# Proposal for extensions to RTCP XR: draft-ietf-avt-rtcp-xxr-00.txt

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IETF 62, Minneapolis, March 2005

## Objective

- Additional parameters needed for VoIP Metrics Block
  - Implementation usage
  - Alignment with other related standards
- Other RTP-based applications could benefit from extending RTCP
  - Video: point-to-point, streaming
  - Other ideas?
- Link Layer and Physical Layer metrics
  - Useful for problem isolation

## VoIP Extensions

- Alignment with related standards: SIP Service Quality Reporting, MIB, etc
- Probe implementation could use more information to identify the media session and call
- New algorithms for estimating voice quality have been defined since RTCP XR, additional information is required
- Clean up: jitter block should be included in VoIP Metrics Block

## ...VoIP Extensions

- Draft covers:
  - Listening R
  - MOS estimation algorithm
  - Min, max, avg jitter
  - Session identifier
  - Codec information
- Other suggestions?

## Video Metrics Block

- Idea has been proposed previously, would like to incorporate the work into this draft and move it forward.
- Objective video quality estimation is an area of research currently, but some ideas can be borrowed from VoIP Metrics Block
  - Bursty loss has heavy impact
  - MOS, flexible algorithm usage
  - Packet Loss Concealment usage indication
- New metrics must be defined
  - Frame freeze counts
  - Codec output parameters
  - Audio to video alignment

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### Physical and Link Layer Block

- Must include metrics that are common to most protocols e.g. frame error rates, retransmission counter, etc
- Could include configuration information such as link speed and duplex settings
- Also could include specializations
  - Wireless LAN: signal strength, co-channel interference indicator

#### Next Steps

• Comments?