Extensions to RSVP-TE for LSP Ingress Local Protection

draft-chen-mpls-p2mp-ingress-protection-09

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Updates from the last version

Merged the following two drafts into one

1. draft-chen-mpls-p2mp-ingress-protection-08
2. draft-torvi-mpls-rsvp-ingress-protection-00

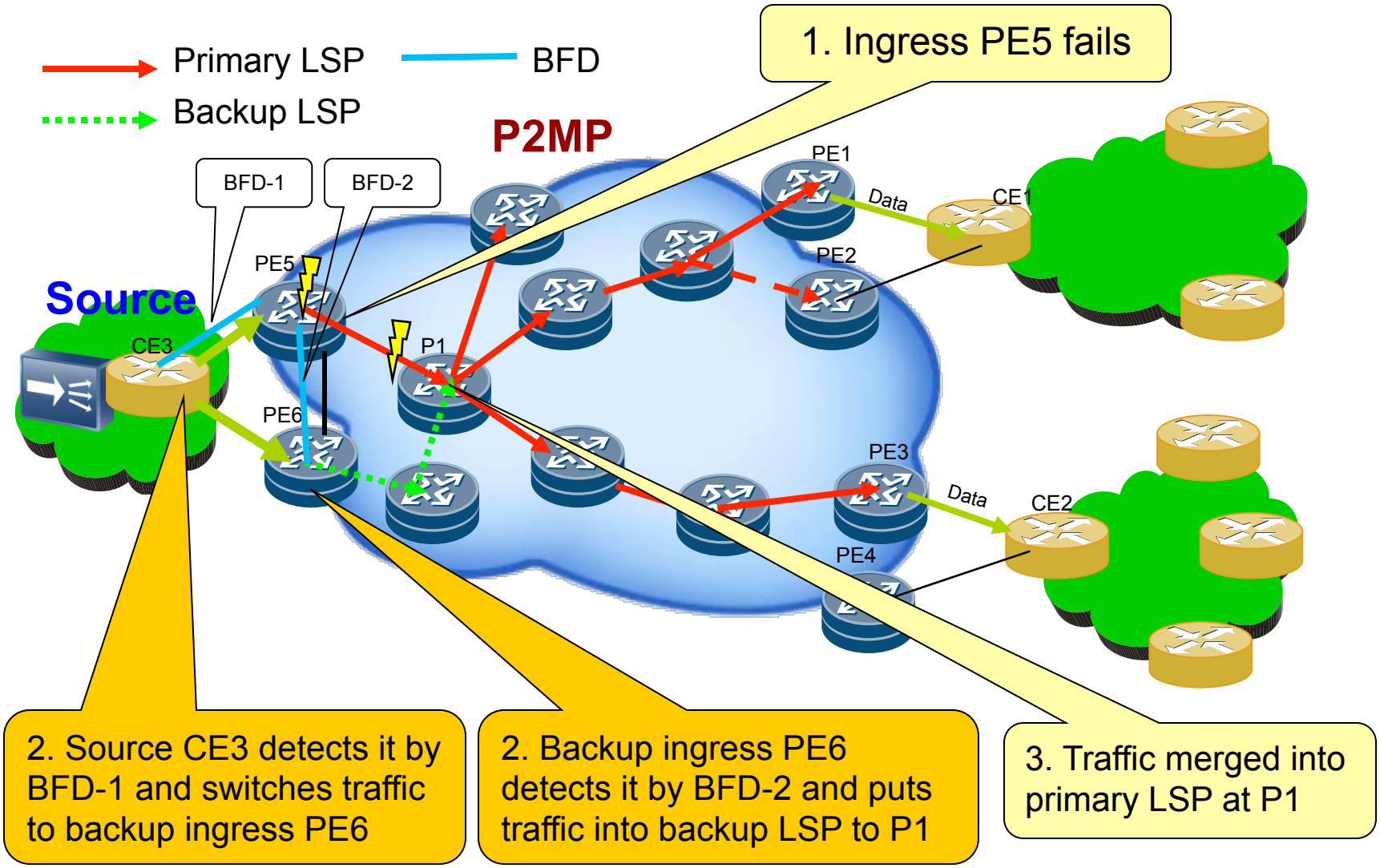
Some Ingress Failure Detection Modes in details are added

1. Backup and Source Detect Failure (New)
2. Backup Detects Failure
3. Source Detects Failure
4. Next Hops Detect Failure

Covers On-path (backup ingress on path of LSP) cases (New)

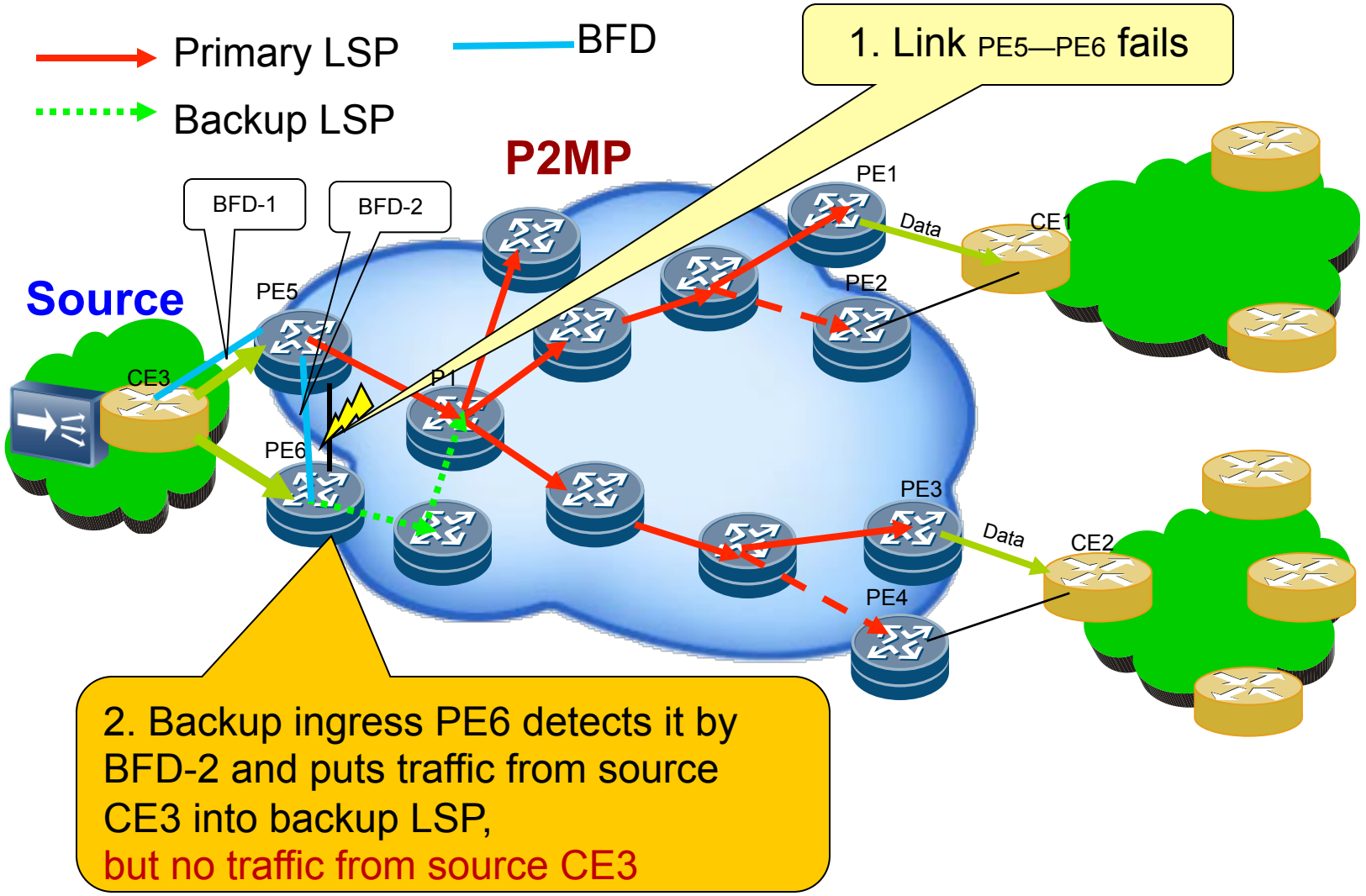
Backup and Source Detect Failure (1/2)

Backup ingress (PE6) and source (CE3) detect ingress (PE5) failure and control the traffic delivery concurrently



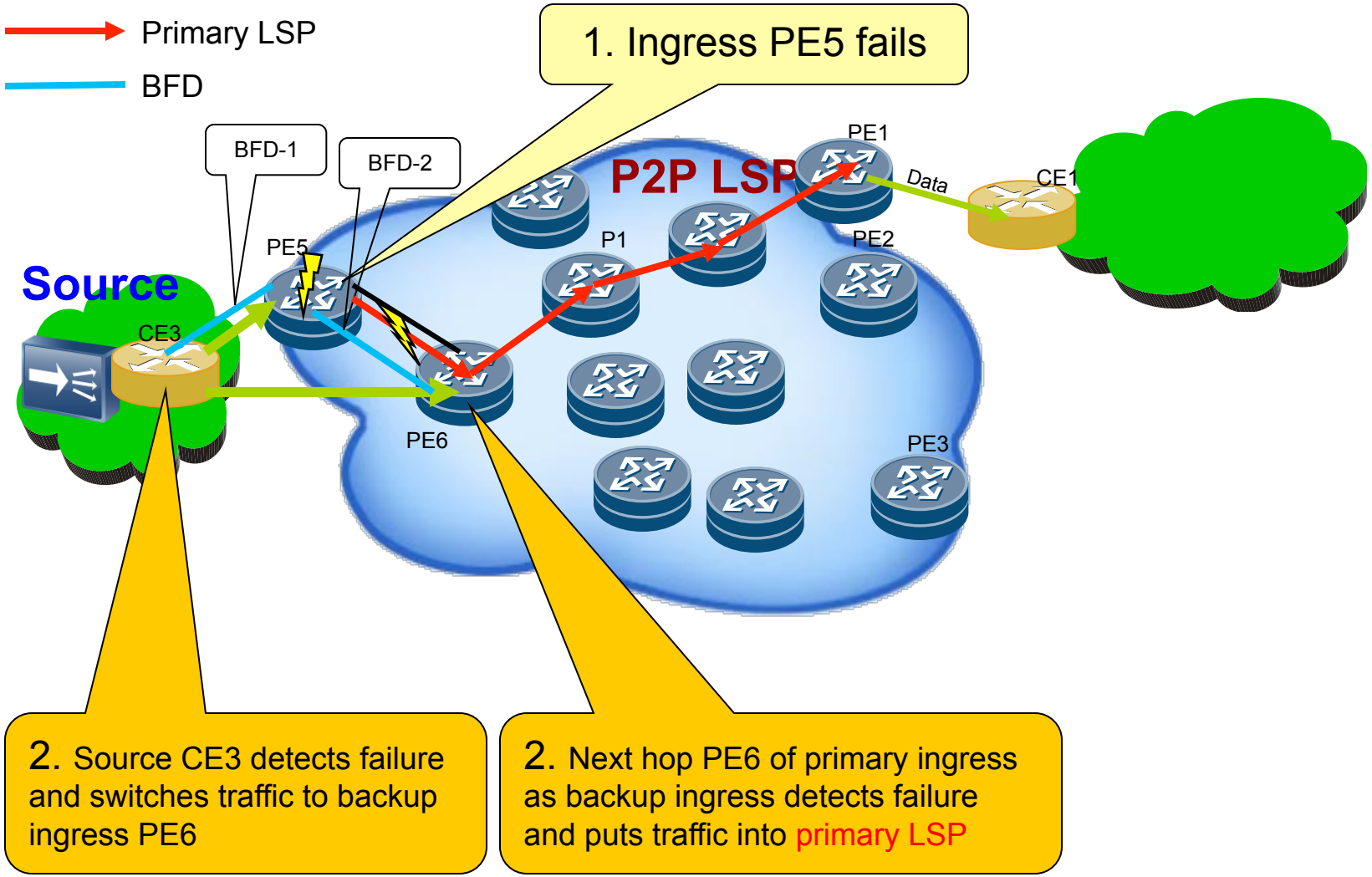
Backup and Source Detect Failure (2/2)

Link PE5—PE6 fails: Traffic from source CE3 to ingress PE5 is transported by primary LSP to destinations as before, no traffic to backup ingress PE6 from source CE3



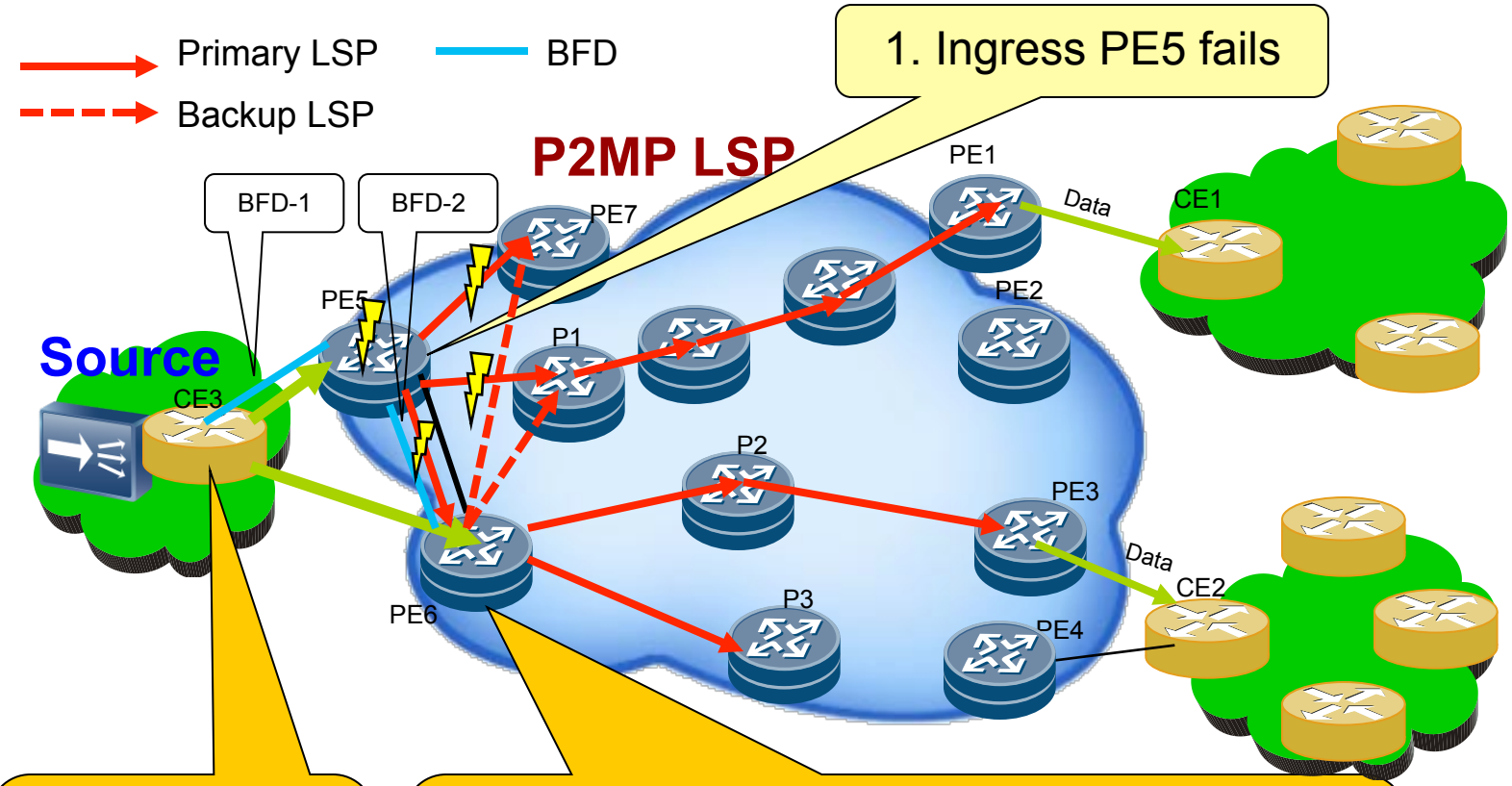
On-path case (1/2)

Backup ingress (PE6) is a next hop of ingress (PE5) , i.e., backup ingress (PE6) is on the path of primary LSP



On-path case (2/2)

Backup ingress (PE6) is a next hop of ingress (PE5), i.e., backup ingress (PE6) is on the path of primary LSP



Next Step

- Welcome comments
- Request for working group adoption