

Proxy MPLS Traffic Engineering Label Switched Path(LSP)

draft-li-mpls-proxy-te-lsp-00

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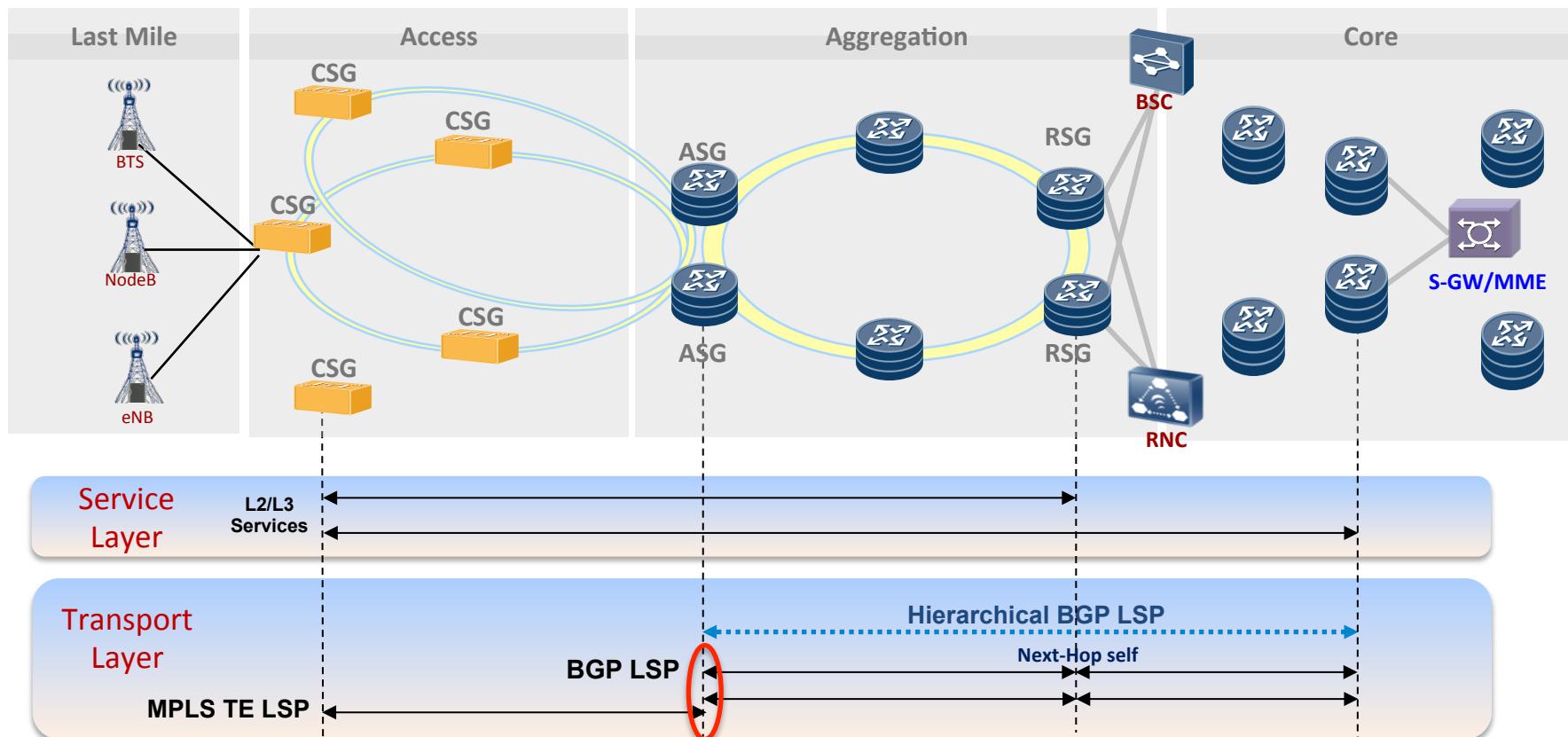
IETF 87, Berlin, Germany

Introduction

- [I-D. draft-li-mpls-seamless-mpls-mbb-00] introduced the framework and requirement of Seamless MPLS for mobile backhaul networks.
- The draft is to provide a method, Proxy TE , to setup proxy egress MPLS TE LSP with RSVP-TE which could stitch with BGP LSP to form an end-to-end LSP.
 - Define a new RSVP-TE object: Proxy Destination Object
 - Procedures of Setup Proxy TE LSP

Requirement on Proxy Egress MPLS TE LSP

- Proxy egress MPLS TE LSP has to be setup in mobile backhaul networks to stitch BGP LSP for Seamless MPLS.



RSVP-TE Extension

- IPv4 Proxy Destination Object

Class-Num = TBD ((of form 0bbbbbbb))

0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
+-----+																					
Length Class-Num C-Type (1)																					
+-----+																					
IPv4 Proxy Destination Address																					
+-----+																					

- IPv6 Proxy Destination Object

0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
+-----+																					
Length Class-Num C-Type (2)																					
+-----+																					
IPv6 Proxy Destination Address																					
+-----+																					

Procedures

 LSP
 Path message
 Resv message

PATH message

Session Object :

tunnel end point address
= Remote AN

Proxy Destination Object :

proxy destination
address = AGN

PATH message

Session Object :

tunnel end point address
= Remote AN

Proxy Destination Object :

proxy destination
address = AGN

RESV message

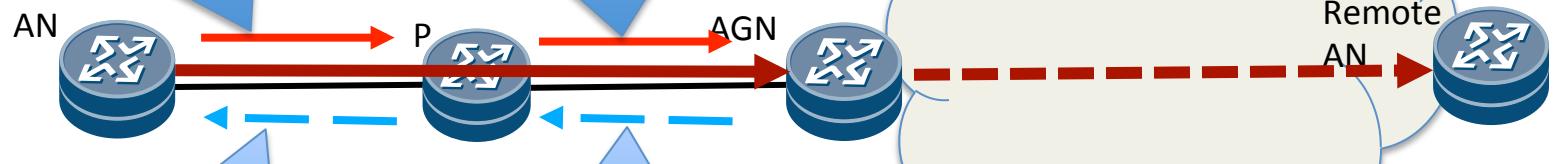
Proxy Destination Object :

proxy destination
address = AGN

RESV message

Proxy Destination Object :

proxy destination
address = AGN



- Ingress: Use the proxy destination address to calculate path and the setup procedure is the same as current process.
- Egress: Identify itself as the proxy node, stitch the proxy RSVP-TE with the other LSP, return RESV message with the same proxy destination object.

Next Steps

- Solicit more Get comments on mailing list
- More scenarios will be taken into account.