

Yang data model

# Dominique's review

- Committed on repository dominique review
  - Mainly language correction

# Dominique's mail

- *the fragmentation-content grouping describes all the parameters needed by any of the fragmentation modes. It could be more specific as to which are mandatory for each mode, and which are not required (irrelevant) for each mode (e.g. Retransmission Timer or MAX\_ACK\_REQUESTS in No-ACK mode). This might help catching errors early.*
- That's a good point, we can add When statement for this one.



```
leaf retransmission-timer {
  type uint64 {
    range "1..max";
  }
  when "derived-from(..fragmentation-mode, 'fragmentation-mode-ack-on-error') or
  derived-from(..fragmentation-mode, 'fragmentation-mode-ack-always')";
  description
  "Duration in seconds of the retransmission timer. Not valid for no-ack mode";
}

leaf inactivity-timer {
  type uint64;
  description
  "Duration is seconds of the inactivity timer,
  0 indicates the timer is disabled.";
}

leaf max-ack-requests {
  type uint8 {
    range "1..max";
  }
  when "derived-from(..fragmentation-mode, 'fragmentation-mode-ack-on-error') or
  derived-from(..fragmentation-mode, 'fragmentation-mode-ack-always')";
  description
  "The maximum number of retries for a specific SCHC ACK. Not valid for no-ack mode";
}
```



# Interleaved SCHC fragments

- *the support for interleaved fragmented packet transmission is not described in the yang model. Do we need it? The DTag size (T) is an indication that interleaving might be supported or not, but a profile might want to specify e.g. that interleaving 3 packets is mandatory, while  $T=2$  says that up to 4 packets could be interleaved.*
- Good discussion for the group, we try to implement just what is defined in RFC8{7|8}24, do you introduce more specific and useful information in the model?

# DTAG lifetime

- *similarly, the "lifetime of DTag at the receiver" is not in the Yang model. Shall it be? Or is it part of a priori knowledge from the profile?*
- I don't catch this point, isn't it linked to inactivity timer?

# Penultimate tile

- *Appendix D says that a profile, if Ack-on-Error is used, must define "if the penultimate tile of a SCHC Packet is of the regular size only or if it can also be one L2 Word shorter". I haven't found such information in the Yang model. Shall it be? Or is it part of a priori knowledge from the profile? I would assume that this would depend on the tile size, therefore vary by rule, therefore should be in the Yang model*
- For me there was not option, it is always done.

# Ack period

- - *I'm unclear that ack-behavior in the Yang model captures the intention of RFC8724. The description of ack-behavior-after-All0 says that an ACK is expected after an All-0, and the description of ack-behavior-after-All1 says that an ACK is expected after an All-1, but the two are not exclusive, while ack-behavior cannot be equal to both. Likewise ack-behavior-always is described like an ACK is expected after every fragment, I think it wanted to say after every window. These pertain to different fragmentation modes (Ack-on-Error and Ack-Always).*
- May be the term always is not well chosen and need more explanation, It is more the ack are sent when the L2 allowed it.



# Window size

- *WINDOW\_SIZE [RFC8724] is incorrectly described as maximum-window-size (Yang model). The window\_size is the max tile index + 1, while the max window size is  $2^M-1$*
- The goal was to limit the maximum value for FCN and not always having  $2^M-2$

