Report of the ILSC meeting

May 26, 1998
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

ILSC meeting report
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

ILSC meeting report
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)

<table>
<thead>
<tr>
<th>Lab</th>
<th>Encoding</th>
<th>Test tape objective test</th>
<th>Error simulation</th>
<th>Subjective test</th>
<th>Statistical analysis</th>
<th>Objective test</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teracom</td>
<td>?</td>
<td></td>
<td></td>
<td>☺</td>
<td></td>
<td></td>
<td>☺ (SGI)</td>
</tr>
<tr>
<td>ATT</td>
<td></td>
<td></td>
<td>☺</td>
<td>☺</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATTC</td>
<td></td>
<td></td>
<td></td>
<td>☺</td>
<td></td>
<td>☺ (SGI)</td>
<td></td>
</tr>
<tr>
<td>FUB</td>
<td></td>
<td>☺ (2 Gbyte exabyte)</td>
<td></td>
<td>☺</td>
<td></td>
<td>☺ (SUN)</td>
<td></td>
</tr>
<tr>
<td>Berkom</td>
<td>?</td>
<td></td>
<td>☺</td>
<td>☺</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DoCatA</td>
<td>?</td>
<td></td>
<td>☺</td>
<td>☺</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRC</td>
<td></td>
<td></td>
<td></td>
<td>☺</td>
<td>☺</td>
<td>☺ (SUN)</td>
<td></td>
</tr>
<tr>
<td>CSELT</td>
<td></td>
<td></td>
<td>☺</td>
<td>☺ (back up)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAI</td>
<td>☺</td>
<td>MPEG-2 MP-ML PAL conversion</td>
<td></td>
<td>☺</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCETT</td>
<td></td>
<td></td>
<td></td>
<td>☺</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIST</td>
<td></td>
<td></td>
<td></td>
<td>☺</td>
<td>☺ (SGI)</td>
<td>☺ (SGI)</td>
<td>☺ ?</td>
</tr>
<tr>
<td>IRT</td>
<td>☺</td>
<td>MPEG-2 MP-ML PAL conversion</td>
<td></td>
<td>☺</td>
<td></td>
<td>☺ (PC)</td>
<td></td>
</tr>
</tbody>
</table>

ILSC meeting report
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)

<table>
<thead>
<tr>
<th>Lab</th>
<th>Collecting source sequences, copying and sending to calibration site</th>
<th>Calibration</th>
<th>Copying and sending pre-processed material to the coding sites</th>
<th>Collecting the processed sequences</th>
<th>Editing, copying and sending to subjective test sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tektronix, Editing site</td>
<td>TBD</td>
<td>😊 ?</td>
<td>😊</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ILSC meeting report
# Schedule

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

ILSC meeting report
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

ILSC meeting report
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?