Dear Chairs of the SPRING and IPPM WGs, Authors, et al.,

Below, please find my detailed comments, questions on the following drafts:

draft-gandhi-spring-stamp-srpm

* Can you define a Link and how it is different from an SR Path?
* It is not clear how the destination UDP port numbers are selected. Does the draft change procedure defined in Section 4.1 RFC 8762?
* It is not clear what "the congruent path" means. The definition of the congruent in geometry tells that a congruent object has the same shape and size, but is allowed to flip, slide or turn. How a path can be congruent to another path?
* An example of the provisional model is Section 3.1 seems well-suited for a YANG data model. What changes to the STAMP YANG data model defined in [draft-ietf-ippm-stamp-yang](https://datatracker.ietf.org/doc/draft-ietf-ippm-stamp-yang/) proposed in these drafts?
* In Section 4.1 noted that

   The probe messages defined in [RFC8762] are used for delay
   measurement for Links and end-to-end SR Paths including SR Policies.
   For loss measurement, the probe messages defined in [I-D.gandhi-ippm-
   stamp-srpm] are used.

It necessary to point that RFC 8762 support packet delay and packet loss measurements in the same test session using test packets defined in the STAMP base specification. I believe that the need yet for another method to perform the loss measurement is not sufficiently demonstrated and does appear as duplication of functionality already available in STAMP.

* Could you expand on the reasoning why in Section 4.1.1.1 stated that

   A separate user-configured
   destination UDP port is used for the delay measurement in
   authentication mode due to the different probe message format.

I cannot find similar requirement in RFC 8762 and would appreciate a technical explanation of the choice made in this specification.

* Section 4.2.1 refers to Sender Control Code (though it is defined in draft-gandhi-ippm-stamp-srpm. Could you explain why it is important to inform the Session-Reflector that the reflected test packet be sent out-of-band? What if only in-band return path is available? Would the Session-Reflector discard test packets in such situation?
* I got confused by the following in Section 4.2.2

   In two-way measurement mode, when using a bidirectional path, the
   probe response message as defined in Figure 6 is sent back to the
   sender node on the congruent path of the data traffic on the same
   reverse direction Link or associated reverse SR Policy
   [I-D.ietf-pce-sr-bidir-path].

If a Path Segment SID associated with the test session, there seems no need to require the Session-Reflector look for in-band path. Would you agree?

* How's the method described in Section 4.2.3 is different from the method described in [RFC 8403](https://tools.ietf.org/html/rfc8403)? What is distinctly unique about the loopback mode proposed in the section?  Is the "liveness monitoring" functionally identical to path continuity monitoring provided by BFD?
* It appears that second and third paragraphs on Section 4.3.1 contradict with the first paragraph. Need to point that RFC 8762 does not specify the value set in TTL/Hop Limit field, thus reference in the first paragraph seems misleading. I couldn't find ::FFFF:127/104 range being mentioned in the draft. Could you clarify when it is used?
* Section 4.3.3 states that a zero-value UDP checksum may be used in some scenarios. RFC 8085 allows that but in very specific cases that are documented in detail in Section 3.4.1. Do you believe that the case of this protocol checks all the requirements for allowing the use of Zero UDP checksum as specified in RFC 8085? Also, I believe that allowing the use of Zero UDP checksum in some scenarios, this protocol introduces a security threat that must be thoroughly analyzed in the Security Considerations section.
* Section 7, as I understand it, suggests that performance measurement can be combined with "liveness monitoring", i.e.path continuity monitoring. How fast path failure detection you expect in such combination? How it is comparable to the the failure detection time guaranteed using BFD?

draft-gandhi-ippm-stamp-srpm

* Introduction states that

  The STAMP message with a TLV for "direct measurement" can be used for
   combined Delay + Loss measurement [I-D.ietf-ippm-stamp-option-tlv].

In fact, that is not accurate. RFC 8762 which provides the base specification of the STAMP protocol already supports packet delay and packet loss (a.k.a. synthetic packet loss) measurement.

* Further, the draft concludes that

   However, in order to use only for loss measurement purpose, it
   requires the node to support the delay measurement messages and
   support timestamp for these messages (which may also require clock
   synchronization).

I disagree that the the clock synchronization is required for STAMP. It is recommended for one-way delay measurement but even without the clock synchronization STAMP supports the round-trip delay measurement and one-way delay variation can be calculated.

* The conclusion on Introduction is, in my view, misleading as the proposed solution is not an extension of STAMP but update of RFC 8762. And since this is changes the foundation of RFC 8762 that specifies active two-way performance measurement protocol, another method for collecting counters and/or other telemetry information should be sought. For example, ICMP using multi-part message extensions, as defined in [RFC 4884](https://tools.ietf.org/html/rfc4884).