Proposal for extensions to RTCP XR: draft-ietf-avt-rtcp-xr-bis-00.txt

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IETF 62 Follow up and Status

- Idea presented at IETF-62: new parameters

- Following the meeting, offline discussion uncovered further need for higher resolution parameters as well – carrier class networks primary need

- Video metrics proposed, working group feedback was define separate draft

  - Editor miscommunication – need to do this post IETF 63

  - Also lack of input and time ☹

  - For now, the basic definitions are included in this draft

- Also, Fax, Modem, and Voiceband metrics are needed

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New Blocks – HR Voice Metrics Report

- Basically, a more complete and higher resolution version of the RTCP XR VoIP Metric Block
- Jitter metrics (new)
  - More flexible than RTCP RR, more pragmatic than XR
  - Percentile option better than average or max for reporting time varying jitter
  - Supports different methods: PPDV, MAPDV, and Y.1540
- Payload type information
  - Description, frame size, sample rate, frames per packet
- More and better call quality metrics
  - MOS and R metrics extended to 8:8 – high res
  - Listening R and Conversational R (new)
  - External R split into R-LQ External In and R-LQ External Out
    - Again useful for bridge, gateway, or other relay
- Burst and Gap durations: extended to 32 bits for longer calls
- New external delay parameter – similar to external R concept

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Comments on HD

- ## Received offline:
  - Signal and noise levels need extension to handle wideband codec's

- ## Others?

New Block – Voice Quality Metric Algorithm Block

- Aligns with SIP draft

- Permits explicit description of quality estimation algorithm(s)

- Separated out from Voice Metrics Block:

  – Sent less often than ongoing measurement block as algorithm(s) not likely to change

  – Keeps Voice Metrics Block size reasonable

New Block - Video Metrics Block

- Block not defined yet, but metrics that are targeted are:
  - Burst duration for diff frames
  - Burst duration for full frames
  - Video Quality Metric
  - Video Quality Algorithm

- Probably need additional metrics including:
  - Frame freeze counts
  - Codec output parameters?
  - Audio to video alignment

- Other thoughts by video experts are very welcome!

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Next Steps

- Define video block: here or separate?
- Comments?