

# TCP Alternative Backoff with ECN (ABE)

**draft-ietf-tcpm-alternativebackoff-ecn-06**

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# Thank you for comments!

- We had a detailed review from Michael Scharf before WGLC and updated the draft
- During WGLC, from Richard Scheffenegger:
  - Some of the I-D references are already RFCs (also M. Tüxen)
  - "I'm wondering if some generic rules-of-thumb, as to what a reasonable  $\beta_{loss}$  vs.  $\beta_{ecn}$  adjustment would be in this RFC might be in order (although I agree, that CCs should come up with reasonable guidance there)."
    - Our answer: it really depends on the CC
    - Note: our draft already says "The results of these tests indicate that CUBIC connections benefit from  $\beta_{ecn}$  of 0.85 (cf.  $\beta_{loss} = 0.7$ )"

# Comments from Markku Kojo

1. Wrong statement in section 4.1 ("Why Use ECN to Vary the Degree of Backoff?") related to timeout
  - We'll remove this paragraph
2. Specify what happens when  $cwnd == ssthresh$ 
  - Suggest to be conservative + conform with previous versions: Congestion Avoidance only, which is only clearly the case when  $cwnd > ssthresh$
  - Explain that there is a "grey area" that, in RFC 5681 style, *"may benefit from additional attention, experimentation and specification."*
  - Suggest to include  $cwnd \leq ssthresh$  in this

# Comment from Markku Kojo /2

- Concern about lower bound of  $2 * SMSS$ 
  - We will clarify that our modified backoff factor applies to adjusting ssthresh and cwnd upon receipt of ECN mark
  - As before, cwnd may be reduced below ssthresh
- ABE is only about changing the backoff factor