



IETF 104 – Prague  
PCE Working Group

draft-barth-pce-segment-routing-policy-cp-02

# PCEP extension to support Segment Routing Policy Candidate Paths

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# History of the Draft

- draft-barth-pce-segment-routing-policy-cp-00, published December 20, 2018.
  - Introduce a new ASSOCIATION type to represent an SR Policy.
  - SR Policy is a collection of Candidate Paths.
  - Each Candidate Path is a PCEP LSP.
  - SR Policy Association Group is a collection of PCEP LSPs.
- draft-barth-pce-segment-routing-policy-cp-01, published June 20, 2019.
  - Define 3 TLVs of the association object:
    - SRPOLICY-POL-ID TLV
    - SRPOLICY-CPATH-ID TLV
    - SRPOLICY-CPATH-ATTR TLV
- draft-barth-pce-segment-routing-policy-cp-02, published March 5, 2019.
  - Extra details and clarification.

# Purpose of the draft

- Recently there was introduced a concept of SR Policy (draft-ietf-spring-segment-routing-policy), which has extra information that cannot be adequately described by the existing PCEP segment-routing IETF documents.
- PCEP was lacking a way to signal information about an SR Policy and its Candidate Paths.
- Our current draft is meant to address this gap in PCEP, by allowing the PCE and/or the PCC to signal: Color, End-point, Protocol Origin, Originator, Discriminator and Preference.

# Overview

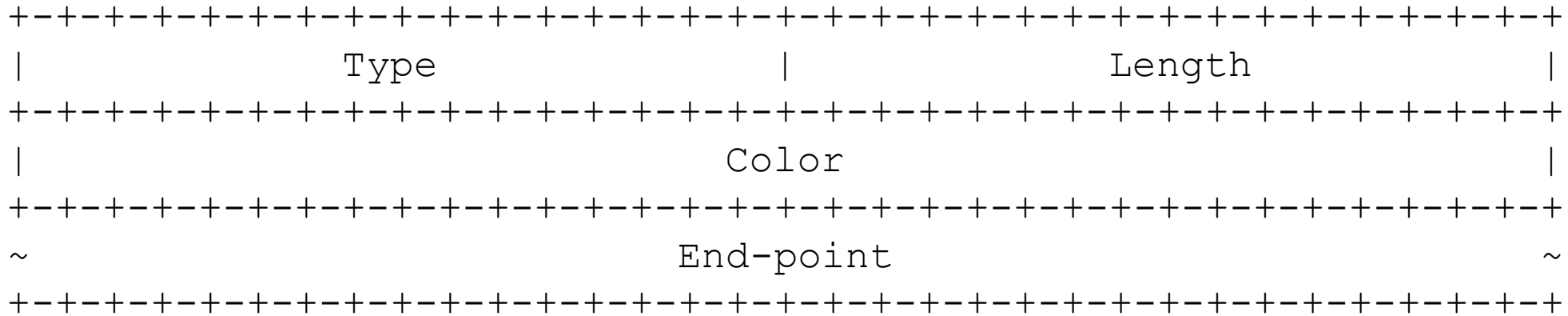
Define how SR objects correspond to PCEP objects:

- SR Policy == PCEP Association Group
- SR Candidate Path == PCEP LSP
- SR Segment List == PCEP ERO

Define a standard way to signal:

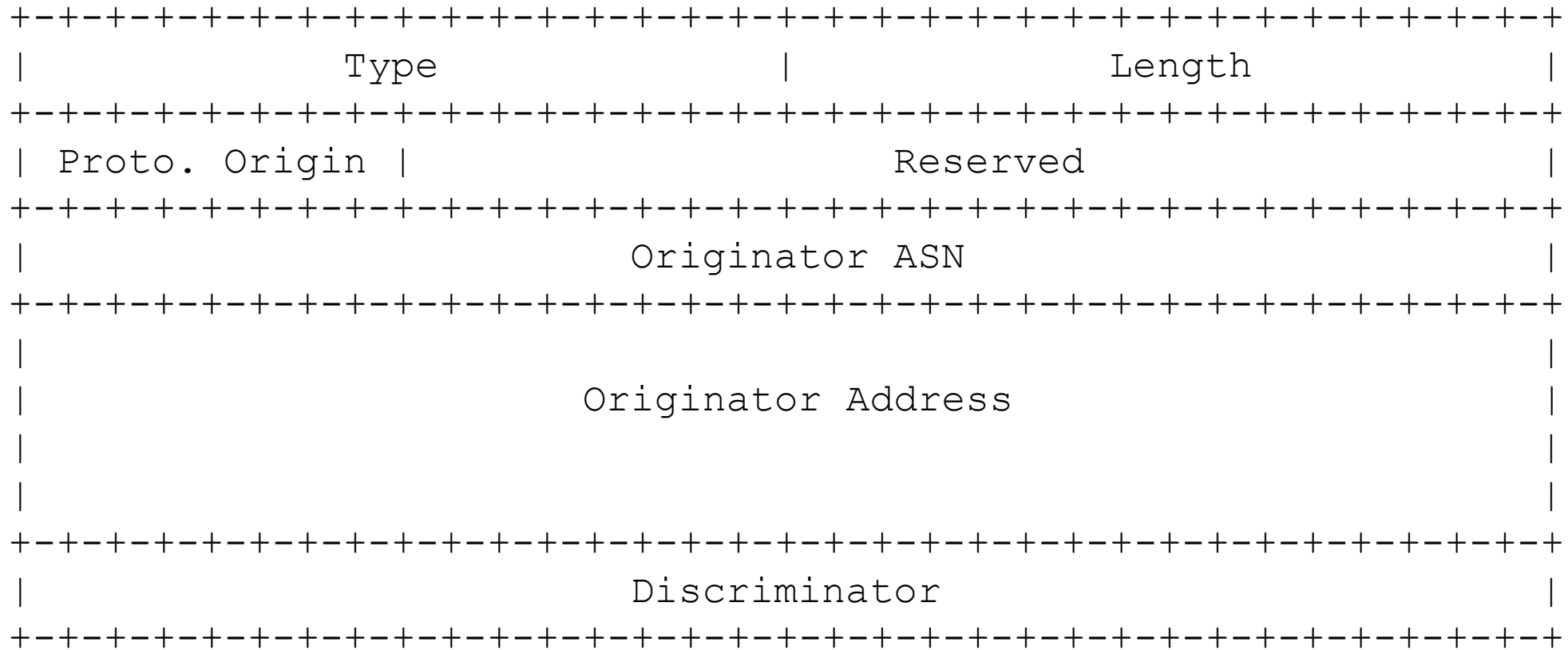
- SR Policy ID: Color, Endpoint
- Candidate Path ID: Protocol, Originator, Discriminator
- Candidate Path ATTR: Preference

# SRPOLICY-POL-ID TLV



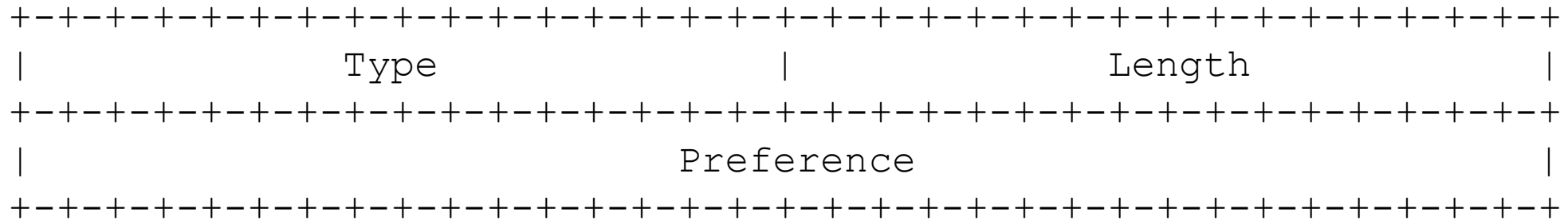
- MUST be same among Candidate Paths of the same SR Policy.
- MUST be different among Candidate Paths of different SR Policies.

# SRPOLICY-CPATH-ID TLV



- MUST be different among Candidate Paths of the same SR Policy.

# SRPOLICY-CPATH-ATTR TLV



- MUST NOT be used to identify the Candidate Path

# Next Steps

- Initiate WG adoption.