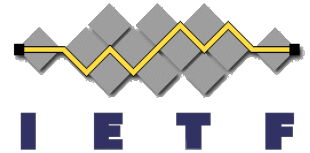


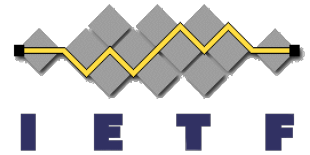
# ANYCAST EGRESS PROTECTION

draft-hegde-rtgwg-egress-protection-  
sr-networks

## IETF 109

Shraddha Hegde, Juniper Networks  
Wen Lin, Juniper Networks  
Peng Shaofu, ZTE Corporation

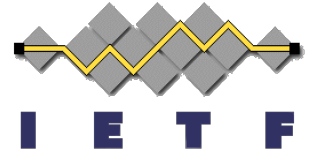




# Agenda

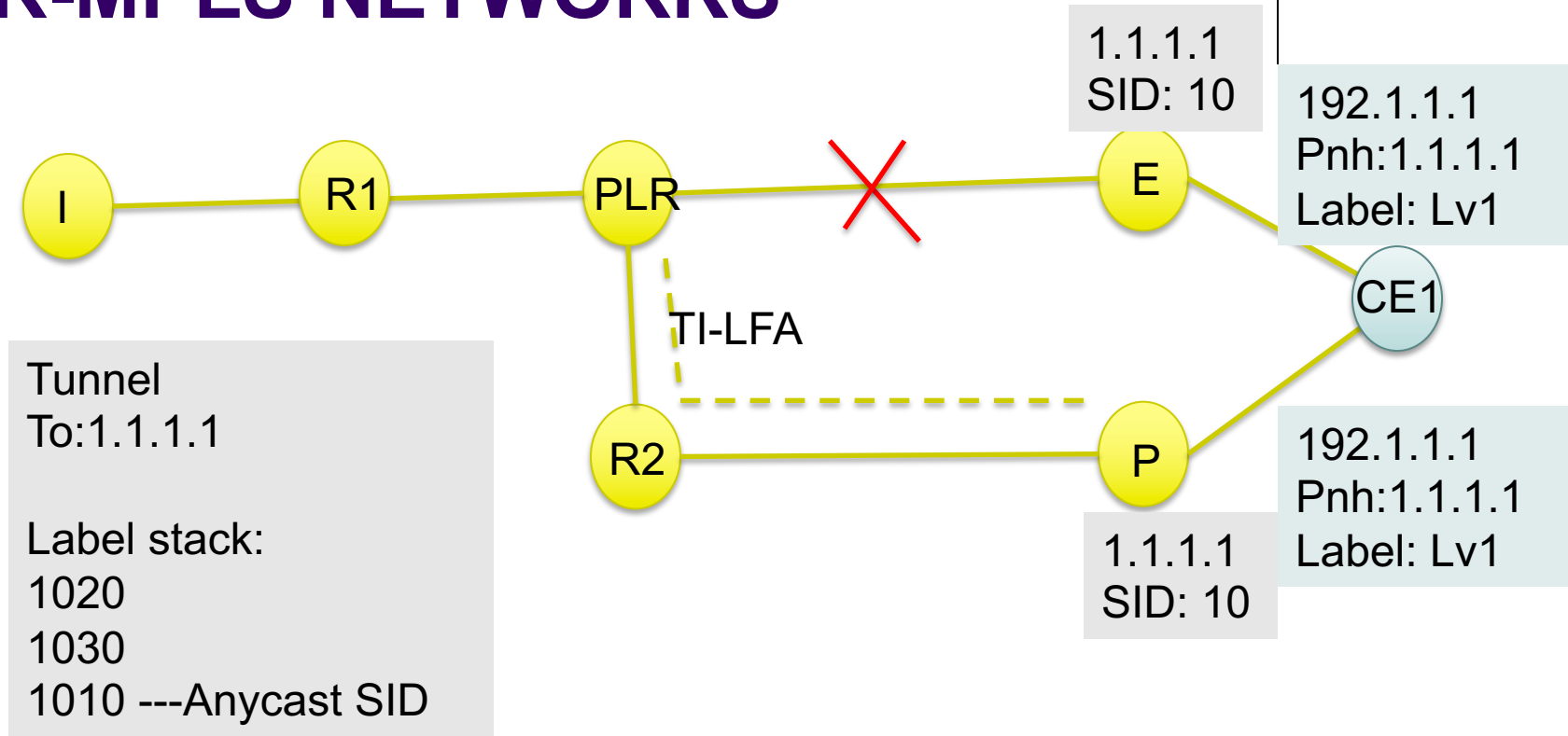
- Introduction
- Proposed Solution
  - SR-MPLS
  - SRm6
  - SRv6

# ANYCAST EGRESS PROTECTION



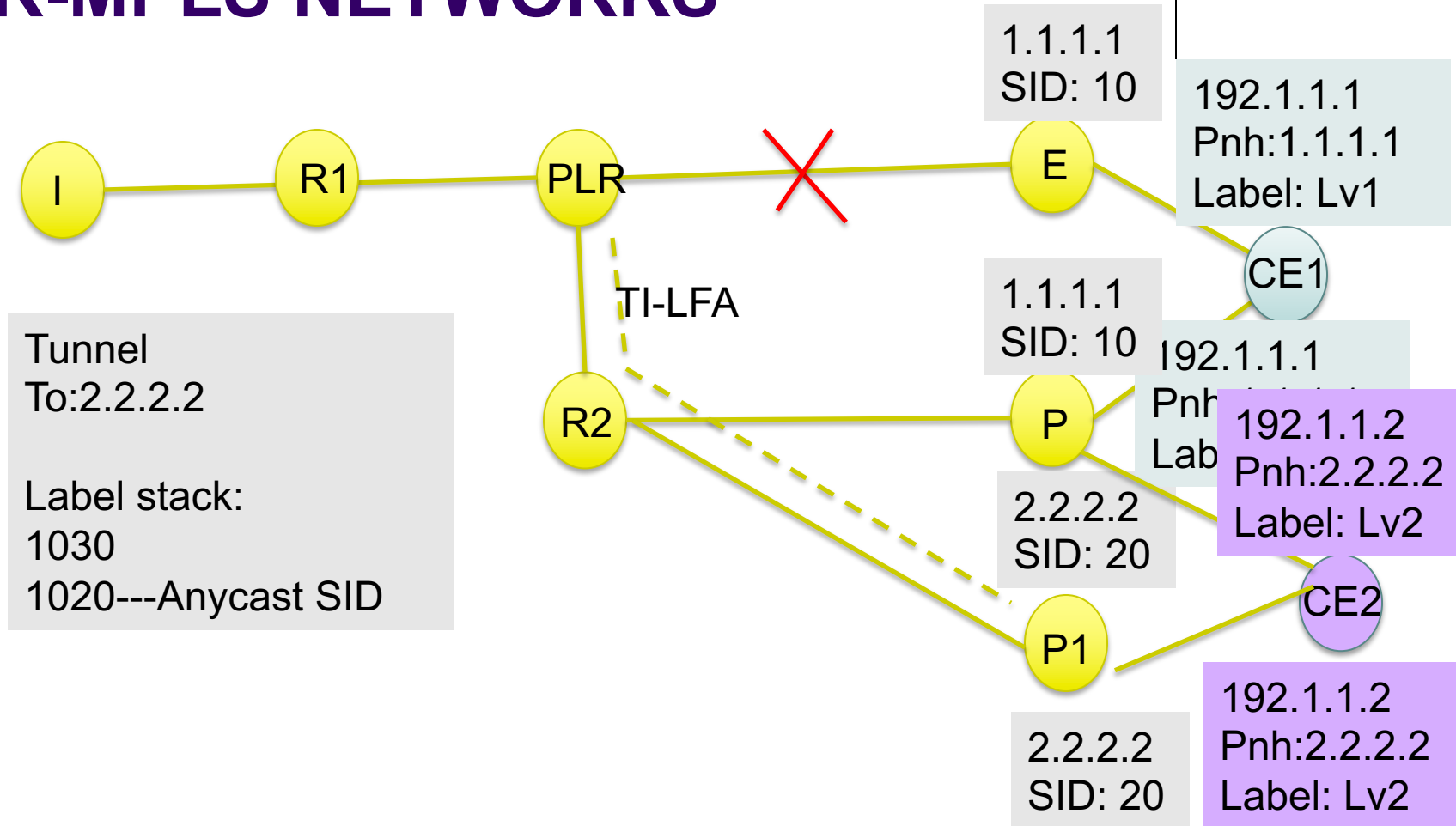
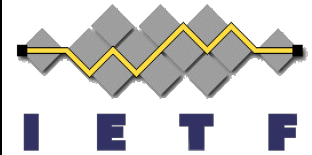
- Egress Node failures
- Need to provide fast failover to multi-homed services
- Based on RFC 8679 Egress protection Framework
- Simplified solution for
  - SR-MPLS ipv4/ipv6
  - SRV6
  - SRm6

# ANYCAST EGRESS PROTECTION- SR-MPLS NETWORKS



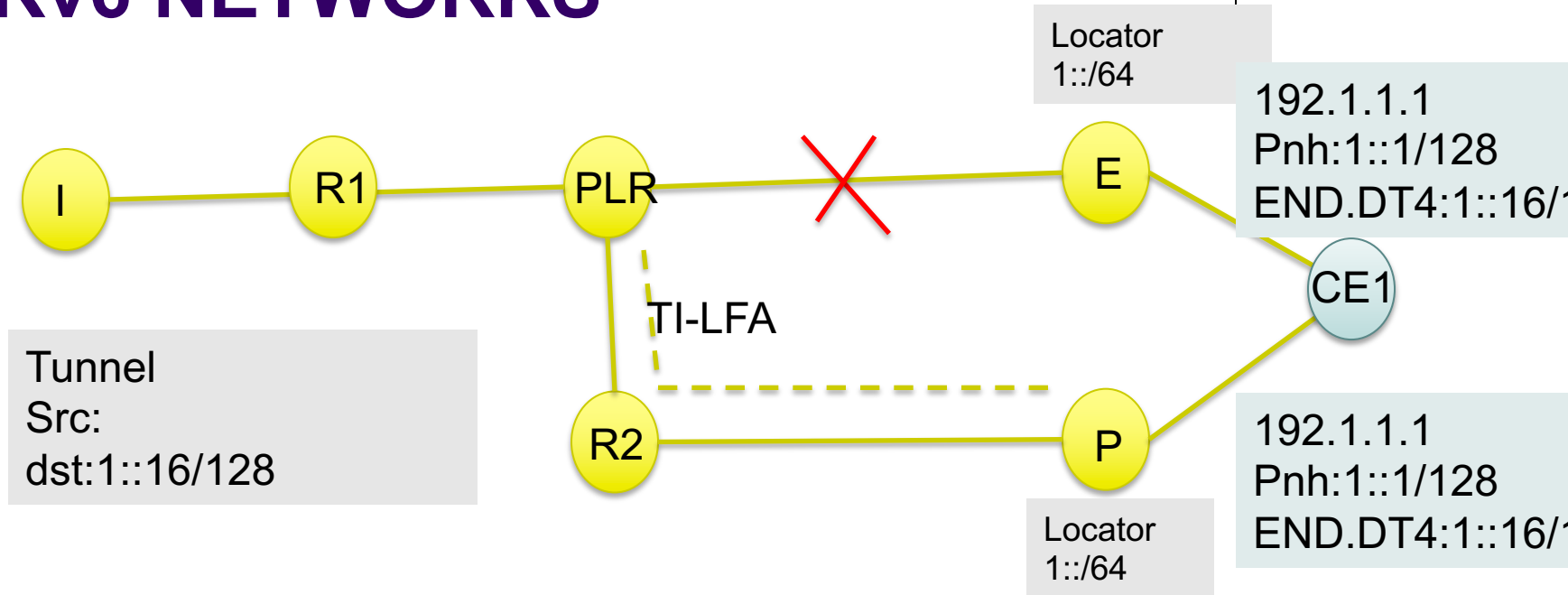
- E & P associated with Anycast loopback and SID
- E & P should have same SRLB space
- Allocate same VPN label for the multi-homed customer
- BGP service prefix carries anycast address as protocol-nexthop
- Ingress has a tunnel with last SID being anycast SID
- PLR builds backup path to anycast SID

# ANYCAST EGRESS PROTECTION- SR-MPLS NETWORKS



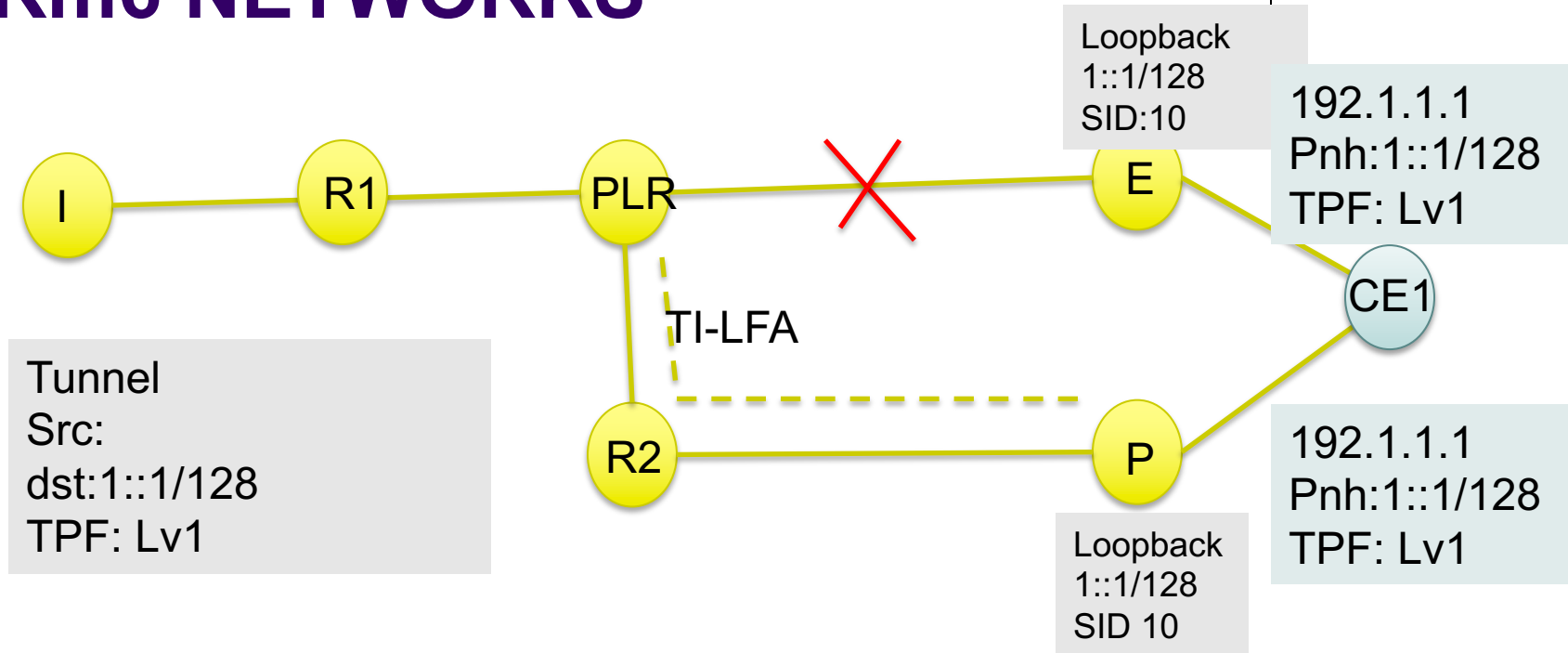
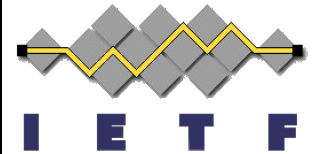
- Anycast SID for each pair of primary/protector egress node

# ANYCAST EGRESS PROTECTION- SRv6 NETWORKS



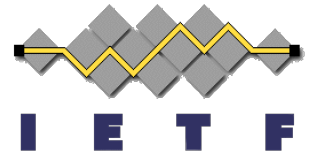
- E & P associated with Anycast locator
- Allocate same END.DT4 SID for the multi-homed customer
- BGP service prefix carries anycast address as protocol-nexthop
- Ingress has a tunnel with last SID being END.DT4 SID
- PLR builds backup path based on anycast locator address

# ANYCAST EGRESS PROTECTION- SRm6 NETWORKS



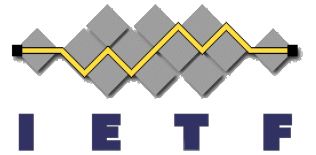
- SRm6 is similar to SR-MPLS solution
- It uses IPv6 dataplane instead of MPLS dataplane.

# Next steps



- Request review and comments





**Thank you**