



IETF 113 – Online  
PCE Working Group

# PCEP extensions for Circuit Style Policies

draft-sidor-pce-circuit-style-pcep-extensions

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# Motivation

- Circuit Style Segment-Routing Policy
  - Designed to satisfy requirements for connection-oriented transport services
    - Often delivered using SONET/SDH or OTN networks
  - Details described in draft-schmutzer-pce-cs-sr-policy

Requirements covered by new PCEP extensions

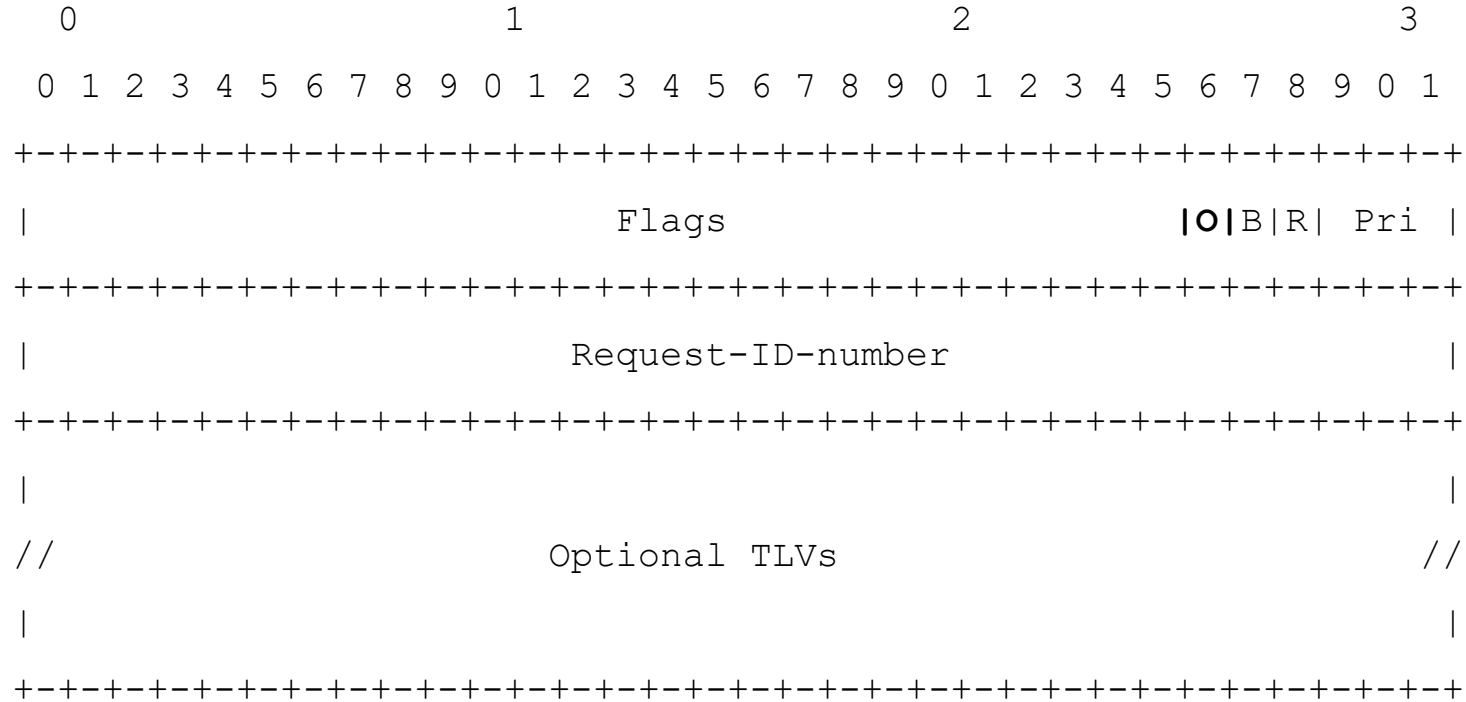
- path persistency
- hop-by-hop behavior

# Draft content summary

- Ability to request path from PCE consisting exclusively of strict hops
  - New flag for Stateful PCEP messages
  - Existing flag for PCReq and PCRep clarified for Segment-routing
    - Strict hop means adjacency SID
- Block re-computation based on specific triggers
  - Topology update
  - Periodic timer

# Strict path – Stateless messages

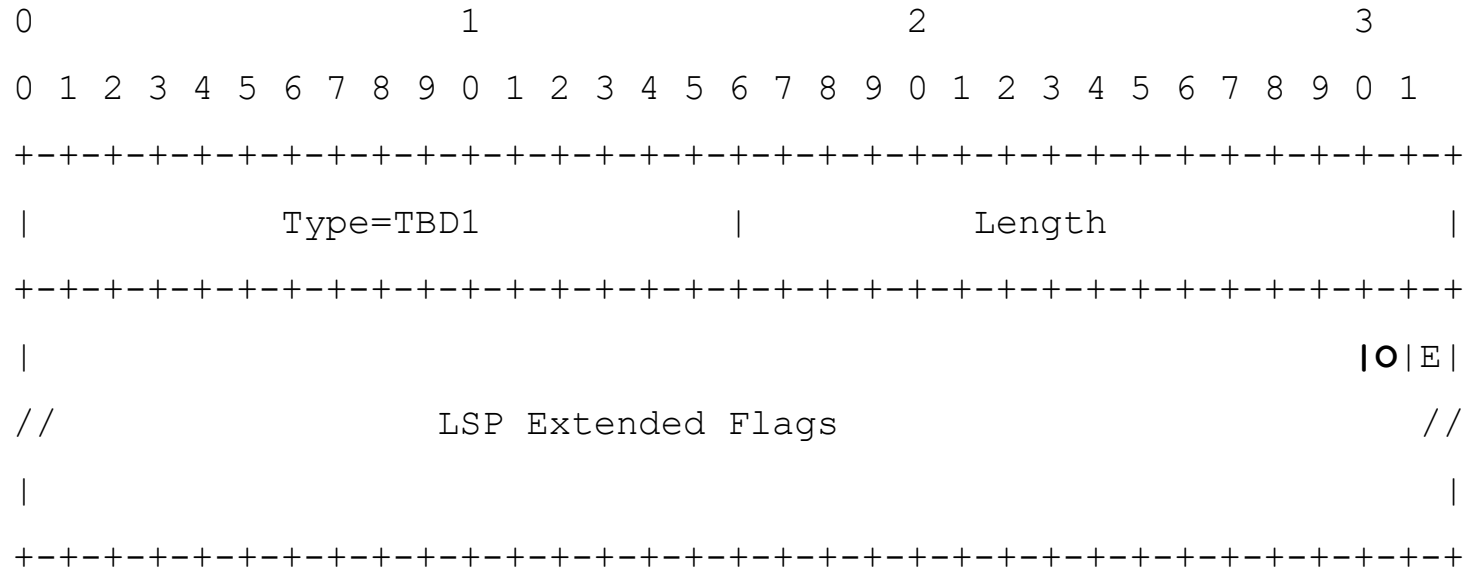
- Existing O flag in RP object clarified for Segment-routing



O (strict/loose - 1 bit) – If strict SR path is requested, then only Adjacency SIDs MUST be used

# Strict path – Stateful messages

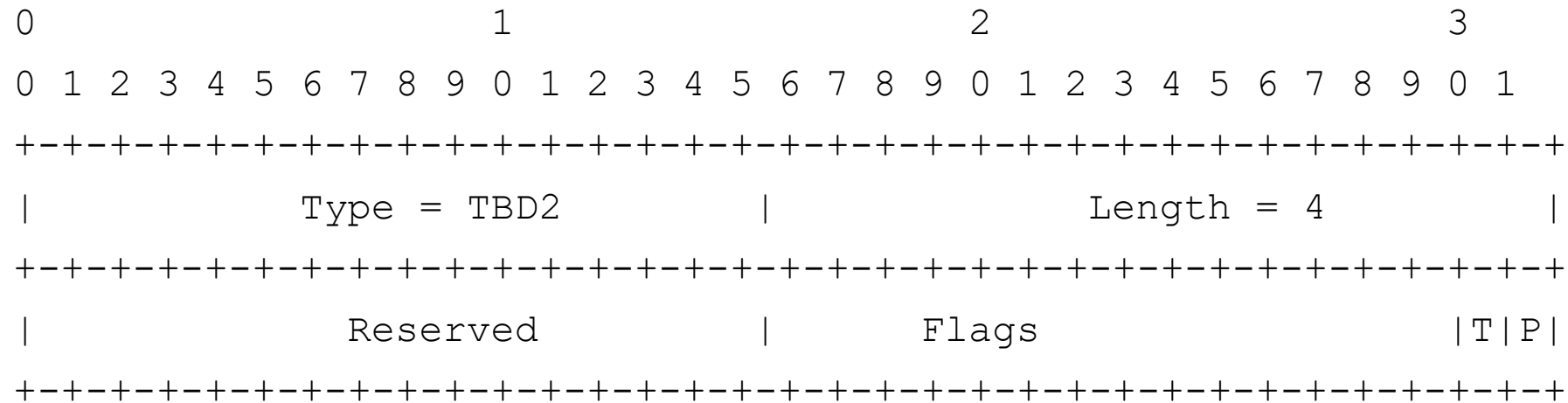
- New flag in LSP-EXTENDED-FLAG TLV in LSP object



- O flag
  - If set, path exclusively made of strict hops is required
  - If cleared, loose path is acceptable

# Blocking path computation triggers

- New TLV RECOMPUTATION-TRIGGERS TLV in LSP object



## T flag

- If set to 1, the PCE MUST NOT trigger path computation as a result of updated topology information

## P flag

- If set to 1, the PCE MUST NOT trigger path computation based on any periodic timer

# Next steps

- Comments and discussion are welcome