On-Path Telemetry for Data Plane

Difference in the handling of the telemetry instruction & data in packets

Tradeoffs
- Performance Impact
- Encapsulation and Overhead
- Security
- Configuration and correlation
- Drop location identification

Data as passport stamps
- IOAM Trace Mode

Data as postcards
- Postcard by Instruction (PBT-I)
- Postcard by Marking (PBT-M)

Could be another mode of IOAM (Per-Hop Postcard)

A standalone approach
MPLS Extension Header for IOAM Encapsulation

- EH is a normalized and scalable mechanism to support network instruction headers and metadata
- EH is stackable to support other in-network services in parallel