Performance Measurement (PM) with Alternate Marking in Network Virtualization Overlays (NVO3)

Giuseppe Fioccola	Telecom Italia
Greg Mirsky	ZTE
Tal Mizrahi	Marvell

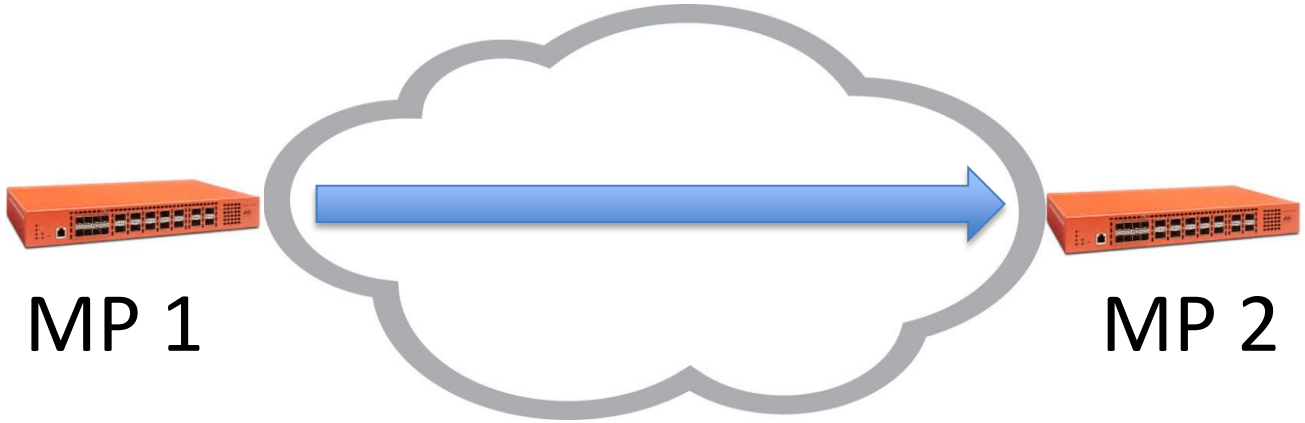
draft-fmm-nvo3-pm-alt-mark-02

Montreal, Jul 2018, IETF 102

Alternate Marking - Background

Monitor data traffic from MP 1 to MP 2

- Packet loss
- Delay
- Delay jitter

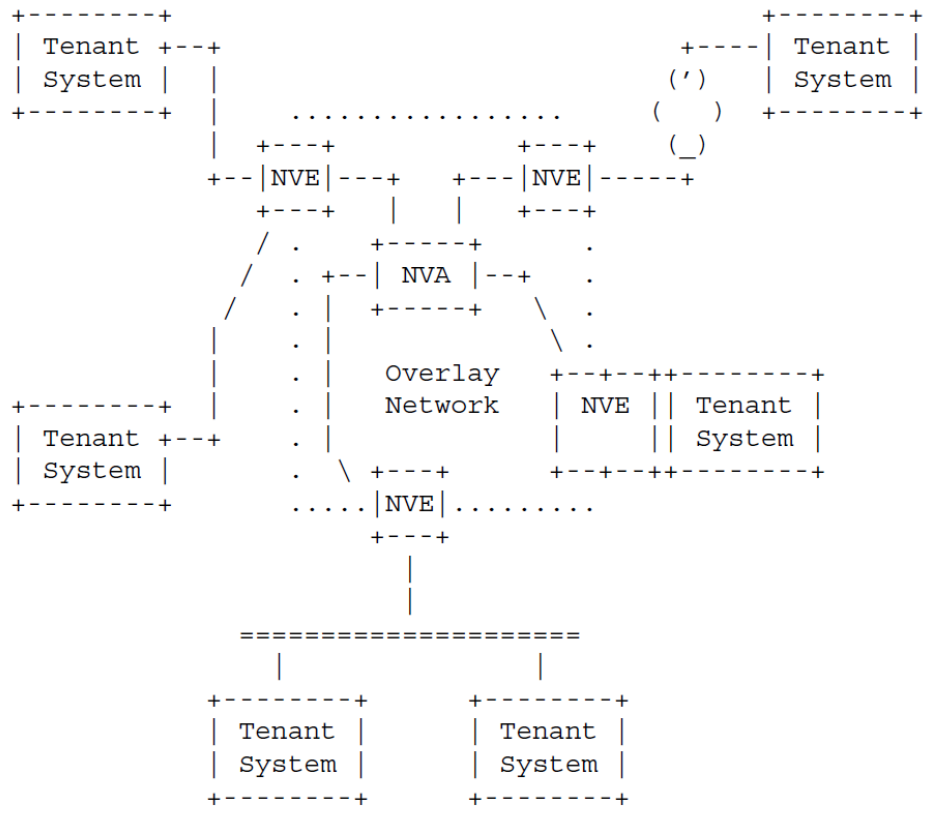


MP = Measurement Point

Alternate Marking in NVO3

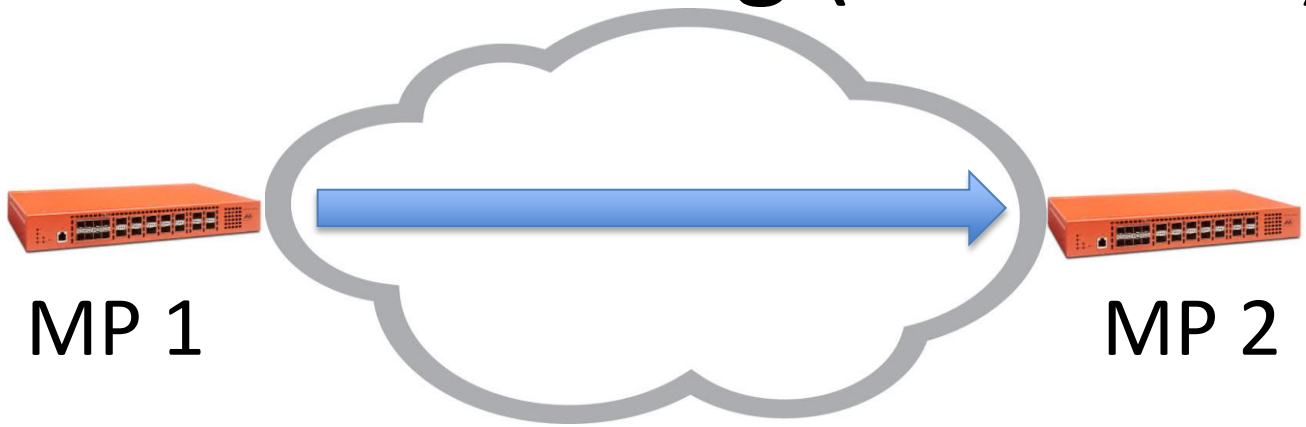
Performance measurements per VNI between two NVE devices:

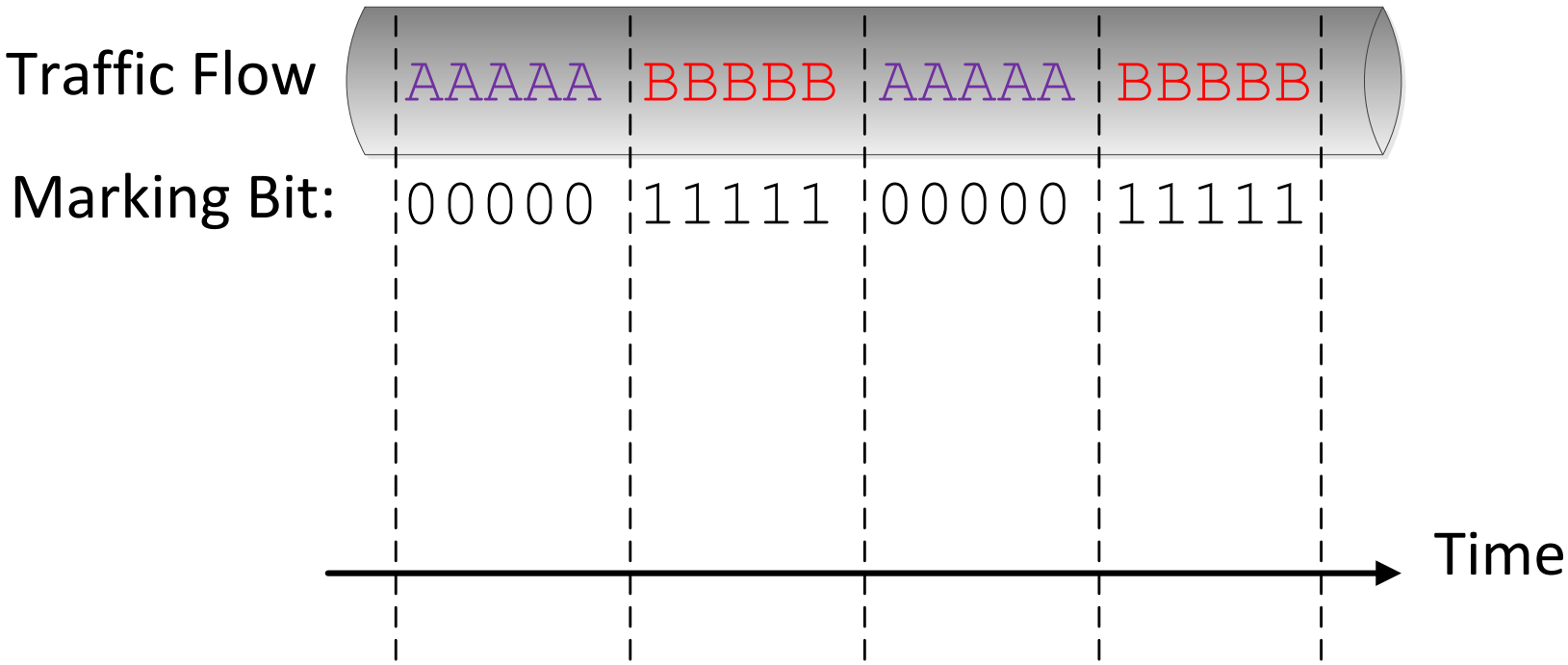
- Packet loss
- Delay
- Delay jitter



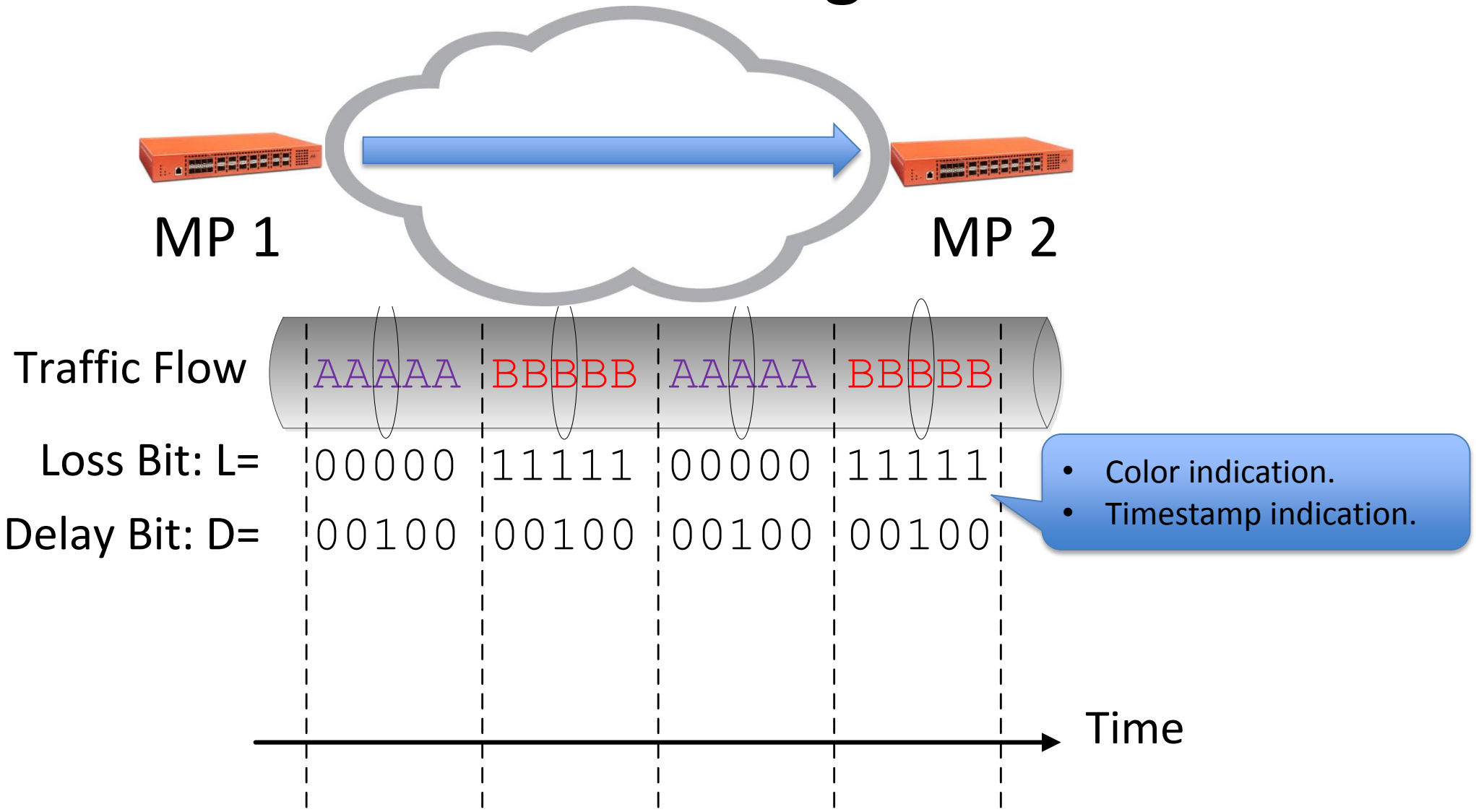
Alternate Marking (RFC 8321)

Every data packet includes a color bit.





Double Marking

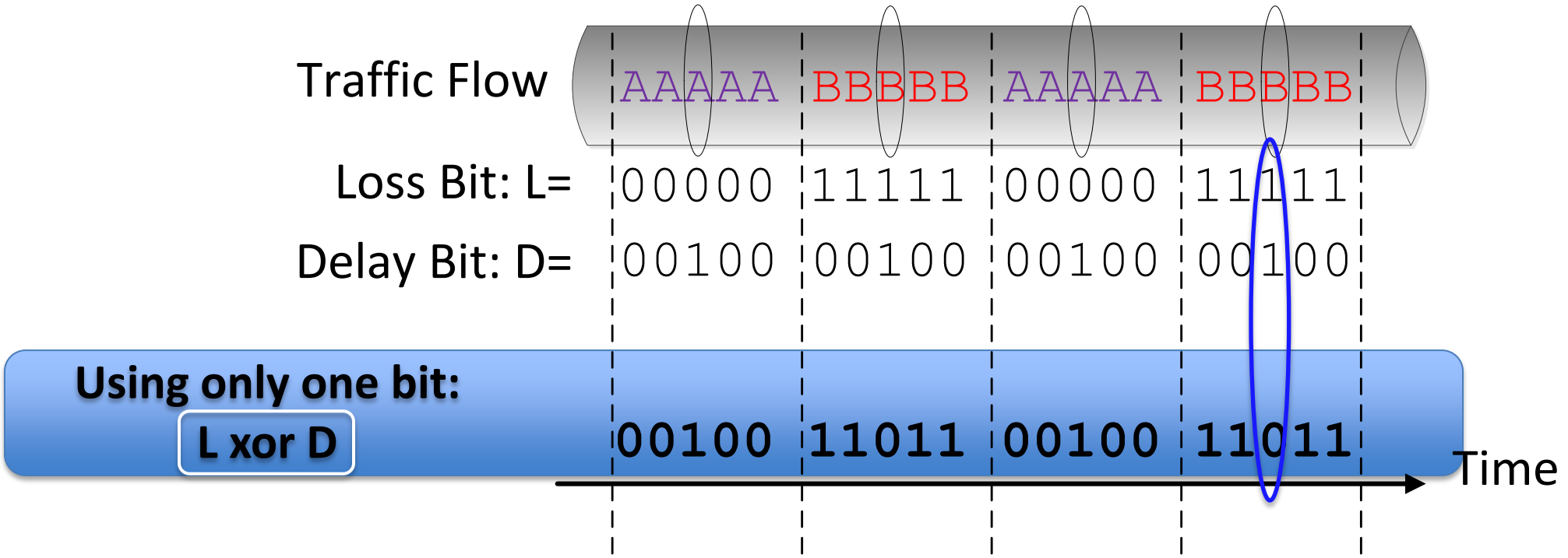


- Color indication.
- Timestamp indication.

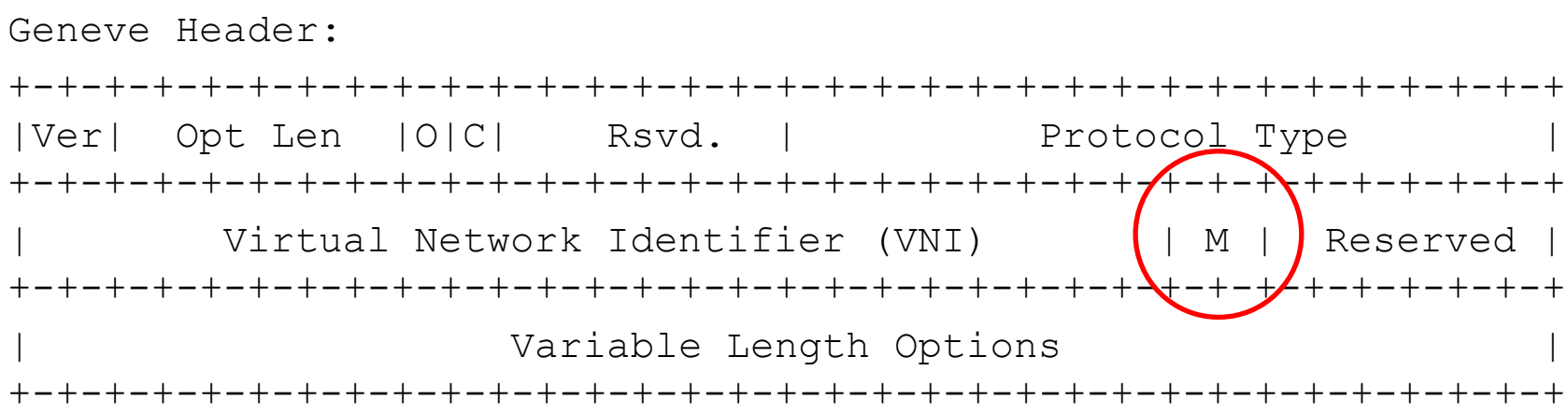
Multiplexed Marking

(draft-mizrahi-ippm-compact-alternate-marking)

- **A single bit** is used for L / D
- Same measurement resolution as double marking



Alternate Marking Bits in NVO3

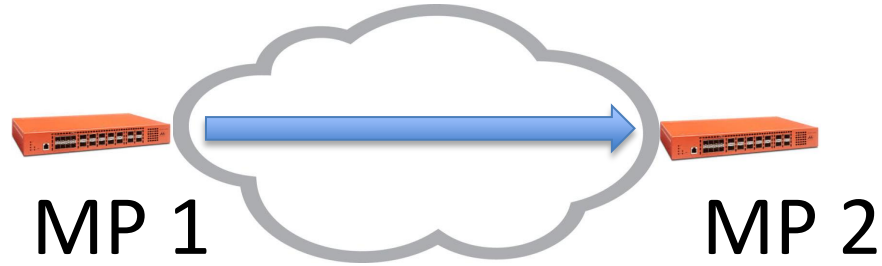


- Single marking
- Double marking
- Multiplexed marking

Status and Next Steps

- Draft 02 – updated based on feedback from the WG

- Consider working group adoption



Thanks!

References

[1] T. Mizrahi, C. Arad, G. Fioccola, M. Cociglio, M. Chen, L. Zheng, G. Mirsky, “Compact Alternate Marking Methods for Passive Performance Monitoring”, draft-mizrahi-ippm-compact-alternate-marking-01, work in progress, 2018.

[2] G. Fioccola, A. Capello, M. Cociglio, L. Castaldelli, M. Chen, L. Zheng, G. Mirsky, T. Mizrahi, “Alternate Marking method for passive performance monitoring”, RFC 8321, 2018.