Problem Statement

ESP packets do not share fate with IKE
IKE might succeed but ESP packets are dropped
Hard to detect and recover
Data traffic is blackholed
Solution Overview

The node MAY send an IPv6 ESP Echo Request packet:

- SPI = 7, Next Header = 59

The peer SHOULD respond with an ESP Echo Reply packet:

- SPI = 8, Next Header = 59
- MUST copy the data from Echo Request up to the MTU
Changes since the IETF119: Use Cases

- A node discovering if the network could carry ESP packets
- Troubleshooting mechanism for network administrators
- Keepalives, to maintain firewall state entries
Fallback Scenarios: ESP Ping failures

- Senders MAY use other means of sending ESP packets:
  - encapsulation
  - use a different IP protocol
  - use a different server or interface.

- Senders SHOULD still attempt to use ESP if no alternative means are available.
Questions? Comments?
Adoption?