

# USGv6 Test Selection Tables

## IPsec OSPF for IPv6

**I9-Interoperability:** Routing Protocol R1v1.1

**Applicable Profile:** NIST SP 500-267B Revision 1 USGv6 Profile – November 2020.

### Test Specification Id:

- [[OSPFv3-Interoperability](#)] OSPFv3 Interoperability Test Plan, [editor: [UNH InterOperability Laboratory](#)].

### Interoperability Partner Requirements:

- Any host or router claiming compliance with the USGv6 profile MUST demonstrate evidence of interoperability with one **or more** independent implementations of IPv6. Routers must demonstrate evidence of interoperability with at least one independent implementation of OSPF-IPsec in order to claim support for this capability.
- Target nodes must not change once testing has begun.

### Interoperability Partners:

- DUT = TR1 for all tests.
- TAR-Router1 = Independent Implementation Device B
- TAR-Router2 = Independent Implementation Device C
- H1 and H2 = Any devices which can execute ping6 function

OSPF for IPv6 Test Check List			
Reference	Test Specification Id	Test Number	Device Type
RFC 5340 RFC 4552 RFC 4301 RFC 4303	OSPFv3- Interoperability	OSPFv3.IO.5.1 IPsec Security (A)(B)(C)	Router
RFC 2328 RFC 5340 RFC 4552 RFC 4301 RFC 4303	OSPFv3- Interoperability	OSPFv3.IO.5.2 IPsec Security with Virtual Link (A)(B)	Router
RFC 5340 RFC 4552 RFC 4301 RFC 4303	OSPFv3- Interoperability	OSPFv3.IO.5.3 IPsec Algorithms and Keys (A)(B)(C)(D)(E)	Router

**References:**

- [RFC 2328] Moy J., “OSPF Version 2”, RFC 2328, DOI: 10.17487/RFC2328, April 1998.
- [RFC 5340] Coltun, R., Ferguson, D., Moy, J., and A. Lindem, "OSPF for IPv6", RFC 5340, DOI: 10.17487/RFC5340, July 2008.
- [RFC 4552] Gupta M., Melam N., “Authentication/Confidentiality for OSPFv3”, RFC 4552, DOI: 10.17487/RFC4552, June 2006.
- [RFC 4301] Kent S., Seo K., “Security Architecture for the Internet Protocol”, RFC 4301, DOI: 10.17487/RFC4301, December 2005.
- [RFC 4303] Kent S., “IP Encapsulating Security Payload (ESP)”, RFC 4303, DOI: 10.17487/RFC4303, December 2005.

The objective of this test selection sheet is to provide a reference for available test specifications that identifies tests applicable to the USGv6 Profile.