-18.5 **MUST**	ISO/IEC 10589:1992(E) S7.3.15.1 P24-25 Action on receipt of Link state PDU	
	Propagation of LSPs If this is a level 1 LSP and the Maximum Area Address field is not equal to the value of the ISs Maximum Area Address then the PDU shall be discarded	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-18.6 **MUST**	ISO/IEC 10589:1992(E) s7.3.14.1 p23 Propagation of LSPs	
	Propagation of LSPs Duplicate PDUs are detected and dropped	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-18.7 **MUST**	ISO/IEC 10589:1992(E) s7.3.14.2 p24 Propagation of LSPs	
	Propagation of LSPs Level 1 Link State PDUs shall be propagated on circuits, which have at least one Level 1 adjacency	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-18.8 **MUST**	ISO/IEC 10589:1992(E), s7.3.14.2, p24, Propagation of LSPs	
	Propagation of LSPs When propagating a L1 LSP on a broadcast subnetwork, the IS shall transmit to the multi-destination Address AllL1IS.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-18.9 **MUST**	ISO/IEC 10589:1992(E) s7.3.14.2 p24 Propagation of LSPs	
	Propagation of LSPs When an Intermediate System receives a LSP older than the one stored in the database, the stored link state PDU needs to be sent on the link from which the older one was received	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-18.10 **MUST**	ISO/IEC 10589:1992(E) S7.3.16.3 P29 Remaining Lifetime Field	
	Propagation of LSPs When the source generates a link state PDU,it shall set the Remaining Lifetime to MaxAge. Before transmitting a link state PDU to a neighbour, a system shall decrement the Remaining Lifetime	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-18.12 **MUST**	RFC 1195 S3.1 P15 Exchange of routing information	
	Propagation of LSPs Level 1 routers need to know what IP address are reachable from each level 1 router in their area	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-18.13 **MUST**	RFC 1195 S3.7 P24 IP-Only Operation	
	Propagation of LSPs Some of the VARIABLE LENGTH fields from IS-IS link packet must be omitted for IP only routers - The End System Neighbours entries are omitted - The Prefix Neighbours entries are omitted	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.1 **MUST**	ISO/IEC 10589:1992(E) S7.2.5 P14 Multiple LSPs for the same system	
	Multiple LSPs for the Same System The following information shall be taken only from LSP with LSP number zero and disregarded if the LSP number is non-zero 1. The setting of the LSP Database Overload bit 2. The value of the IS Type field 3. The Area Addresses option field	
	Debian 12: pass	Debian 12: unpredict
ANVL-ISISV6-19.2 **MUST**	ISO/IEC 10589:1992(E) S7.3 P19 Update process	
	Multiple LSPs for the Same System The update process is responsible for generating and propagating Link State information reliably throughout the routing domain	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.3 **MUST**	ISO/IEC 10589:1992(E) S7.3.2 P19-20 Generation of local link state " information	
	Multiple LSPs for the Same System The update process is responsible for generating Link State PDUs under the following circumstances: - When notified by the subnetwork dependent functions of an adjacency database change	
	Debian 12: pass	Debian 12: FAIL
ANVL-ISISV6-19.4 **MUST**	ISO/IEC 10589:1992(E) S7.3.8 P22 Generation of level 2 pseudonode LSPs	
	Multiple LSPs for the Same System The Area Addresses option will not be present when an IS generates a level 2 Link State PDU on behalf of pseudonode	
	Debian 12: pass	Debian 12: FAIL

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ANVL-ISISV6-19.5 **MUST**	ISO/IEC 10589:1992(E) S7.3.15 P24-25 Action on receipt of Link state PDU	
	Multiple LSPs for the Same System If this is a level 2 LSP and the Maximum Area Address field is not equal to the value of the ISs Maximum Area Address then the PDU shall be discarded	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.6 **MUST**	ISO/IEC 10589:1992(E) s7.3.14.1 p23 Propagation of LSPs	
	Multiple LSPs for the Same System Duplicate PDUs are detected and dropped	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.7 **MUST**	ISO/IEC 10589:1992(E) s7.3.14.2 p24 Propagation of LSPs	
	Multiple LSPs for the Same System Level 2 Link State PDUs shall be propagated on circuits, which have at least one Level 2 adjacency	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.8 **MUST**	ISO/IEC 10589:1992(E), s7.3.14.2, p24, Propagation of LSPs	
	Multiple LSPs for the Same System When propagating a L2 LSP on a broadcast subnetwork, the IS shall transmit to the multi-destination Address AllL2IS.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.9 **MUST**	ISO/IEC 10589:1992(E) s7.3.14.2 p24 Propagation of LSPs	
	Multiple LSPs for the Same System When an Intermediate System receives a LSP older than the one stored in the database, the stored link state PDU needs to be sent on the link form which the older one was received	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.10 **MUST**	ISO/IEC 10589:1992(E) s7.3.15.1 p24 Action on receipt of a link state PDU	
	Multiple LSPs for the Same System If the ID Length of the PDU is not equal to the value of the ISs routingDomainISLength, the PDU shall be discarded	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.11 **MUST**	ISO/IEC 10589:1992(E) S7.3.16.3 P29 Remaining Lifetime Field	
	Multiple LSPs for the Same System When the source generates a link state PDU, it shall set the Remaining Lifetime to MaxAge. Before transmitting a link state PDU to a neighbour, a system shall decrement the Remaining Lifetime	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-19.13 **MUST**	RFC 1195 S3.2 P17 Exchange of routing information	
	Multiple LSPs for the Same System Level 2 routers need to know what IP address are reachable from each level 2 router in their area	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-19.14 **MUST**	RFC 1195 S3.7 P25 IP-Only Operation	
	Multiple LSPs for the Same System Some of the VARIABLE LENGTH fields from IS-IS link packet must be omitted for IP only routers - The End System Neighbours entries are omitted - The Prefix Neighbours entries are omitted	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-20.1 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.1 p28 sequence numbers	
	Sequence Numbers When a system initializes, it shall start with sequence number with 1 for its own Link State PDUs:	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-20.2 **SHOULD**	ISO/IEC 10589:1992(E) s7.3.16.1 p28 sequence numbers	
	Sequence Numbers The sequence number of any actually generated Link State PDU should not be zero	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-20.3 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.1 p29 sequence numbers	
	Sequence Numbers Update sequence number depending on the sequence number received from system in the domain	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-20.4 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.2 p29 LSP confusion	
	Sequence Numbers If the sequence numbers match, but checksums do not and the LSP is not generated by the local system, then store the LSP with zero Remaining Lifetime, and flood the LSP	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-21.1 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.1 p28 sequence numbers	
	LSP Confusion When a system initializes, it shall start with sequence number with 1 for its own Link State PDUs	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-21.2 **SHOULD**	ISO/IEC 10589:1992(E) s7.3.16.1 p29 sequence numbers	
	LSP Confusion The sequence number of any actually generated Link State PDU should not be zero:	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-21.3 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.1 p29 sequence numbers	
	LSP Confusion Update sequence number depending on the sequence number received from system in the domain	
	Debian 12: pass	Debian 12: unpredict

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ANVL-ISISV6-21.4 **MUST**	ISO/IEC 10589:1992(E) s7.3.16.2 p29 LSP confusion	
	LSP Confusion If the sequence numbers match, but checksums do not and the LSP is not generated by the local system, then store the LSP with zero Remaining Lifetime, and flood the LSP	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-22.3 **MUST**	ISO/IEC 10589:1992(E), s7.3.17, p30, Making the update reliable	
	Making the Update Reliable I On broadcast links, Designated Intermediate System shall periodically multicast Complete Sequence Number Packet instead of explicit acknowledgement for each Link State Packet that it received	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-22.4 **MUST**	ISO/IEC 10589:1992(E), s7.3.17, p30, Making the update reliable	
	Making the Update Reliable I On broadcast links, Designated Intermediate System shall periodically multicast Complete Sequence Number Packet instead of explicit acknowledgement for each Link State Packet that it received	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-24.1 **MUST**	ISO/IEC 10589:1992(E) s7.3.19.1 p31 Entering the waiting state	
	Entering the Waiting State When an LSP cannot be stored, the LSP shall be ignored and waiting State will be entered	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-24.2 **MUST**	ISO/IEC 10589:1992(E) s7.3.19.1 p31 Entering the waiting state	
	Entering the Waiting State When an LSP cannot be stored, the LSP shall be ignored and waiting State will be entered	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-25.2 **SHOULD**	RFC3719 Section 2.1 Page 3 " MaxAge"	
	ISISUpdate - RFC 3719 MaxAge SHOULD exceed maximumLSPGenerationInterval by atleast 300 seconds Note: Verify the RemainingLifeTime of the Packet	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-25.3 **MAY**	RFC3719 Section 2.2 Page 4 " ISISv6HoldingMultiplier"	
	ISISUpdate - RFC 3719 An implementation MAY allow ISISv6HoldingMultiplier to be configurable.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-25.4 **MUST**	RFC3719 Section 3.1 Page 4 " ID Length"	
	ISISUpdate - RFC 3719 An implementation MUST use an ID Length of 6.	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-25.5 **MUST**	RFC3719 Section 3.1 Page 4 " ID Length"	
	ISISUpdate - RFC 3719 If a router encounters a PDU with an ID Length different from 0 or 6, section 7.3.15.a.2 dictates that it MUST discard the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-25.6 **SHOULD**	RFC3719 Section 3.2 Page 5 "maximumAreaAddresses"	
	ISISUpdate - RFC 3719 An implementation SHOULD use the value 3.	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-25.7 **MUST**	RFC3719 Section 3.2 Page 5 " maximumAreaAddresses"	
	ISISUpdate - RFC 3719 If a router receives a PDU with maximumAreaAddresses that is not 0 or 3, it MUST discard the PDU, as described in section 7.3.15.a.3	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-25.8 **MUST**	RFC3719 Section 3.3 Page 5 " Protocol Version"	
	ISISUpdate - RFC 3719 If a router receives a PDU with a value other than 1 for either field, it MUST drop the packet. Note: Verify the Version field	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-25.9 **MUST**	RFC3719 Section 3.3 Page 5 " Protocol Version"	
	ISISUpdate - RFC 3719 If a router receives a PDU with a value other than 1 for either field, it MUST drop the packet. Note: Verify the Version/Protocol ID field	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-25.23 **MUST**	RFC3719 Section 11 Page 11 "Doppelganger LSPs"	
	ISISUpdate - RFC 3719 A complete set of CSNPs is a set whose Start LSPID and End LSPID ranges cover the complete possible range of LSPIDs. (i.e., there is no possible LSPID value which does not appear within the range of one of the CSNPs in the set).	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-26.1 **MUST**	RFC1195, s3.2, p17 Hierarchical Abbreviation of IP Reachability Information	
	Hierarchical Abbreviation of IP Reachability Information Any address obtained from a level 1 LSP which is NOT superceded by the manually configured information is included in the level 2 LSPs	
	Debian 12: FAIL	Debian 12: pass

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ANVL-ISISV6-26.2 **MUST**	RFC1195, s3.2, p17 Hierarchical Abbreviation of IP Reachability Information	
	Hierarchical Abbreviation of IP Reachability Information Any address obtained from a level 1 LSP which is NOT superceded by the manually configured information is included in the level 2 LSPs (Note: This test checks whether the address is not included when it is superceeded)	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-26.3 **MUST**	RFC 5308, s2, p2 IPv6 Reachability TLV	
	Hierarchical Abbreviation of IP Reachability Information If a prefix is redistributed from a higher level to a lower level (e.g., Level 2 to Level 1), the up/down bit is set to 1.	
	Debian 12: FAIL	Debian 12: FAIL
ANVL-ISISV6-28.2 **SHOULD**	RFC3719 Section 2.1 Page 3 " MaxAge"	
	ISISUpdate - RFC 3719 Part 2 MaxAge SHOULD exceed maximumLSPGenerationInterval by atleast 300 seconds Note: Verify the RemainingLifeTime of the Packet	
	Debian 12: FAIL	Debian 12: pass
ANVL-ISISV6-28.3 **MAY**	RFC3719 Section 2.2 Page 4 " ISISv6HoldingMultiplier"	
	ISISUpdate - RFC 3719 Part 2 An implementation MAY allow ISISv6HoldingMultiplier to be configurable.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-28.4 **MUST**	RFC3719 Section 3.1 Page 4 " ID Length"	
	ISISUpdate - RFC 3719 Part 2 An implementation MUST use an ID Length of 6.	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-28.5 **MUST**	RFC3719 Section 3.1 Page 4 " ID Length"	
	ISISUpdate - RFC 3719 Part 2 If a router encounters a PDU with an ID Length different from 0 or 6, section 7.3.15.a.2 dictates that it MUST discard the PDU	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-28.8 **MUST**	RFC3719 Section 3.3 Page 5 " Protocol Version"	
	ISISUpdate - RFC 3719 Part 2 If a router receives a PDU with a value other than 1 for either field, it MUST drop the packet. Note: Verify the Version field	
	Debian 12: pass	Debian 12: pass
ANVL-ISISV6-28.9 **MUST**	RFC3719 Section 3.3 Page 5 " Protocol Version"	
	ISISUpdate - RFC 3719 Part 2 If a router receives a PDU with a value other than 1 for either field, it MUST drop the packet. Note: Verify the Version/Protocol ID field	
	Debian 12: pass	Debian 12: pass

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ANVL-ISISV6-28.23 **MUST**	RFC3719 Section 11 Page 11 "Doppelganger LSPs"	
	ISISUpdate - RFC 3719 Part 2 A complete set of CSNPs is a set whose Start LSPID and End LSPID ranges cover the complete possible range of LSPIDs. (i.e., there is no possible LSPID value which does not appear within the range of one of the CSNPs in the set).	
	Debian 12: pass	Debian 12: pass