LDP MAC Flush extensions for PBB-VPLS

draft-balus-l2vpn-pbb-ldp-ext-02
Background

- **draft-ietf-l2vpn-vpls-ldp-mac-opt-01.txt** - LDP Extensions for Optimized MAC Address Withdrawal in HVPLS
  
  Approved working group item
  
  Extends the LDP MAC Flush to address existing VPLS deployments
  
  Enables a PE to minimize the MAC addresses that need to be relearned

- **draft-balus-l2vpn-pbb-ldp-ext-02** - Extensions to LDP MAC Withdraw for PBB-VPLS
  
  Content discussed in a number of IETF meetings
  
  Extends the existing LDP MAC Flush to work in a PBB-VPLS case
  
  Enables a PBB-VPLS PE to
  
  minimize the Customer MAC addresses that need to be re-learned
  
  eliminate unnecessary MAC Flush in the Backbone VPLS
LDP MAC Flush for regular VPLS and PBB-VPLS

Regular LDP VPLS

LDP PBB-VPLS

Flush in V1 all CMACs except the ones mapped to PW32

Flush in ISID I1 all CMACs except the ones mapped to BMAC2
Required extensions to LDP MAC Withdraw

Add New MAC Flush Extension TLV to LDP MAC Withdraw
ISID sub-TLV identifies the target ISID instance(s) - ISID I1
BMAC sub-TLV identifies the BMAC of the originator PE – BMAC2
Comparison of LDP MAC Flush for Hierarchical VPLS and PBB-VPLS

- **Regular LDP VPLS**
  - PE-rs2
    - MTU1
      - LDP
        - V1
        - V2
      - CMAC X
    - PE-rs1
      - LDP
        - V1
        - V2
      - Flush V1
      - Flush V2
    - Activate stdby PWs
    - LDP MAC Withdraw
      - FEC VSI V1
      - FEC VSI V2
    - link (active PW) failure
    - Activate stdby PWs

- **PBB-VPLS**
  - PE-rs2
    - MTU1
      - LDP
        - B1
      - CMAC X
    - PE-rs1
      - LDP
        - B1
      - Flush I1
      - Flush I2
    - Activate stdby PWs
    - LDP MAC Withdraw
      - FEC B1
      - ISID I1
      - ISID I2
    - No Flush in B1
    - link (active PW) failure
    - Activate stdby PWs

- **PE3**
  - LDP
    - V1
    - V2
  - LDP
    - I1
    - I2
  - Flush I1
  - Flush I2
Next steps

The text in `draft-balus-l2vpn-pbb-ldp-ext-02` addresses the same goals as `draft-ietf-l2vpn-vpls-ldp-mac-opt-01.txt` for PBB-VPLS.

Authors of the two drafts have agreed the procedures are complementary.

Are there any objections to extend the `draft-ietf-l2vpn-vpls-ldp-mac-opt-01.txt` with the text from `draft-balus-l2vpn-pbb-ldp-ext-02`?