

**IETF 102 – Montreal
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RFC8287 Sub-TLV Length Clarification

(draft-nainar-mpls-rfc8287-errata-00)

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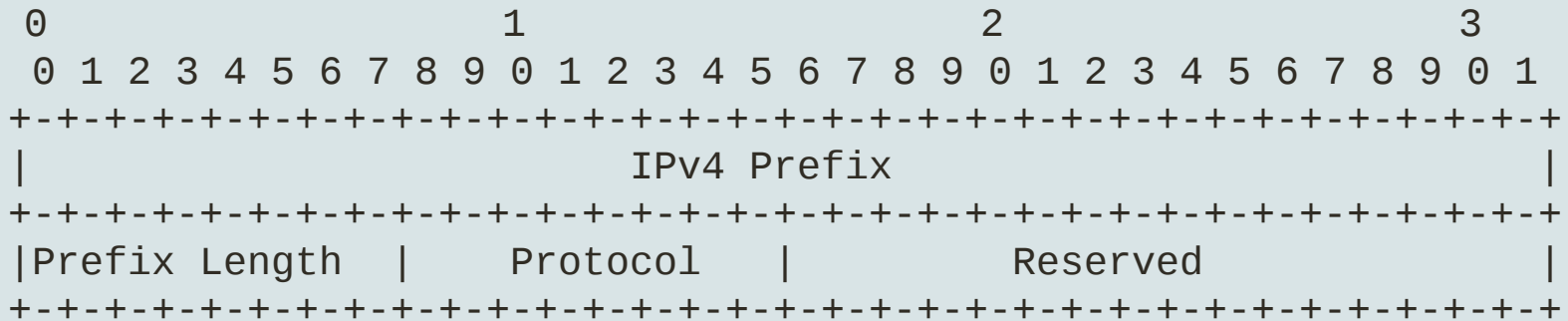
(ECI Telecom)

Problem Statement

- RFC-8287 defines SR-IGP Prefix SID and Adjacency SID FEC extensions for MPLS LSP Ping and Traceroute.
- Defines the Target FEC Stack sub-TLVs, their format, and handling procedure.
- Does not explicitly specify how the length of Segment ID TLVs should be computed for inclusion in Length field of TLV header.
- As vendors are implementing MPLS OAM for SR-MPLS using RFC-8287, there is a need to clarify how the length of sub-TLV should be computed to avoid interoperability issues.
 - Interoperability issues across vendors were recently encountered during the latest EANTC event.

Example: IPv4 IGP Prefix Segment ID

- RFC-8287 defines following format for IPv4 IGP Prefix SID sub-TLV.

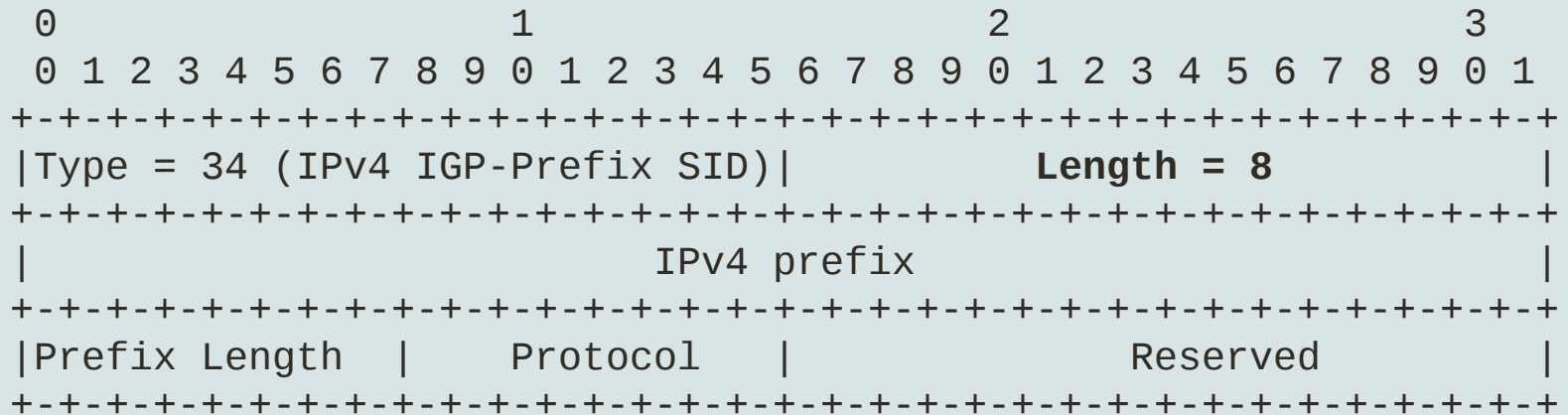


- What is the length of above TLV?
 - 6 bytes if we ignore Reserved field.
 - 8 bytes if we include Reserved field.

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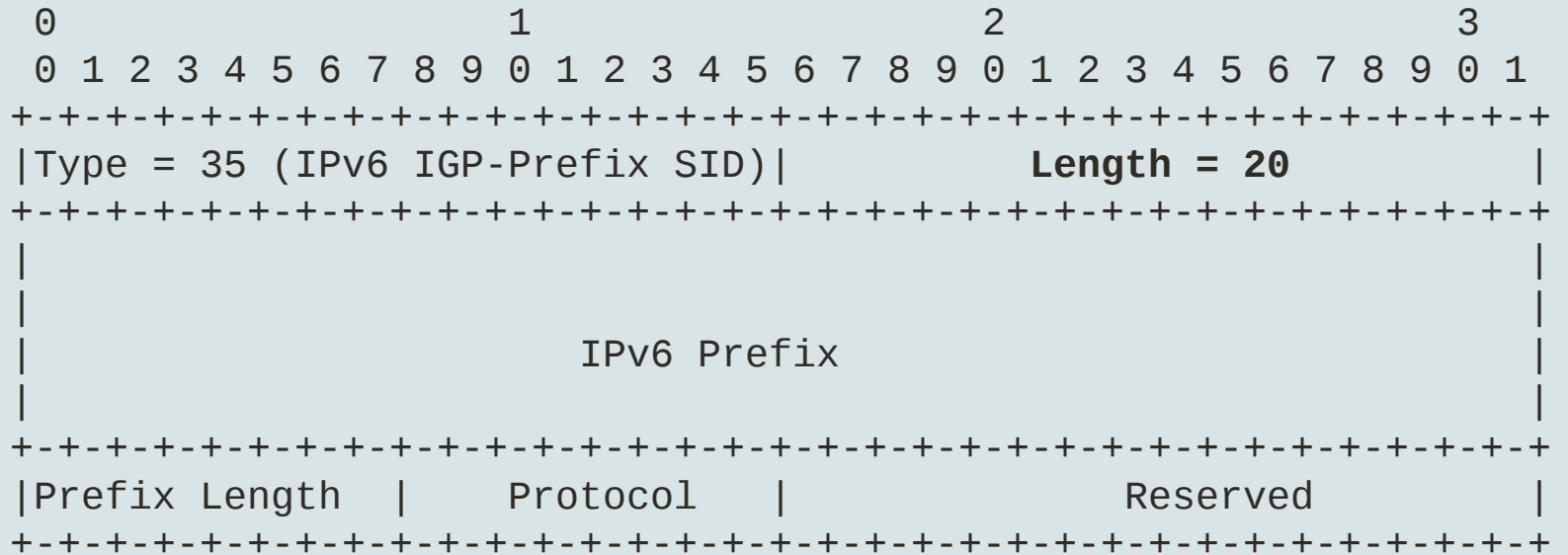
- This I-D clarifies the length field the TFS sub-TLVs defined in RFC-8287.
- Length calculation MUST include 'Reserved' field.
 - Explicitly including 'Reserved' field in length calculation conforms with the RFC-8029 IP FEC definitions.

IPv4 IGP Prefix SID sub-TLV



IPv6 IGP Prefix SID sub-TLV Length

IPv6 IGP Prefix SID sub-TLV



I-D Status

- New draft but problem identified through errata at MPLS WG.
- Next Steps:
 - Seeking
 - WG feedback;
 - **WG adoption;**
- Thank you!