

**WBU-ISOG
MPEG-4 (H.264) CONTRIBUTION
1080i/720p CODEC
INTEROPERABILITY PROGRAM**

WBU-ISOG
Atlanta, GA
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Chair
1080i/720p CODEC
INTEROPERABILITY PROGRAM

TEST PARAMETERS

- a. Tests will be conducted only for high definition formats.
- b. Tests will be conducted using bit rates for high quality contribution (e.g., major events, potential concatenation), medium quality contribution and SNG. Tests for medium quality will be curtailed if necessary due to time constraints. The chroma for each bit rate are as indicted.
- c. Four video formats will be tested, although 720p/50 tests are subject to availability of equipment.
- d. Latency will be tested because if latency is too extreme for a particular vendor decoder, the decoder may not be interoperable because it cannot effectively be used. Codec settings for latency at each bit rate are as indicated.

TEST PARAMETERS (cont.)

- Video Formats:
 - 1080i/59.94
 - 1080i/50
 - 720p/59.9
 - 720p/50
- Bit Rates:
 - High Quality: 38 Mbps
 - Medium Quality: 20 Mbps – perhaps tests would be limited
 - SNG: 10.3 Mbps
- Chroma:
 - High Quality: 4:2:2 (Hi 422 @L4 (10 bit if supported, otherwise 8 bit))
 - Medium Quality: 4:2:2 (Hi 422@L4 (10 bit if supported, otherwise 8 bit))
 - SNG: 4:2:0 ((HiP@L4 8 bit)
- or if 4:2:2 not supported:
 - High Quality: 4:2:0 (H:P @ L4 8 bit)
 - Medium Quality: 4:2:0 (H:P @ L4 8 bit)
- Coding Structure:
 - IBBP
- GOP:
 - GOP 15 (vendors will be asked whether they support longer GOP)

TEST PARAMETERS (cont.)

- Audio Format:
 - 4 Ch. Audio MPEG-2 (MPEG 1 Layer 2)
 - Dolby E 20 bit mode 8 channels (SMPTE 302 M 2002)
 - PCM (SMPTE 302 M 2002)
 - AAC – if sufficient vendors support
- Lip Sync:
 - Test all audio formats
- Latency:
 - High – Standard latency
 - Medium – Standard latency
 - SNG - Low Latency
- Resolution:
 - All tests will be done at full resolution:
 - 1920 (1800 line) h pixels
 - 1280 (720 line) h pixels

POTENTIAL MPEG-4 PARTICIPATING VENDORS

1. Ateame
2. Cisco (Scientific Atlanta)
3. Envivio
4. Fujitsu
5. Harris/Aastra
6. Harmonic, Inc.
7. HaiVision
8. Hitachi (Chicago)
9. JVC
10. Modulus
11. NTT Electronics Corporation
12. Scopus
13. Sencore
14. Snell & Wilcox
15. Tandberg Television
16. Thomson
17. Telairity
18. Tiernan, A Radyne Company