

# Requirements for MPLS Network Action Indicators and MPLS Ancillary Data

---

**draft-ietf-mpls-mna-requirements-02**

Mathew Bocci (Nokia)

Stewart Bryant (University of Surry 5GIC)

John Drake (Juniper)

# Overview

---

- Captures the key requirements for MPLS network actions that affect forwarding or other processing of MPLS packets:
  - Network Action Sub-Stack Indicator
  - Network Action indicators
  - Any ancillary data required to perform the indicated action
- Product of the MPLS Open Design Team
- Requirements largely derived from a number of proposals for additions to the MPLS label stack to allow decisions about actions based on application data
- Requirements are on protocol design, NOT implementations

# WG Adoption Process

---

- draft-bocci-miad-adi-requirements-04
- Around 30 comments made on the list which were collated by Loa
- Following the guidance of the chairs, the authors added these to an appendix A: Working Group Adoption Comments
- Published draft-ietf-mpls-miad-mna-requirements-00 and subsequently revised to draft-ietf-mpls-mna-requirements-00
- Comments, and MPLS list/OpenDT meeting discussion, addressed in this and subsequent revisions
- Appendix A will be removed shortly

# Main Changes

---

- Terminology aligned with draft-andersson-mpls-mna-fwk
- Refocusing around Network Actions instead of Ancillary Data
  - Ancillary Data Indicator -> Network Action Indicator
- Clarification of in-stack vs. post-stack requirements
  - In-stack ancillary data requires strong justification
- Distinction between network action sub-stack indicator (a.k.a MNA label in framework) and network action indicator
  - Allows NAI and/or AD to be in-stack or post-stack
- Clarified that solution specs MAY support user-defined actions, and if they do, they MUST explicitly reserve a user-defined range in IANA policy
- Reorganization of requirements into appropriate sections

# Draft Structure (Changed since last IETF)

---

- Terminology
  - New Terms needed to define new objects in MPLS
- General Requirements
  - A set of design principles that underpin this work
- Requirements on Network Action Indicator Sub-stack
  - Indicator in the label stack of network actions
  - This needs a solution-agnostic definition to be added
- Requirements on Network Action Indicators
- Requirements on Ancillary Data
- Appendix containing working group adoption comments

# Next Steps

---

- Several versions of the draft have been reviewed line-by-line in the MPLS Open Design Team
- Appendix containing WG adoption comments will be removed in next revision
- Please review and post comments to the MPLS list
- Authors believe the draft is mature and close to MPLS WG last call quality