INTERNATIONAL ORGANISATION FOR STANDARDISATION

ORGANISATION INTERNATIONALE DE NORMALISATION

ISO/IEC JTC1/SC29/WG11

CODING OF MOVING PICTURES AND AUDIO

**ISO/IEC JTC 1/SC 29/WG 11/N15341**

June 2015, Warsaw, Poland

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| **Source:** | **Requirements** |
| **Title:** | **Workshop on Future Video Coding Applications and Technologies** |
| **Status:** | **Approved, Public** |
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| **Date:** | **Wednesday, 21 October 2015 14:00-19:00** |
| **Venue:** | **Room Londres, Crowne Plaza Hotel, Louis Casaï 75-77,** |
|  | **1216 Genève, Switzerland** |

Video is a very lively and fast moving application field and each video coding generation has to deal with new application requirements. ISO/IEC JTC 1/SC 29/WG 11 (MPEG) plans to hold a public half-day workshop on the afternoon of 21 October 2015, during the 113th WG11 meeting in Geneva, CH to acquire solid information about the context in which video coding will be operating in the future, and to review the status of existing technology with merits beyond HEVC.

From this, MPEG plans to draw conclusions for the needs and chances in video coding standardization during the next years. For this purpose, more insight is desirable on the following key topics:

1. Applications: Which video signal resolutions are expected, which data rates will be manageable, which networks/storage/packaged media will become dominant during the next decade for transmission and storage of video for
   1. Video/movie content distribution,
   2. User-generated content,
   3. Surveillance,
   4. Conferencing, screen interaction, gaming,
   5. Other applications, e.g. automotive, medical and industrial.
2. Video equipment: Availability of cameras, displays, projectors etc. (both for professional and consumer sectors) around the year 2020
   1. Cameras/displays/projectors: High dynamic range, wide color gamut, multi-view, size/resolution of typical input signals, cost.
   2. Human factors: What size/resolution is useful considering the properties of human visual system? How likely is it that people will put very large displays (beyond HD) into their houses?
3. Compression technology
   1. What are known limitations or missing functionality of current compression technology, considering existing and new applications?
   2. New compression methods that could overcome such limitations.
4. Methods to evaluate performance: Visual quality, complexity.

The workshop will be featuring the following single track of oral presentations:

*A) Applications:*

**Doug Young Suh (Kyung Hee University):**

Video Value Addition by Cloud Computing

**Jonatan Samuelsson (Ericsson):**

Guided Transcoding in a Cloud DVR

**Stephan Wenger (Vidyo):**

The Case for Scalability Support in Version 1 of Future Video Coding

**Don Wu (HiSilicon):**

Challenges and Requirements for Surveillance Video

*B) Video Equipment:*

**Dr. Stefano Andriani (Arnold & Richter Cine Technik GmbH):** MPEG in the Digital Cinema Workflow, an ARRI point of view

*C) Compression Technology:*

**Debargha Mukherjee (Google):** An Overview of Coding Tools under Development for VP10

**Tim Terriberry (Daala):**

A Summary of the Daala Project

*D) Visual Quality Evaluation:*

**Patrick le Callet (University of Nantes):**

Video Quality Assessment of HDR Content

The presentations will be followed by an open discussion.