Simple Two-way Active Measurement Protocol (STAMP) Extensions
draft-ietf-ippm-stamp-option-tlv

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Update

• Welcome Adi Masputra and Ernesto Ruffini

• New extensions:
  – Access Report TLV
  – Follow-up Telemetry TLV
Access Report TLV

- Access Report TLV MAY be included by a STAMP Session-Sender to report the state of the access network.

- The type of the access network indicated by the Access ID field:
  - 3GPP - Radio Access Technologies specified by 3GPP
  - Non-3GPP – accesses that are not specified by 3GPP

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- The value in the Return Code field identifies the state of the access network:
  - Available
  - Not available

- The Session-Sender upon transmission of the test packet with Access Report TLV sets the retransmission timer (default 3 sec). Access Report TLV MAY be re-transmitted up to four times.

- The Session-Reflector that received the Access Report TLV MUST include in in the reflected packet and copy values from Access ID and Return code fields.

- The retransmission timer at Session-Sender is cleared once a reflected packet received that includes Access Report TLV with the Access ID and Return Code values as in the transmitted packet.
Follow-up Telemetry TLV

- In some environments a Session-Reflector may not be able to transmit the accurate Timestamp (time of the reflected packet transmission). More accurate value may be available to the Session-Reflector only after the transmission has started. Optional STAMP extension, Follow-up Telemetry TLV, may be used to collect such time value from the Session-Reflector.

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0                   1                   2                   3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|   Follow-up Telemetry Type    |           Length              |
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|                        Sequence Number                        |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                          Timestamp                            |
|                                                               |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|  Timestamp M  |                     Reserved                  |
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```

- Sequence Number is the Sequence Number of the reflected packet to which the follow-up value in the Timestamp field is applicable.
- Timestamp M(ethod) is the method of obtaining the follow-up timestamp.
Next steps

• Comments are welcome
• WGLC?