



Sequence Number considerations

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Background

- ❑ The current RoE header sequence number is defined as a single 31 bit monotonically increasing number.
- ❑ This is good for a number of use cases but for all - in same use cases there might be a need to embed multiple counters
- ❑ Example: LTE radio frame counted as samples, HFN and BFN:
 - 256 BFs
 - 150 HFs
 - 100 radio frames
 - This DOES NOT align nicely – there is discontinuity from HFN to BFN!

Proposal

- ❑ Define up to four “counter fields” that constitute the 31 bit sequence number.

- ❑ Each counter define:
 - Range: minimum (practically always 0) and maximum
 - Increment: when applied how much is added
 - Initial value: the counter itself and its reset value
 - Increment semantics: disabled, every packet, when previous counter overflowed and never (static field in practice)

Discussion

- Proposed next steps:
 - Approve the principle.
 - Required modifications to D0.1 shown in the associated Word document (tf3_1510_korhonen_seqnum-word_1.docx).