VQEG

Atlanta Meeting

15th-19th November 2010

Minutes for November 17, 2010

3DTV (Breakout session)

Marcus (University of Nantes) illustrates the goal of the 3DTV group. The current project is about the influence of “crosstalk”. Marcus (University of Nantes) explains how the amount of crosstalk will be manipulated for the experiments. The goal is to find an acceptable (for quality purposes) value of crosstalk and have it considered by ITU.

The project will probably use the methods ITU Rec. 500, but many issues need to addressed

The organization participating are: xxxxxx, xxxx, xxxx, xxxx ... Others are invited to join.

Margaret (NTIA) notes that there are several groups working on 3D and suggest letting these organizations to know about VQEG effort. The following list of 3D-TV organizations was identified by Gözde Bozdaği Akar of METU, Dept of Electrical and Electronics Eng. inTurkey (g.bozdagi@ieee.org, bozdagi@metu.edu.tr, www.eee.metu.edu.tr/~multimed/ )

\* 3DPhone <http://the3dphone.eu>; \*Real3D [www.digitalholography.eu;\*Mobile3DTV](http://www.digitalholography.eu;*Mobile3DTV) http://sp.cs.tut.fi/mobile3dtv/ or www.mobile3dtv.eu;\*Helium3d [www.helium3d.eu](http://www.helium3d.eu); \*3D4YOU www.3d4you.eu ; \* 3DPresence www.3dpresence.eu;\*2020 3D Media www.20203dmedia.eu; \* i3Dpost www.i3dpost.eu; \* SkyMedia [www.ict-skymedia.eu](http://www.ict-skymedia.eu); \* FINE [www.projectfine.eu](http://www.projectfine.eu); \* Beaming <http://beaming-eu.org/>; \* 3D Vivant www.3dvivant.eu; \*DIOMEDES www.diomedes-project.eu;\* FASCINATE [www.fascinate-project.com](http://www.fascinate-project.com); \* 3DLife www.3dlife-noe.eu/3dLife;\* MUSCADE www.muscade.eu

There also some Standardization activities on Quality of Experience

 \* ETSI HF STF 354 (Specialist Task Force 354 within the Human Factors Group of ETSI) Goal is to provide objective and subjective measures of user experience for given communication situations, service prescriptions and levels of QoS.

 \* ITU-T SG12, Goal is to be able to a) measure quality parameters in next generation networks and b) measure their impact on QoE. The challenge of providing good QoE for new multimedia systems is study item of question Q13/12 "QoE, QoSand performance requirements and assessment methods for multimedia including IPTV". Main study items are the relation of end-user requirements to system parameters and to identify simple and efficient analysis techniques to measure and monitor QoE. All results will be included into the development of new recommendations.

Martin (Telchemy) notes that Telchemy would be willing to provide code underlying G.1050 to help this project (and JEG).

Lucjan (AGH) illustrates the Crosstalk test plan, which is available from xxxxxx. There are different sections and one editor per section has been appointment. The first goal is to measure crosstalk using same display system across labs. The second goal is to examine difference across labs using same system. The third goal is to examine difference across labs due using different systems.

A discussion follows regarding the need to have three goals. Filippo (CRC) notes only two (the first and the third) are needed. Marcus (University of Nantes) explains that the experiments across labs will use different PVS (but same HRC) which will be customized for the display system.

Marcus (University of Nantes) asks organizations to list the 3D equipment they have. Lucjan (AGH) illustrates other sections of the test plan and notes that the subjective methodology has not been decided. Marcus (University of Nantes) notes that the existing quality scales might not be appropriate. Vittorio (FUB) raises the issue of viewer screening.

Lucjan (AGH) illustrates the rest of the test plan. A particular problem is the availability of test material. Marcus (University of Nantes) notes that the test material should have certain characteristics, e.g., avoid window (edge) effects.

Emmanuel (Orange-FT) presents some video material which could be used for hybrid, MM2 and 3D project. An NDA will have to be signed. The details of these sequences are contained in the xxxxx file which can be found in the meeting files section.

Marcus (University of Nantes) presents a new proposal to measure crosstalk. The details of this proposal are contained in the xxxxx file, which can be found in the meeting files section. After a description of the method,

A question was raised as to whether the relative value of luminance of the background stated in REC. 500 (about 15%) for 2D viewing should also apply to for 3D viewing. Nearly all organizations think it is not necessary. Some organizations warn about changing too much without evidence.

A discussion ensued about the measurement of the crosstalk: the way is measured (Kjell, Acreo) warn that the measurement might be difficult) its value, and its relevance.

JEG II (Breakout session)

Marcus (University of Nantes) proceeds to the distribution of the VM virtual box software.

Nicolas (IBBT Ghent University) describes how to use the VM virtual box machine up to the point in which a PCAP file can be obtained.

Lucjan (AGH) explains how to introduce packet loss into the just created bit-stream.

Nicolas (IBBT Ghent University) further describes the use of the VM virtual box.

Lucjan (AGH) explains a tool for reading xml files produced by the VM virtual box.

Marcus (University of Nantes) explains why working on an xml file is better for the project. The information required for example by the hybrid models can be all extracted from the xml file.

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***About Tools***

Lucjan (AGH) notes that the use of the VM virtual box might be subject to a licence, possibly a GPL one, sometime in the future.

Savvas (T-Labs) discuss his software which is a functionally similar to VM virtual box. Harvey (Dialogic) express concerns about having multiple tools all doing the same thing and he would prefer VQEG to adopt only one.

Martin (Telchemy) also has a similar tool which has been proposed for the P.NAMS project.

Marcus (University of Nantes) suggest collecting all tools, maybe integrating them in the virtual machine and evaluate which one better serve the interests of the project.

***About SRC***

Marcus (University of Nantes) estimates that about 100-200 SRC will be required to train the models.

Martin (Telchemy) suggests splitting the overall database in smaller sets and having individual organizations to select only from that dataset. Alternatively, we could ask people to select only materials having a certain type of content (fast motion).

The selection of this material will be done by Martin (Telchemy), Alex (ip-label) Lucjan(AGH), Kjell (Acreo) Vladimir (University of Novi Sad)

Marcus (University of Nantes) asks whether we can use the same SRC used in other projects (where permitted by NDA). **All agreed.**

Identification of coding and transmission scenario will be done by Savvas (T-Labs), Nicolas (Ghent University), Glenn (Ghent University) and Marcus (University of Nantes)

HRC generation toolchain GUI will be done by Nicolas, Lujan, Glenn (Ghent University) and Marcus.

Playback with timestamps and generate PVS is required to verify PVS. It will be done by Alex and Marcus.