|  |  |
| --- | --- |
| **Joint Collaborative Team on 3D Video Coding Extension Development**  **of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11**  2nd Meeting: Shanghai, CN, 13–19 Oct. 2012 | Document: JCT3V-B0220 |

|  |  |  |  |
| --- | --- | --- | --- |
| *Title:* | **Cross check on inter-view SAO process of LG (JCT3V-B0130)** | | |
| *Status:* | Input Document | | |
| *Purpose:* | Report | | |
| *Author(s) or Contact(s):* | Ilsoon Lim  14-1 Nongseo-dong Giheung-gu Yongin-si Gyeonggi-do 446-712 South Korea | Tel: Email: | +82 31 280 6688 ilsoon.lim@samsung.com |
| *Source:* | Samsung Electronics Co., Ltd. | | |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Introduction

The experimental result for LG’s inter-view SAO process is reported. It shows -0.4 % (synthesized view) and -0.4% (coded & synthesized view) in BD-rate compared to anchor (3DV-HTM 4.0.1) in common test conditions.

# Test results

## Testing environment

Testing environment is described in below.

• Operating System

Linux Cluster

• Compiler

GCC 4.1.2 [64 bit]

## Testing result in common test conditions

Table 1. Test results for LG’s inter-view SAO process in common test conditions

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | video 0 | video 1 | video 2 | video only | synthesized only | coded & synthesized | enc time | dec time | ren time |
| Balloons | 0.0% | -1.5% | -1.6% | -0.5% | -0.5% | -0.5% | 99.8% | 103.9% | 100.0% |
| Kendo | 0.0% | -1.8% | -1.4% | -0.5% | -0.5% | -0.5% | 103.1% | 99.1% | 100.0% |
| Newspapercc | 0.0% | -1.4% | -1.1% | -0.3% | -0.4% | -0.3% | 101.5% | 99.0% | 100.0% |
| GhostTownFly | 0.0% | -2.5% | -2.3% | -0.4% | 0.0% | -0.1% | 101.6% | 103.8% | 100.0% |
| PoznanHall2 | 0.0% | -1.4% | -2.4% | -0.6% | -0.7% | -0.6% | 98.8% | 101.0% | 100.0% |
| PoznanStreet | 0.0% | -2.1% | -1.1% | -0.1% | -0.4% | -0.3% | 99.1% | 101.5% | 100.0% |
| UndoDancer | 0.0% | -1.2% | -1.2% | -0.1% | -0.3% | -0.2% | 101.6% | 103.7% | 100.0% |
| 1024x768 | 0.0% | -1.6% | -1.4% | -0.4% | -0.5% | -0.4% | 101.5% | 100.7% | 100.0% |
| 1920x1088 | 0.0% | -1.8% | -1.8% | -0.3% | -0.3% | -0.3% | 100.3% | 102.5% | 100.0% |
| **average** | **0.0%** | **-1.7%** | **-1.6%** | **-0.4%** | **-0.4%** | **-0.4%** | **100.8%** | **101.7%** | **100.0%** |

# Conclusion

The BD-rate (and PSNR) results obtained from the cross-verification match those provided by LG. Encoding and decoding time differences are similar enough to be considered a match.