

RMCAT XR Block for Congestion Control Feedback - A Proposal

(For potential use in draft-dt-rmcat-feedback-message)

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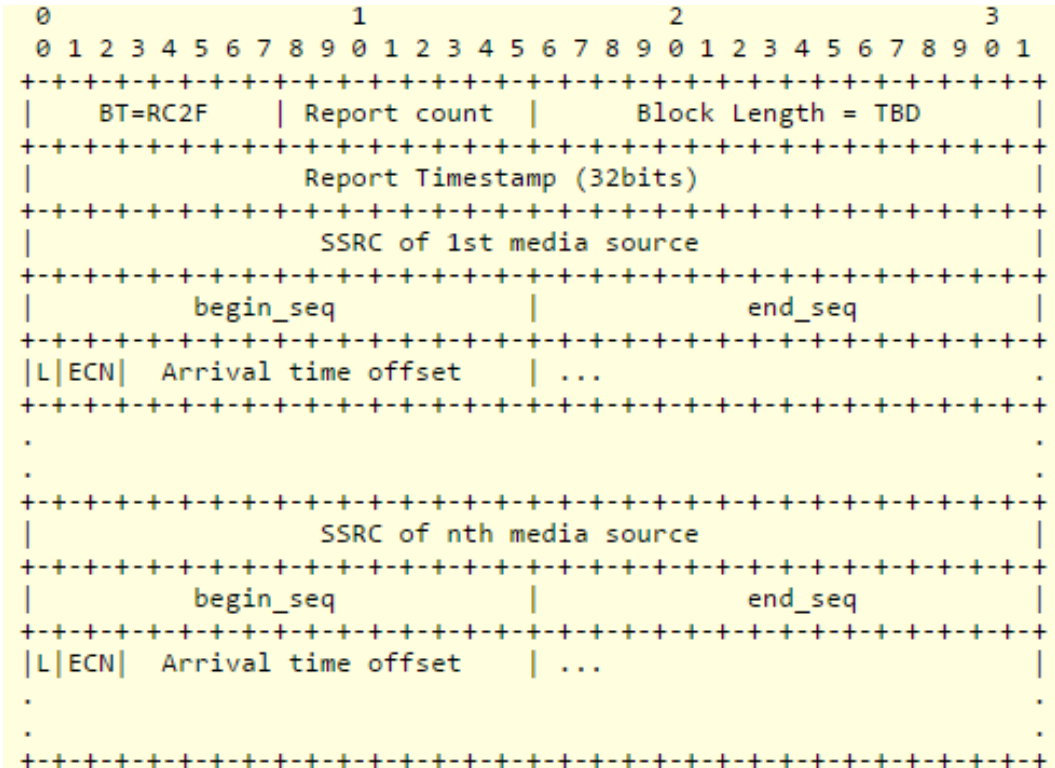
RMCAT XR Block for Congestion Control Feedback

Outline

- Format in draft-dt-rmcat-feedback-message-01 format
- Rationale for a different format
- A proposal for the new format

RMCAT XR Block for Congestion Control Feedback

draft-dt-rmcat-feedback-message-01 format



RTS = Report Timestamp
(wall clock, TS unit granularity)

L = Packet Received
(1 = received)

ECN = ECN Bits

ATO = Arrival Time Offset
(in timestamp units, 13 bits)

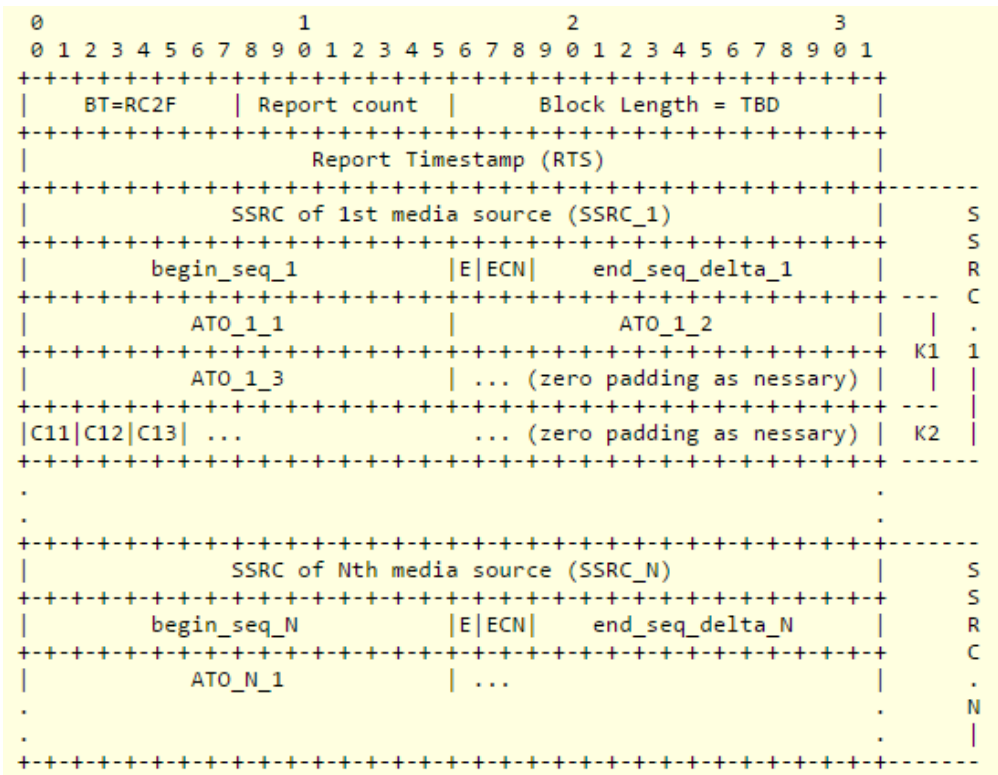
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Rationale for a Different Format
(from Design Team meeting on September 28)

- A different design more amenable to “easier/trivial” compression.
 - Goal: Not mandating such compression for cases not needing it.
 - Defer decision on whether/if compression is ever needed.
- A desire to “separate out” the ECN component to a separate field.
 - Saving bits when ECN bits are identical.
 - ECN bits trivially compressible when different (via form of RLE).
 - Possibility for signaling to not request ECN bits.
- Potential for Arrival Time Offset range expansion (from 13 to 16 bits).

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A Proposal



- `end_seq` is a modulo 2^{16} offset from `beg_seq` (up to 8192 forward)
- `E`: Set to 1 when all received ECN bits are identical, 0 otherwise.
- `ECN`: The ECN bits when `E` bit is 1, “representative ECN” otherwise.
- `ATO`: Offset w/ following exceptions.
`0xFFFF` = Packet not received.
`0xFFFE` = Timestamp > `0xFFFD`.
 (note: allows for trivial compression)
- `C` Blocks: ECN bits for all packets when `E = 0` (w/ option to not report)

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Questions?