# draft-wenger-avt-rtp-ccm-04.txt

Stephan Wenger, Umesh Chandra

Nokia

Magnus Westerlund, Bo Burman

Ericsson

# Topologies section removed

- Moved "topologies" discussion into new draft-wenger-avt-topologies-00.txt -- missed submission deadline for IETF66
- Results in a number of references to the topologies draft, which makes it less well accessible.  Not sure, after all, whether this was a good idea
  - Most of the references local to TMMBR message

# ITU-T Rec. H.271

- H.271 == H.VBCM (Video Back Channel Messages)
  - Created by ITU-T VCEG group (Q.6/16)
  - Handles back channel messages for all H.26x video codecs (works also with non-ITU-T codecs)
  - Planned to be aligned with forthcoming modifications and additions to H.26x
  - Under ITU-T control, following ITU-T processes and ITU-T timing -- FAST
- Overlap with a number of AVPF and CCM messages
  - Stuff like PLI, SLI, FIR, …
- Overlap with H.245, H.263, …
  - Stuff like PLI, SLI, FIR, back channel syntax for H.263 RPS

# CCM codepoint for H.271: Reasons

- Video expertise and standard's ownership in ITU-T
  - they are most qualified to hammer out details of VBCMs, including alignment with forthcoming video tools/standards
- Optimized bit string for VBCMs -- saves bits
- Bit string protocol-independent (gateways between network/protocol worlds)
- CCM == Clean and documented H.271 "transport"
  - Similar situation as with media payload
  - AVPF's RPSI could be used for transport of H.271, but
  - New codepoint and associated signaling allows negotiation of each H.271 sub-message independently, and
  - It's cleaner

# CCM codepoint for H.271: Risks

Codepoint not under IETF control may cause problems

1. Duplication of methods
   - Additional functionality required in some boxes
   - Aesthetics of standards
2. ITU-T messages may not be multicast-save

We respond by appropriate use restrictions

1. Don't use H.271 when a) in native IETF environment, and b) appropriate AVPF/CCM messages are available
2. Current draft errs on the side of caution: Point-to-Point and centralized multipoint only

# CCM Codepoint for H.271: Alternatives

- AVPF's RPSI codepoint could be used
  - Documented by IETF/AVT?  Same as CCM codepoint.
  - Documented by ITU-T?
  - Not documented at all -- worst solution, but that's what we are heading towards if no action is taken
- Model each H.271 codepoint in non-bitstream format in follow-ups of AVPF and CCM
  - H.271 took less than one year from requirements to approved Recommendation…

# Questions to WG

- Removal of Topologies Section -- good idea or bad?

- Introduction of H.271 codepoint: ok with WG?

- H.271 codepoint vs. multicast safety.  Are we
    - Restrictive enough?
    - Overly restrictive?

Thanks.