QUIC
Loss Detection &
Congestion Control
(*draft-ietf-quic-recovery*)

TSVWG, Montreal, July 2018

Premise

QUIC machinery different from TCP

- send-order separable from delivery-order
- monotonically increasing *packet numbers*
- receiver explicitly states ack delay
- largest_acked, not SND.UNA
- ECN signaling

Loss detection and congestion control use these signals

QUIC

Same, but different

Loss Detection

- fast retransmit, early retransmit, timeout
- ER timer, tail loss probe
- spurious timeout detection quite different

Congestion Control

- NewReno, but using largest_acked for recovery period

QUIC

draft-ietf-quic-recovery

We are doing editorial work

adding rationale, clarifying mechanisms

We will be presenting it in more detail soon

TSVWG/TCPM/TSVAREA?
probably Bangkok

QUIC