

VQEG Gaithersburg Meeting May 1998

VQEG 016

Report of the ILSC meeting

May 26, 1998

ILSC meeting report

Issues addressed (1)

- **Logistics for subjective tests**
 - What are the tasks that **MUST** be carried out by ILs?
 - Identification of volunteers for those tasks
 - Schedule
- **Technical aspects**
 - Statistical analysis
 - Viewing distance ?
 - Calibration ??

Issues addressed (2)

- **Selection of sequences**
 - Criteria
 - Further selection of encoded material?
 - Selection
- **A.O.B**
 - Non-disclosure agreement will be signed by ILs

Logistics

What are the tasks that **MUST** be done by ILs?

- Encoding
- Creation of test tape for objective test
- Error simulation
- Subjective test
- Statistical analysis
- Objective test
- Analysis of Correlation between subjective & objective evaluations

Logistics

What are the tasks that can be done by proponents?

- Collecting, copying and sending source sequences to calibration site
- Calibration
- Copying and sending the pre-processed material to the coding sites
- Collecting the processed sequences
- Editing, copying and sending to subjective test sites

Logistics

Identification of volunteers (1)

Lab	Encoding	Test tape objective test	Error simulation	Subjective test	Statistical analysis	Objective test	Correlation
Tetacom,	?			☺			
ATT			☺			☺ (SGI)	
ATTC,				☺			
FUB,		☺ (2 Gbyte exabyte)		☺		☺ (SUN)	
Berkom,	?			☺			
DoCata,	?			☺			
CRC,				☺	☺	☺ (SUN)	
CSELT,				☺	☺ (back up)		
RAL,	☺ MPEG-2 MP-ML PAL conversion			☺			
CCETT				☺	☺		
NIST					☺	☺ (SGI)	☺ ?
IRT	☺ MPEG-2 MP-ML PAL conversion					☺ (PC)	

Open issues

- Encoding at 525 (GI, SMPTE, Scientific Atlanta, Comsat?)
- H.263 encoding (Picturetel?)
- Third 625-lines encoder (Berkom, Teracom, DoCatA?)
- Conversion into NTSC
- Betacam, Betacam SP, VHS
- MPEG-2 4:2:2 at 525 (if Massimo's proposal is accepted)
- Analysis of correlation between subjective and objective data

Logistics

Identification of volunteers (2)

Lab	Collecting source sequences, copying and sending to calibration site	Calibration	Copying and sending pre-processed material to the coding sites	Collecting the processed sequences	Editing, copying and sending to subjective test sites
Tektronix, Editing site TBD	☺ ?	☺			

Schedule

What	When	Who	Comments
Sending source material to editing sites	29 July		
Preparation of test design (randomisations, stabilisation training)	7 August		
Copying the source material and sending to pre-processing sites	7 August		
Calibration & sending to coding sites	21 August		
Coding & sending to editing site(s)	11 September		
Copying Editing coded material and send to objective test sites	25 September		(on exabyte, Abekas, CD-ROM?)
Copying Editing coded material and sending to subjective test sites	2 October		
Subjective Test	30 October		
Objective Test	30 October		
Statistical analysis of subjective test	20 November		
Correlation between objective and subjective	11 December		
Discussion of results	18 December		
Writing the report	22 January		

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Technical aspects (Statistical analysis)

- Beta-test
- Mean
- STD
- CI
- Screening of subjects
- NSSD (t-test)
- correlation among test sites
- anova to check the significance of test site

Other technical aspects

- Viewing distance: 4 H is needed
- Calibration: is it really needed?

Selection of sequences

- **Criteria**
 - colour
 - luminance
 - still pictures
 - film
 - motion energy & spatial details
 - source format
 - general (masking/facilitating, cultural/gender neutral, range of quality)
- **Further selection based on encoded material ?**

Selection of sequences

- **10 sequences at 50 Hz**
- **10 sequences at 60 Hz**

Comments

- **film**
 - different behaviour at 50 and 60 Hz
 - they are not critical, one or two are enough
- **still pictures**
 - no still pictures are available for 60 Hz

Did I forget anything important ?

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