| <b>Question(s):</b> | Q 2/9, 14/9                                        | Meeting, date:    | VQEG JRG-MMQA,                                                |
|---------------------|----------------------------------------------------|-------------------|---------------------------------------------------------------|
|                     |                                                    |                   | Paris 7-11 May 2007                                           |
| <b>Study Group:</b> | 9 Working Party:                                   | 5 <b>Intended</b> | type of document (R-C-TD): TD                                 |
| Source:             | Psytechnics Ltd                                    |                   |                                                               |
| Title:              | Software for video playback in MM subjective tests |                   |                                                               |
| Contact:            | Quan Huynh-Thu                                     |                   | Γel: +44 1473 261839                                          |
|                     | Psytechnics Ltd<br>UK                              |                   | Fax: +44 1473 261880<br>Email: quan.huynh-thu@psytechnics.com |

### Introduction

VQEG agreed to use a common software for running subjective experiments in the MM project. This software is being developed by ACREO and a beta version was posted on the FTP server (acryqwinbeta2.zip).

Psytechnics has tried the software and feedback is provided in this document. A trial was run both on a powerful desktop PC conforming to the MM test plan requirements and a less powerful laptop. The identical problems were found with both machines, suggesting that problems are not linked to inadequate hardware.

# List of problems

- 1. Playback of VGA videos caused 2 problems (which did not occur with CIF or QCIF):
  - a. The software crashed during the test
  - b. Various distortions were introduced in the video in some of the videos (color distortions, black screen, distorted content)
- 2. Currently, after a vote has been entered on the voting scale, a mouse click is required to start the playback of the following video. This process should be automated, i.e. after the vote has been completed for the current trial the video for the next trial should automatically start after (e.g.) 1 sec.

# **Additional required features**

In order to comply with the current MM test plan, the current feature(s) should be added in the software:

## Randomization

The current software provides a randomized order of playback for each subject in accordance to the MM test plan. However, the MM test plan has an additional requirement: the same scene content may not be presented in two successive trials. This (controlled) randomization process should therefore be added in the software.

### Black borders around the video

VQEG agreed at the last meeting in Tokyo, that videos would be displayed in the center of the screen, in front of a grey background and with videos surrounded by black borders.

### The current text in the MM test plan is:

Video sequences will be displayed using a black border frame (0) on a grey background (128). The black border frame will be of the following size:

- 36 lines/pixels VGA
- 18 lines/pixels CIF
- 9 lines/pixels QCIF

[Ed. Note: The size of the black border may change after some initial trials of the software change. This will not require 2/3 to change size of black border.]

The black border frame will be on all four sides.

This should be implemented in the software (although currently no decision has been reached on the definitive width of the borders)