**Official VQEG Minutes, Tuesday**

**QART Session**

**Agreement:** VQEG established a liaison relationship with VQiPS, with Joel Dumke (NTIA) as the liaison representative.

**Agreement:** Joel Dumke (NTIA) appointed as the second Co-Chair of the QART session.

Mikolaj and Joel presented the current status of QART and two experiments. See slides:

* VQEG\_QART\_2011\_041R2\_Hillsboro\_R2\_v20111209a.pptx
  + Progress to date
* VQEG\_QART\_2011\_039R2\_tests-hillsboro-2011\_R2.pdf
  + This experiment investigated the impact of motivated subjects (related to their job, or paid) versus non-motivated subjects (volunteers) on a task oriented test. This information may be suitable for modifying ITU-T Recommendation P.912. Motivated subjects had a statistically significantly higher recognition rate.
* VQEG\_QART\_2011\_040R1\_guc-hillsboro-2011\_R1.pdf
  + This experiment investigated the classification of videos by lighting level and object size.

**3DTV Session**

The following presentations were made:

* VQEG\_3DTV\_2011\_031\_Technicolor\_studies\_subjective\_testing\_methodologies\_3DTV.pdf
  + 3D subjective testing techniques / variables to be investigated
  + Industry needs to find the best 3D compression settings. The ability to separate the impact of picture quality, viewing comfort and depth quality in a 3D subjective test is important.
  + Guidance on instructions may be particularly important.
  + The process of “how to design the best subjective test” is not by performing multiple subjective tests; but rather using focus groups. The test should be meaningful and easy to answer.
* VQEG\_3DTV\_2011\_037\_Performance Evaluation of 3D Assessment Methods(NTT).doc
  + Compare 3D subjective testing using ACR, DCR and DSCQS, when asking for overall quality. Propose using ACR with 28+ subjects, as best compromise between time taken per subject and confidence intervals (e.g., comparative to 24 subjects in a 2D ACR test).
  + Lesson learned—subsequent 3D studies need to use more people, due to the extra variability between subjects.
  + There was more variability among 3D viewers than 2D viewers.
* VQEG\_3DTV\_2011\_038\_Test Plan for Investigation of 3D Assessment Methods(NTT).doc
  + Proposed plan for collaboration on 3D subjective test method studies. Goal is to quickly figure out how to do 3D subjective tests quickly, with a group of labs.
  + All labs do some portion identically; each lab also explores one or more unique topics.
* << VQEG\_3DTV\_2011\_054\_IRCCyN\_presentation\_of\_3D\_source\_content\_and\_unique\_database.ppt >>
  + Collaborate to create a variety of 3D source and 3D PVSs. Choose a subset. Cooperate to perform related subjective tests.
* VQEG\_3DTV\_2011\_043\_JRG-MMQA display crosstalk.doc
  + What is the maximum allowable crosstalk? Proposed experiment to add crosstalk to a still video and whether or not a subject can see a 3D effect.
  + Interest in collaboration with Yonsei on this from IRCCyN, AGH, NTIA

**Notes on 3D Methodology Collaboration:**

An interesting discussion ensued. Some key points raised follow:

* Labs can use 3D Bluray discs for some of these 3D subjective tests. This will let more people become involved. Other 3D playback options are also acceptable.
* Marcus/IRCCyN will create HRCs. Other people will look into 3D HRC creation options (e.g., Emmanuel, Mikolaj, Pierre, Filippo).
* Time shifting is impairment of interest (e.g., international distribution causes 1-2 frame shift when converting between formats). That is, left and right views become unsynchronized by 1 or 2 frames).
* Problems using paper forms reported.
* Scene selection and PVS creation will occur in the next few months. The next steps will be coordinates during audio calls.

**Other Issues:**

* IRCCyN (Marcus) has a crosstalk study underway and are interested in having other labs repeat their study.

**Requirements:** Light sensor fast enough to capture changes in shutter glasses display, around 1 ms; and a osciliscope or other device fast enough; and a shutter glass 3D display

* The IEEE P.3333 liaison was discussed. See VQEG’s reply liaison (forthcoming).
* The agenda for Wednesday, Thursday and/or Friday may change. If another group ends early, the remaining time will be given to 3DTV.