

Timestamp & sequence number simultaneous use considerations

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Background

- RoE overloads a single field in the header for a timestamp and a sequence number. The Tflag bit is used to distinguish which one is currently in use.
- Typically RoE endpoints would use only one type and stick with it for the lifetime of the RoE flow.
- However, there are use cases where occasional use of timestamps in a sequence number dominated RoE flow can be useful.
- There is currently no guidelines how to use timestamps and sequence numbers simultaneously.

Proposal

- Describe a generic guideline how to use both timestamps and sequence numbers simultaneously.
- The assumption is that in the mixed use case the RoE flow primarily uses sequence numbers except in well defined points uses a timestamp.
- The "point" when timestamp is used within sequence number stream has to be such that the RoE endpoint has no issue reasoning which sequence number the timestamp equals to.
- Solution proposal: For CPRI mappers the start of radio frame, since in those cases sequence number could have an easy to recognize pattern e.g., HFN and BF count (or its equivalent) being all zero.

Discussion

Steps forward:

- Agree on principle.
- Revisit the current mapper proposals to match the proposed solution.