

LDP extensions for Explicit Pseudowire to transport LSP mapping

draft-cao-pwe3-mpls-tp-pw-over-bidir-lsp-05.txt

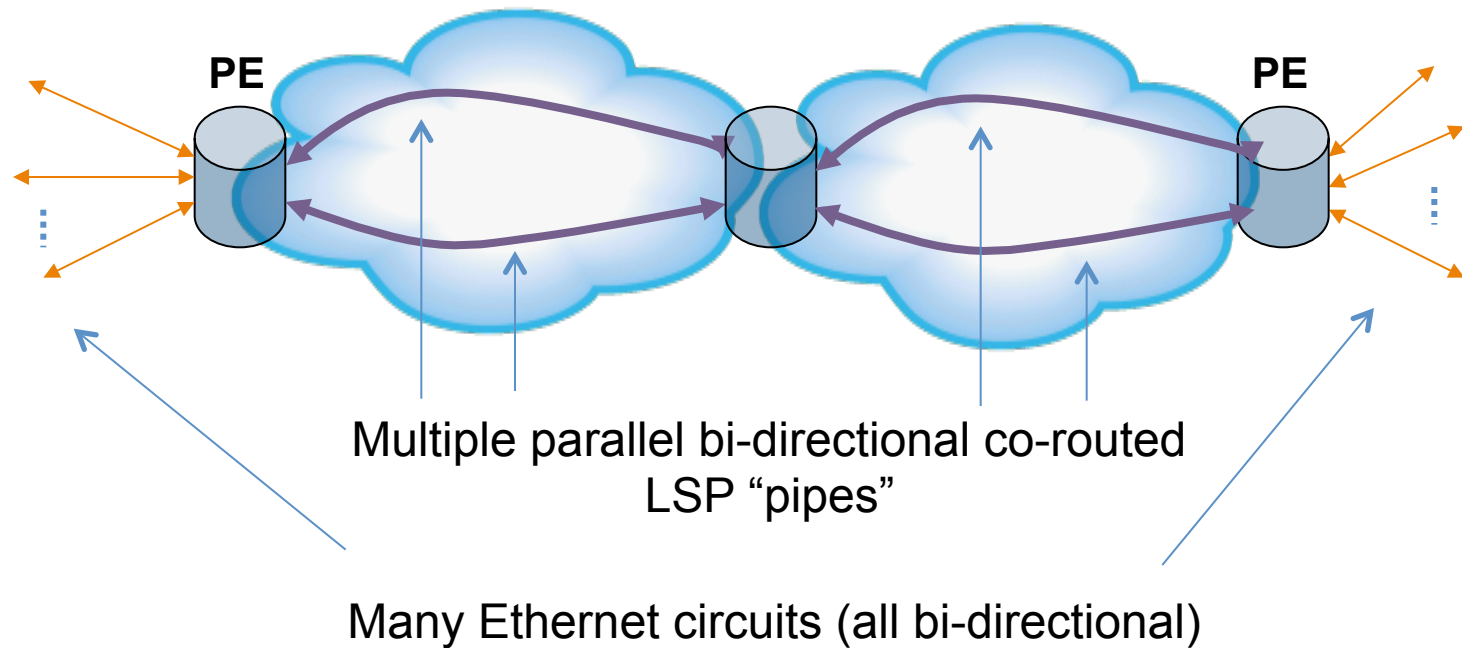
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Application and Motivation

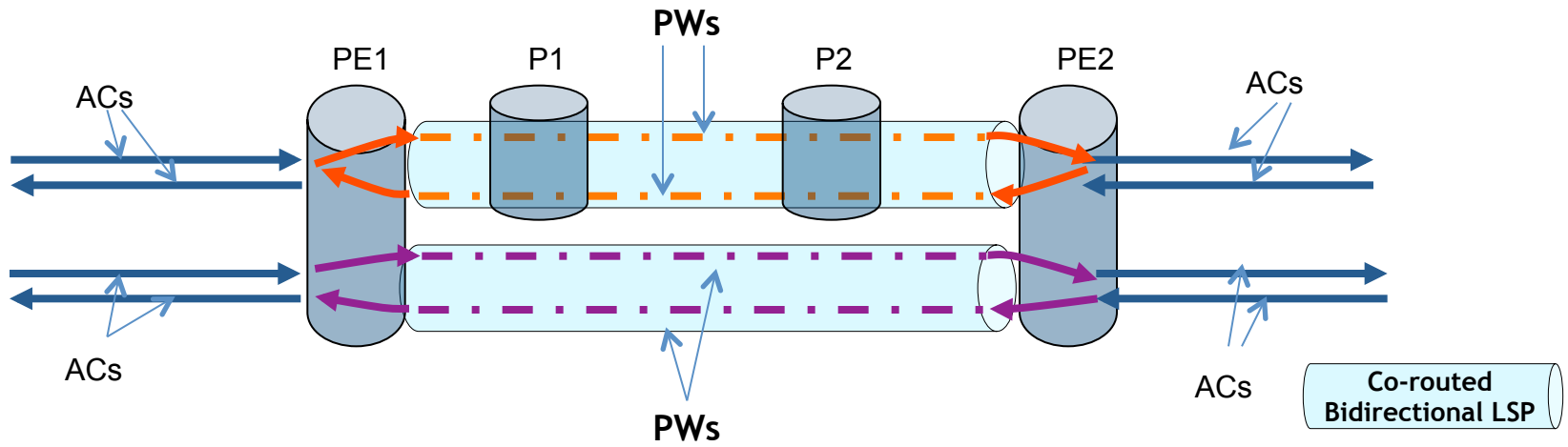


It's desirable to aggregate user circuits into the same "pipes"

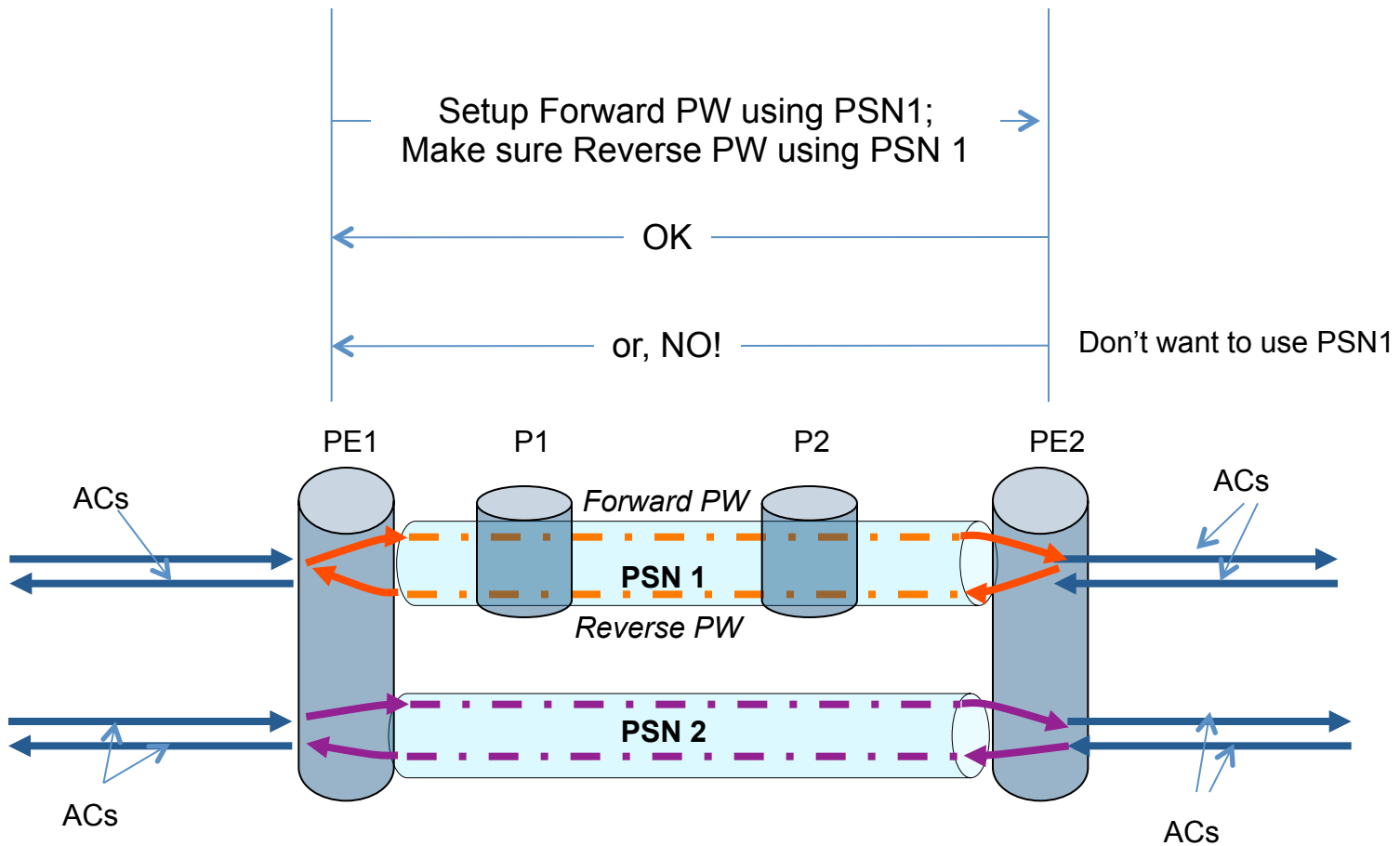
- Easy to manage (e.g. protection)
- Predictable service qualities (e.g. delay)
- Can deliver over multiple transport domains

Problems

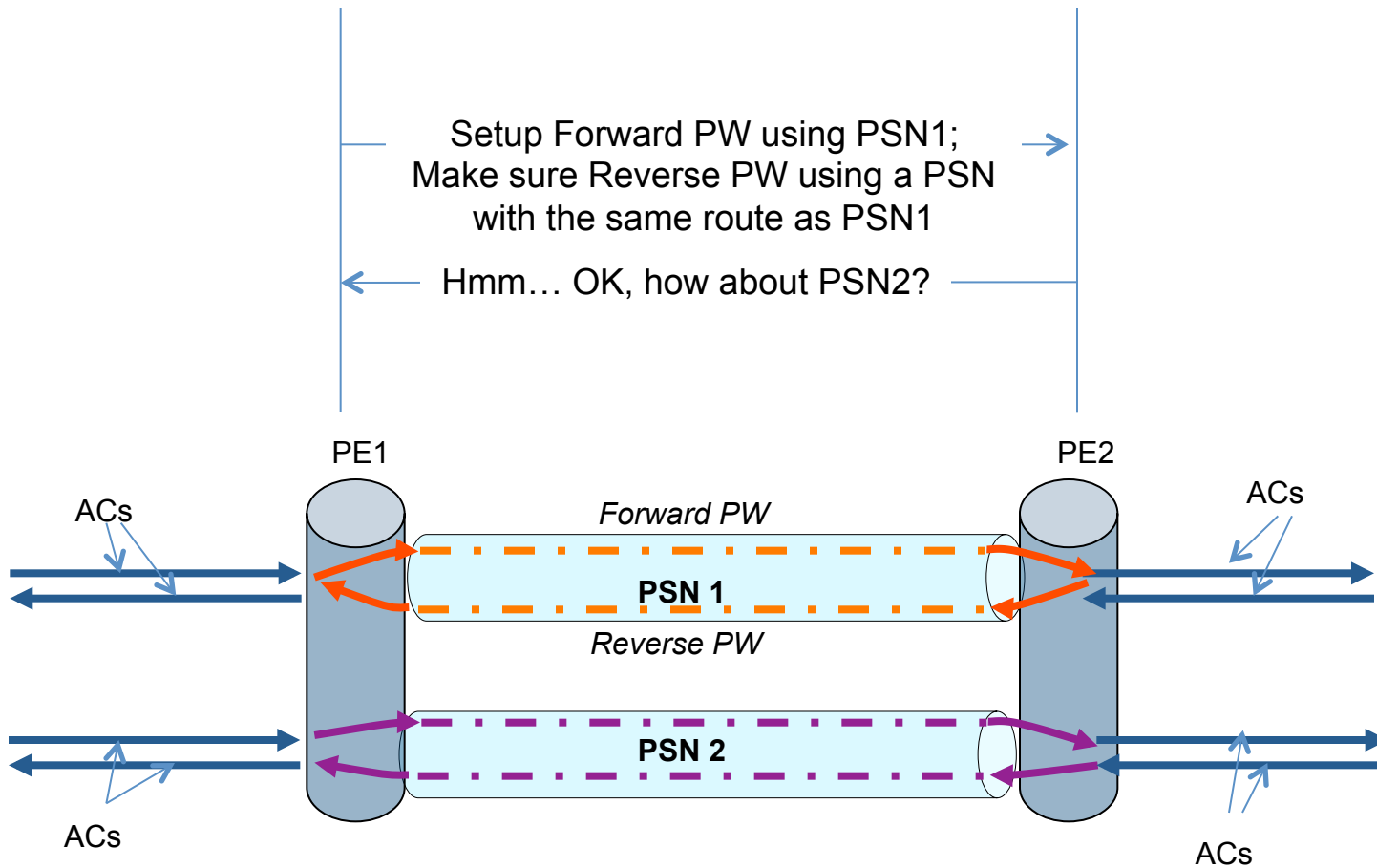
- Essentially, this is a PW-LSP binding problem
 - PW's (fwd + reverse) → bi-dir co-routed LSP's
 - Be able to support MS PW's (a.k.a. FEC129)
- Issues today:
 - PEs select and bind PW's to uni-directional LSP's locally
 - Difficult to manage for bi-directional LSP binding (especially, over multiple segments)



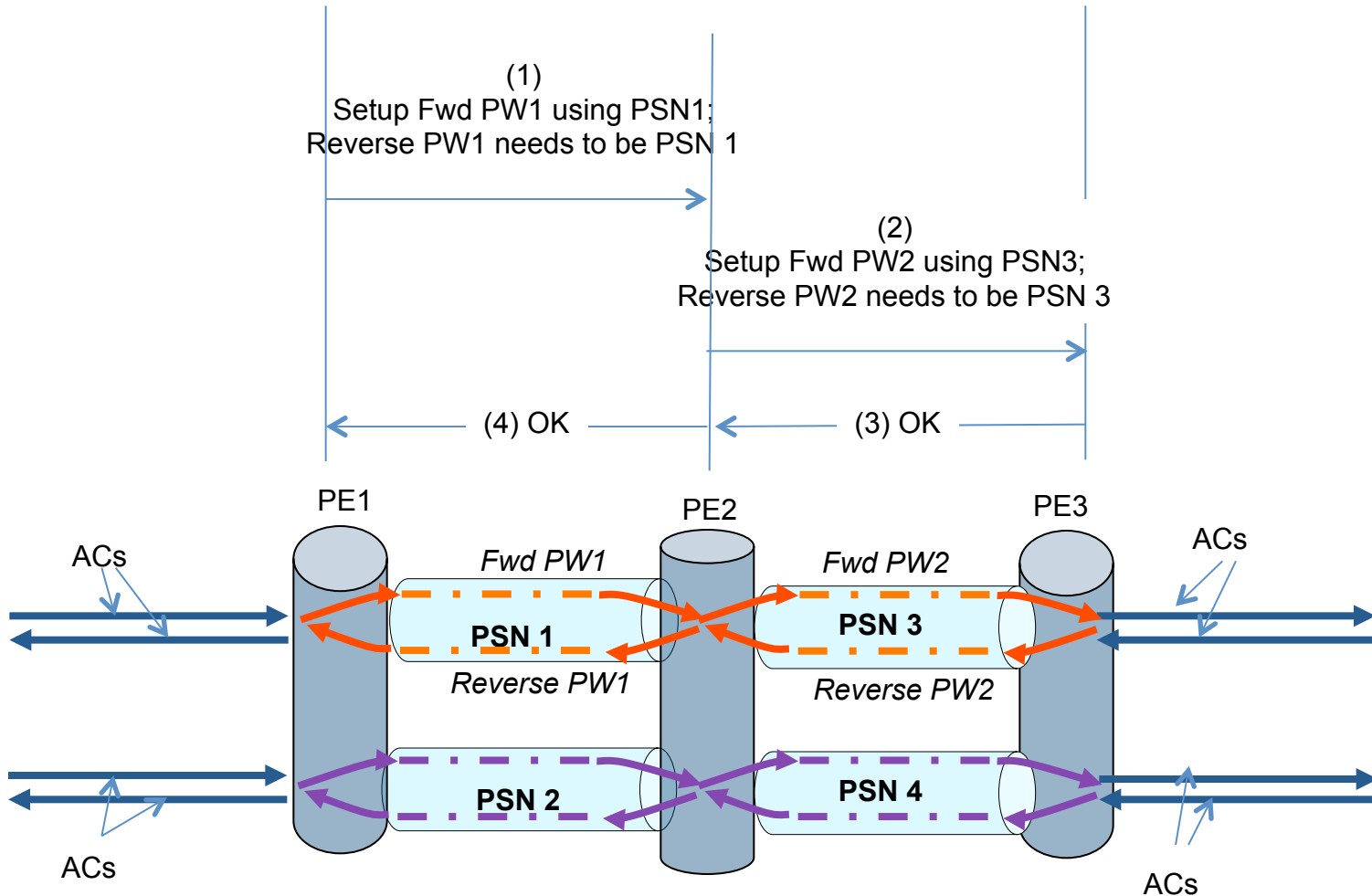
Solution Overview (Single-Hop) (Strict Mode)



Solution Overview (Single-Hop) (Congruent Mode)

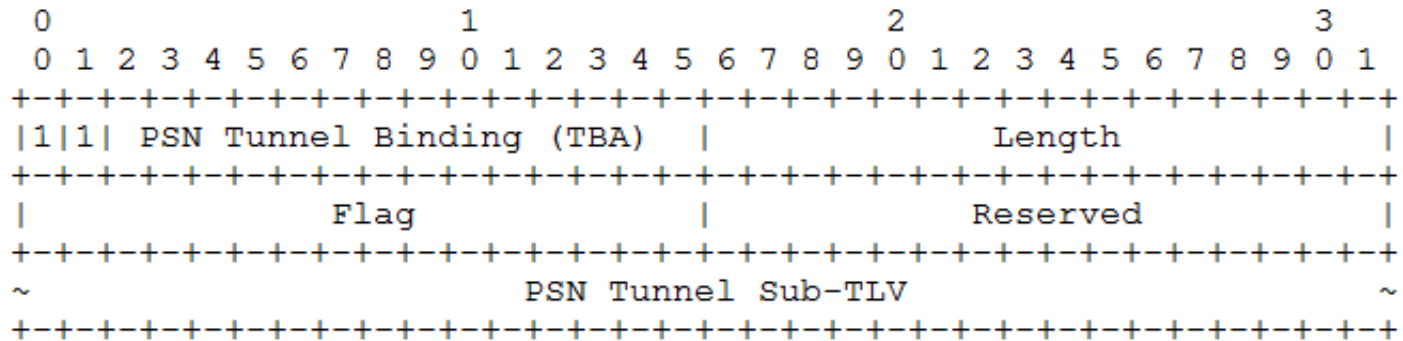


Solution Overview (Multi-Segment) (Strict Mode)

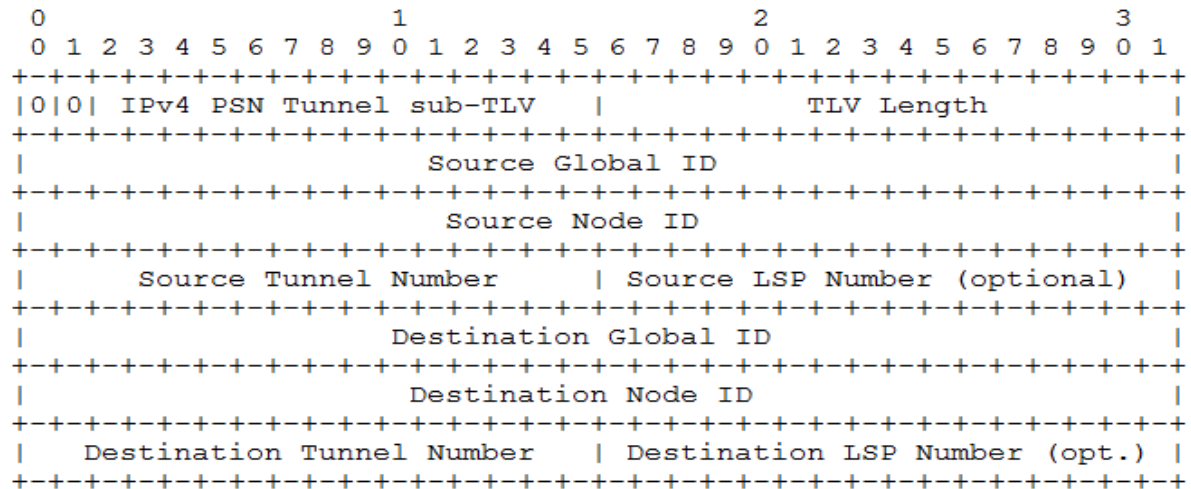


Protocol Extension

- PSN Tunnel Binding TLV (optional)



- IPv4 PSN Tunnel sub-TLV format



Changes since last version

- Rewrite the Abstract and Introduction sections to make the motivation and requirement clearer
- Some editorial changes

Key Comments from the list

- Suggest re-work procedures to withdraw such an advertised binding
- Need more explanation on the usage of FEC 128 (for SS-PW) and FEC 129 (for SS-PW and MS-PW)

Next steps

- Resolve the received comments and re-submit new version after this meeting
- Like to request for WG document?