ISO/IEC JTC 1/SC 29/WG 1
(ITU-T SG16)

Coding of Still Pictures

JBIG
Joint Bi-level Image Experts Group

JPEG
Joint Photographic Experts Group

TITLE: Subjective evaluation procedure of JPEG AI proposals

SOURCE: ICQ Group

STATUS: Final

REQUESTED ACTION: Distribute

DISTRIBUTION: Public

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1 Purpose of this Document

This document reports the decisions made at the 95th JPEG meeting with respect to the subjective evaluation of the JPEG AI Call for Proposals (CfP) proponents’ submissions.

2 Subjective Assessment Methodology

During the JPEG AI breakout meetings of the 95th JPEG meeting, the following decisions were made:

- As defined in the JPEG AI Common Training and Testing Conditions, a DSCQS double stimulus methodology will be used with 8 images, using a crowdsourcing platform with QualityCrowd2 software which will be connected to the Amazon Mechanical Turk service.

- JPEG 2000 visually optimized and HEVC/VCC Intra will be used as anchors in the subjective evaluation.

- Crops from the following 8 images will be used: #01, #07, #09, #11, #12, #15, #19 and #20. The crops are described in the following table:

<table>
<thead>
<tr>
<th>Test image</th>
<th>Crop_top_left (X,Y)</th>
<th>Crop_width</th>
<th>Crop_height</th>
</tr>
</thead>
<tbody>
<tr>
<td>00001_TE_1192x832_8bit_sRGB.png</td>
<td>(0,0)</td>
<td>945</td>
<td>880</td>
</tr>
<tr>
<td>00007_TE_1248x832_8bit_sRGB.png</td>
<td>(152,0)</td>
<td>945</td>
<td>832</td>
</tr>
<tr>
<td>00009_TE_1536x1024_8bit_sRGB.png</td>
<td>(154,71)</td>
<td>945</td>
<td>880</td>
</tr>
<tr>
<td>00011_TE_1784x1296_8bit_sRGB.png</td>
<td>(180,31)</td>
<td>945</td>
<td>880</td>
</tr>
<tr>
<td>00012_TE_3680x2456_8bit_sRGB.png</td>
<td>(1679,350)</td>
<td>945</td>
<td>880</td>
</tr>
<tr>
<td>00015_TE_976x1472_8bit_sRGB.png</td>
<td>(15,592)</td>
<td>945</td>
<td>880</td>
</tr>
<tr>
<td>00019_TE_2120x1608_8bit_sRGB.png</td>
<td>(1052,30)</td>
<td>945</td>
<td>880</td>
</tr>
<tr>
<td>00020_TE_1072x928_8bit_sRGB.png</td>
<td>(60,30)</td>
<td>945</td>
<td>880</td>
</tr>
</tbody>
</table>

- Four bitrate points covering a wide range of qualities will be used in the subjective evaluation.
  - 0.06, 0.12, 0.25 and 0.5 bpp for image #11 and #15
  - 0.06, 0.12, 0.25 and 0.75 bpp for image #19
  - 0.12, 0.25, 0.5 and 0.75 bpp for the remaining images

- Number of valid subjects in the subjective assessment test will be above 80.