Advancing Metrics on the Standards Track:

RFC 2679 bis: One-way Delay Metric

RFC 2680 bis: One-way Loss Metric

draft-morton-ippm-rfc2679-bis-06
draft-morton-ippm-rfc2680-bis-04
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Al Morton, guest editor
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# Revisions to the —bis drafts following IETF-90

- All revisions are now mentioned in the –bis change sections
  - This is a requirement!
- First section of

```
draft-morton/draft-ietf-ippm-
rfc2679-bis-00
```

Last section of

```
draft-morton/draft-ietf-ippm-rfc2680-bis-00
```

## Comments on —bis drafts prior to IETF-90

#### Have now addressed

- All comments from Nalini and Barry on-list, forgotten comments from Ruedger on-list, and support and many off-list comments from Joachim.
- Loss waiting time parameter
- Hardware or NIC timestamps,
- Network-based Compression,
- Editor's suggestions for added references
- XML references and bis-version ACKs

### Latest Revisions: Joachim & Rudiger

- RFC Standard Formed Packets needs an explicit reference in RFC2679-bis
- Reasons to take host timestamp as late as possible
- Measurement "Instrument" used but not defined – should be "host"
- Reporting the specific stream sending pattern (covered by the singleton pairs)
- Some wording inconsistencies and mixed thoughts in the 2679 security section.

#### Issues to discuss further

- Occasional comments: "yet to be tested", Delete where the sentence is obsolete? Or ref to RFC (6808 for NTP & GPS)
- Standard formed depends to some extent on header checksum --- IPv6 no-gotz
- "wire-time" in the wireless world: wire-entry time as host-exit time instead (?)
- Permanent monitor on host clock synchronization quality (in RFC 2330?).
- These topics reach beyond the metrics under discussion.

#### Where is the "Line"? RFC 6410

- Updated 2026 with two Maturity Levels
- "The result of this change is expected to be maturity-level advancement based on achieving widespread deployment of quality specifications. Additionally, the change will result in the incorporation of lessons from implementation and deployment experience, and recognition that protocols are improved by removing complexity associated with unused features."

## Next Steps

- Further Review?
- WGLC?

### **BACKUP**

Backup Backup Backup

#### Active Metric Attributes:

- Source and Destination known a priori
- Stream characteristics known at the Source (at least, may be communicated to Dest. later)
- (Most) Parts of the Packet are Dedicated to Measurement (typically the transport payload)
- More...
- (Will still work in the E2E Encrypted world)