

# TRILL OAM- Status, Updates and Next Steps

*March, 2013*

# Status

- Requirement document move to IESG for publication as RFC
  - [draft-ietf-trill-oam-req-05](#)
- Framework document in WG status and -01 published
  - [draft-ietf-trill-oam-framework-01](#)
- -02 Fault management draft published
  - [draft-tissa-trill-oam-fm-01](#)
- -00 Performance Management draft published
  - [draft-mizrahi-trill-loss-delay-00](#)

## Next steps for Framework document

- Identify group of Volunteers (around 5) to review the document
- Complete the review by March 30<sup>th</sup>
- Publish updated version of the draft – Mid April
- Request for WG Last call – Mid April

## Next steps for Fault Management document

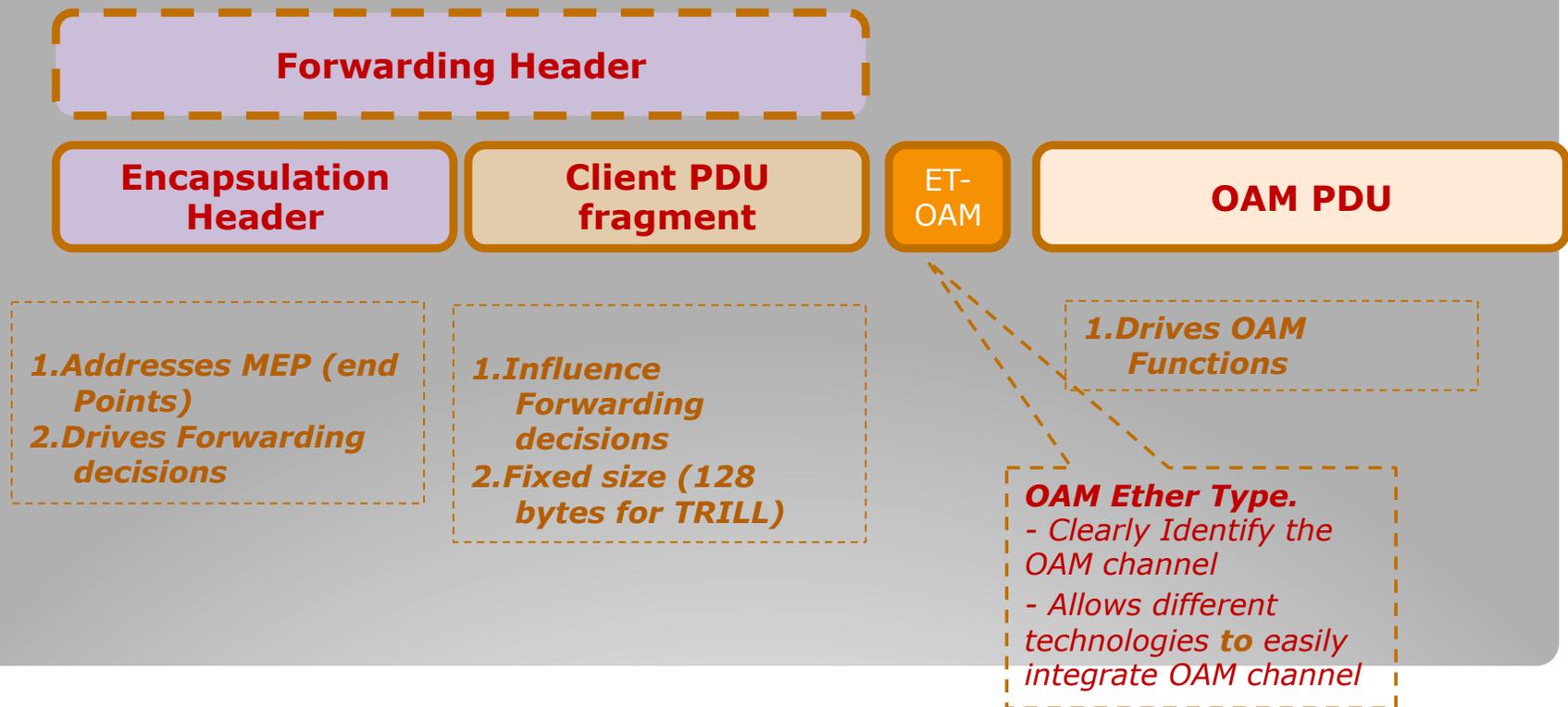
- Request for WG adoption
- Identify group of Volunteers (around 5) to review the document
- Complete the review by April Mid
- Publish updated version of the draft – End April
- Request for inter SDO review – End April/Early May
- WGLC July.

# Our Goal

- Utilize 802.1ag OAM framework
- Utilize 802.1ag OAM messages where applicable
  - Re-use LBM (Loopback Message), CCM (Connectivity and Continuity Monitoring) .
  - New TRILL specific additions: Path Trace, Multicast Tree Verification
- This creates a common OAM framework between 802.1 and TRILL
- This allow customers and end users to perform *nested* "OAM tests" to easily troubleshoot connectivity problems between 802.1 and TRILL.

# TRILL OAM Frame Structure

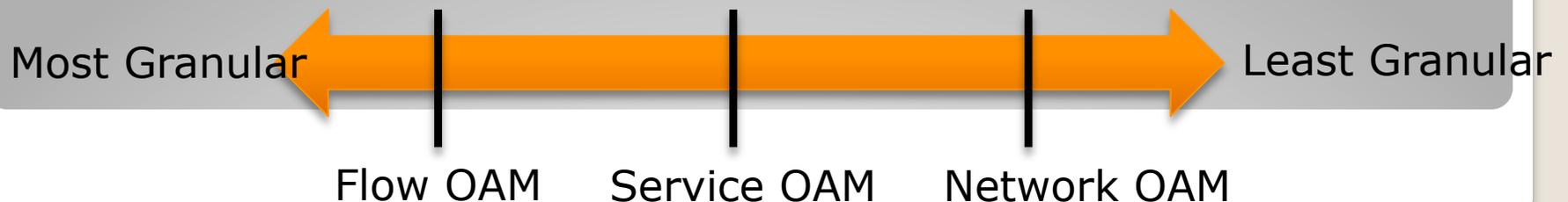
- Below is the proposed TRILL OAM frame structure
- Client PDU fragment, may or may not be present based on the technology



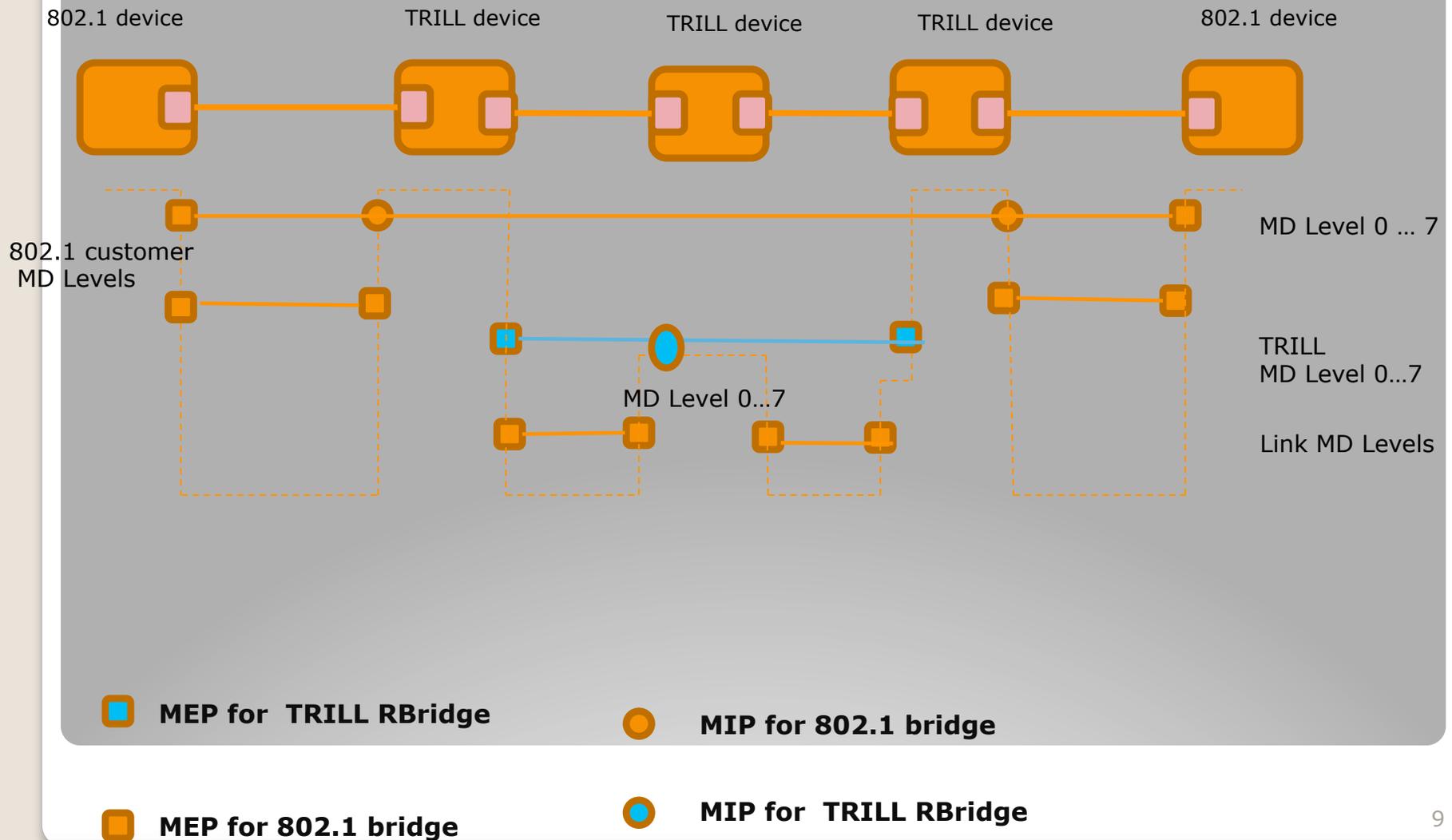


# Network, Service and Flow OAM

- Network OAM: functions in the context of a representative 'test' VLAN or fine-grained label.
- Service OAM: functions in the context of the end station service VLAN or fine-grained label.
- Flow OAM: functions performed in the context of end station service VLANs or fine grained labels and user flows.



# Nested MP Interaction

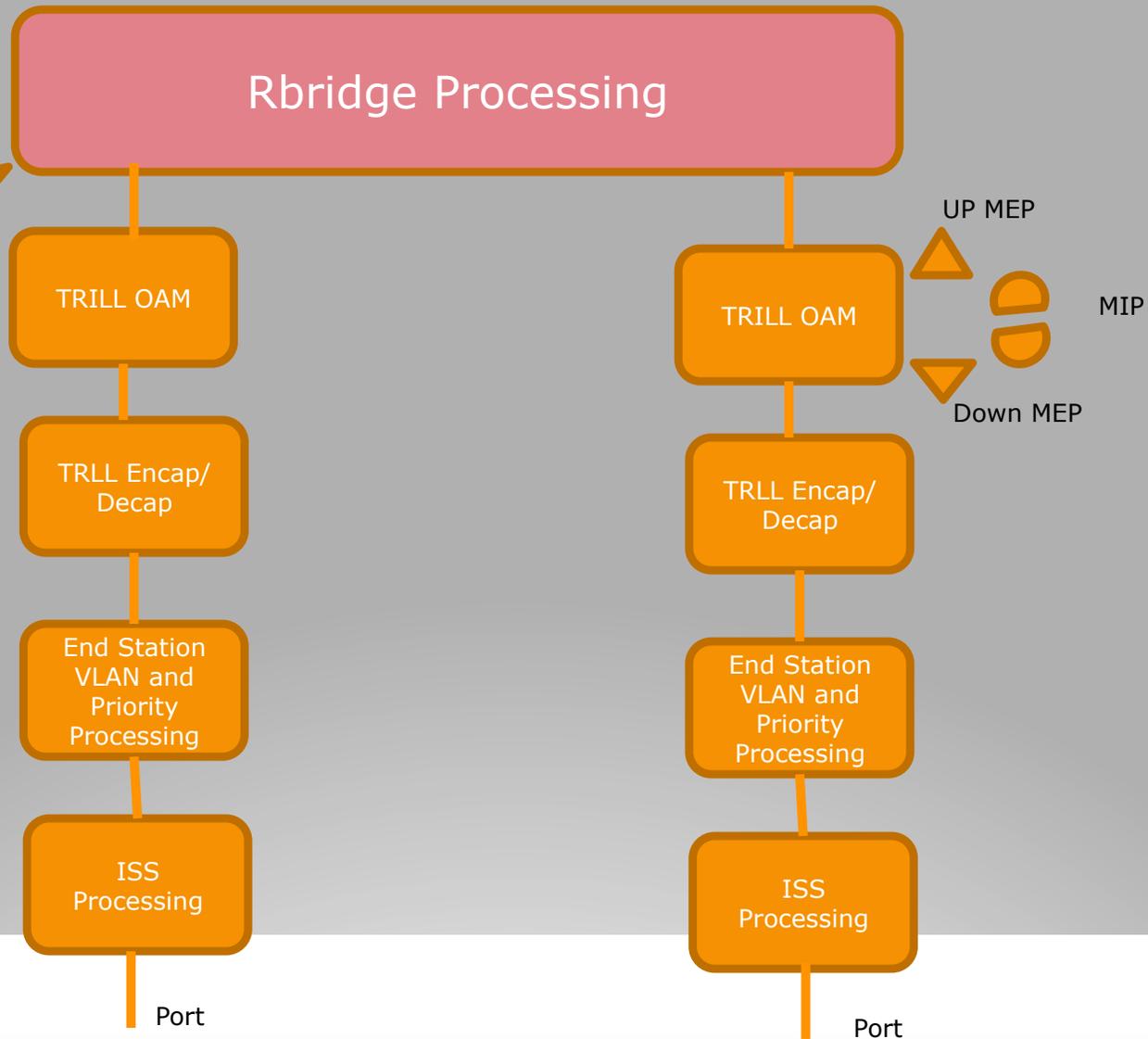


# TRILL OAM Addressing Model

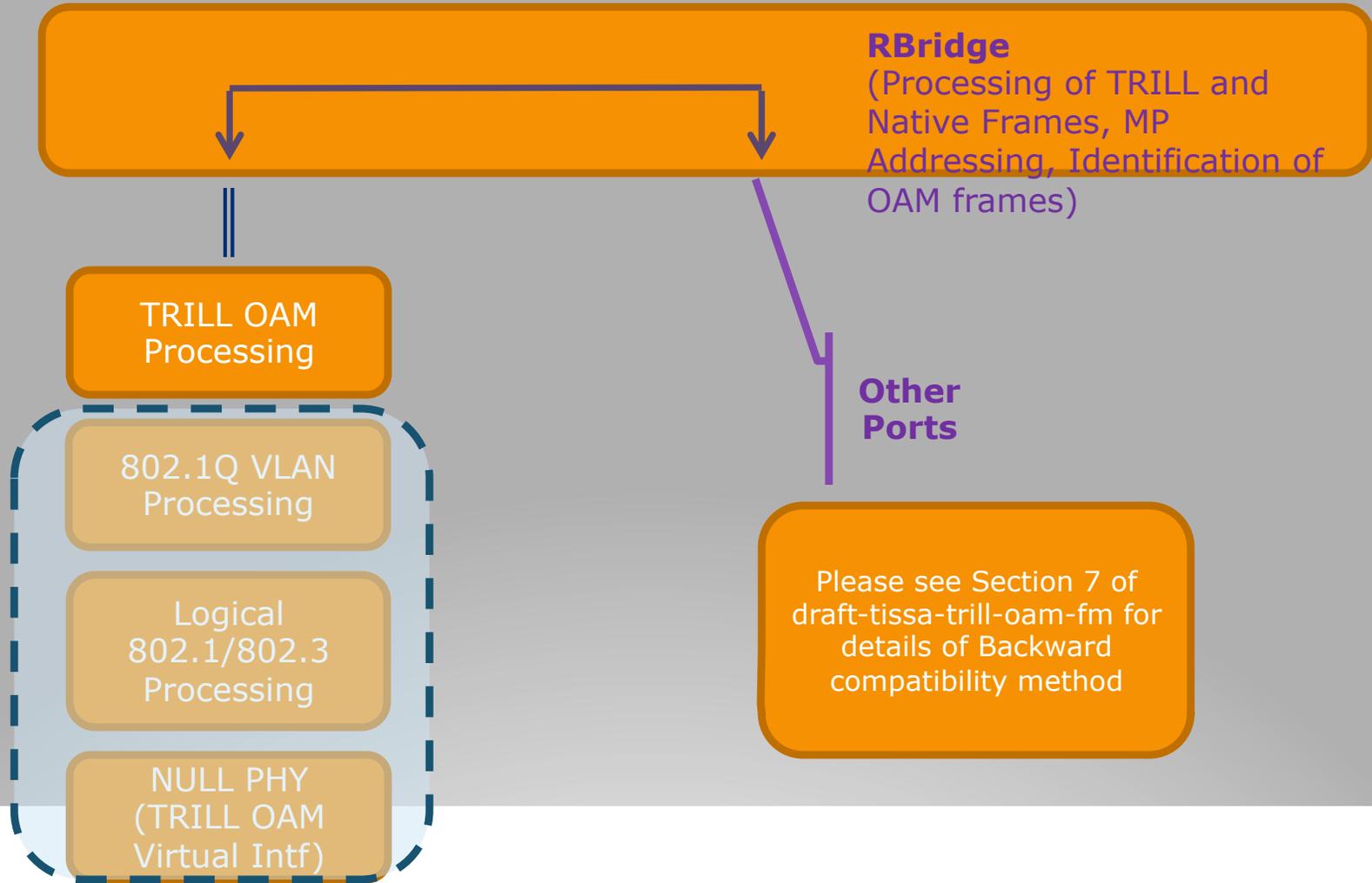
- MP (Maintenance Points) are placed on each port
- Use the shared addressing model
  - IE, all MP within an Rbridge use the same nickname.
- If connectivity to a physical interface needed to be tested, use CFM, which lies below TRILL

# Placement of TRILL MP

Please refer to section 4 of *draft-tissa-trill-oam-fm* for details



# TRILL MP (Maintenance Point) Model – Backward compatible



## Reference

- Requirement document
  - <https://datatracker.ietf.org/doc/draft-ietf-trill-oam-req/>
- Framework document
  - <https://datatracker.ietf.org/doc/draft-salam-trill-oam-framework/>
- Fault Management
  - <https://datatracker.ietf.org/doc/draft-tissa-trill-oam-fm/>