RTCP XR Video Metrics draft-ietf-avt-rtcpxr-video-01.txt draft-ietf-avt-rtcpxr-audio-00.txt

Alan Clark

-00 draft divided into 4

- Per AVT Chair's direction from Prague meeting
 - -00 draft had sub-blocks
 - Now divided into four XR blocks in separate drafts
 - Draft-ietf-avt-rtxpxr-video-01.txt
 - Draft-ietf-avt-rtxpxr-audio-00.txt
 - Draft-ietf-avt-rtxpxr-transport-00.txt
 - Draft-ietf-avt-rtxpxr-mpts-00.txt
- Aimed for strong consistency with ATIS IIF (WT014) and DSL Forum (WT135) work on IPTV performance metrics

-00 draft divided into 4

- Draft-ietf-avt-rtxpxr-video-01.txt
 - Video related metrics
- Draft-ietf-avt-rtxpxr-audio-00.txt
 - Audio related metrics
- Draft-ietf-avt-rtxpxr-transport-00.txt
 - RTP metrics
- Draft-ietf-avt-rtxpxr-mpts-00.txt
 - MPEG Transport metrics

New –01 Video draft

- Aimed for consistency with ATIS IIF WT014 and DSL Forum WT135 (principal IPTV metrics definitions (both in final closure))
 - Identify stream by both SSRC and PID
 - Measurement Interval
 - I/ BP Frame metrics
 - Mean/ Max GoP length
 - MOS-V
 - EPSNR
 - Added thresholds and time below threshold for MOS-V and EPSNR

EPSNR and MOS-V

- EPSNR
 - Packet based estimation approach being evaluated by ATIS IIF group
 - Can be directly produced by video decoder
- MOS-V
 - Defined in ATIS IIF WT014
 - Zero reference algorithms being evaluated by VQEG during mid-2007 to early-2008

New –00 Audio draft

- Identify stream by both SSRC and PID
- Report Timestamp & Measurement Interval
- Added Left/Right audio quality
- Other metrics consistent with previous draft

Audio quality estimation

• PEAQ – ITU-T BS.1387

– Full reference audio quality estimation

- ITU-T G.1070
 - Multimedia quality estimation for IP videoconferencing applications
- VQEG
 - Audio as part of multimedia testing of objective algorithms (FR/RR/NR)

Other -- 00 drafts

- Transport metrics (co-author Al Morton)
 - RTP related metrics from previous Video metrics draft .. Loss rate, burst/gap metrics, loss period, PDV
- MPEG Transport metrics
 - MPEG transport related metrics from previous
 Video metrics draft
- Both in reasonable alignment with ATIS IIF and DSL Forum work on IPTV metrics