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| **Joint Collaborative Team on Video Coding (JCT-VC)**  **of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11**  9th Meeting: Geneva, CH, 27 April – 7 May 2012 | Document: JCTVC-I0555 |

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| *Title:* | **AHG15: Cross-check of JVTVC-I0076 on signalling long-term reference picture set** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Information | | |
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| *Source:* | Qualcomm Incorporated | | |

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# Abstract

This document presents the results of a cross-check of the proposal in JCTVC-I0076 related to signalling of long-term reference picture set. It is reported that the encoder software implementation is as per the description of the proposal. It is also reported that the results obtained at the encoder log during cross-check match the results provided by the proponents of JCTVC-I0076. It is noted that the results include the sending of the POC MSB cycle of LTRPs, which should not have been sent according to the latest HEVC WD.

# Code verification

The encoder software provided was built on the code base HM 6.1 and the changes made to the software are enabled by setting the macro LTRPS\_IN\_SPS to 1.

# Results

The source code was successfully compiled using GCC version 4.1.2 in 64-bit Linux system. The test cases 2.6 and 3.3 as specified in JCTVC-H0725 were used to obtain the results. The configuration files used for testing were also provided. The results obtained are provided in Table 1. The bit-counts for the slice header (corresponding to both CD and JCTVC-I0076) also include bits for signalling the syntax element delta\_poc\_msb\_cylce\_lt\_minus1, as software HM 6.1 always signals it. As per the CD text, however, it should not always be signalled.

Table 1: Bit-count results obtained during cross-check of JCTVC-I0076

|  |  |  |
| --- | --- | --- |
| **Case 2.6 (10s -- 30s -- 10s -- 30s -- 4800 frames)** | | |
| Field | Required bits | |
| CD | JCTVC-I0076 |
| SPS | 1 | 128 |
| PPS | 0 | 0 |
| Slice Header | 87943 | 13786 |
|  |  |  |
| **Case 2.6 (20s -- 60s -- 20s -- 60s -- 9600 frames)** | | |
| Field | Required bits | |
| CD | JCTVC-I0076 |
| SPS | 1 | 136 |
| PPS | 0 | 0 |
| Slice Header | 190873 | 27586 |
|  |  |  |
| **Case 3.3 (200ms RTT -- 600 frames)** | | |
| Field | Required bits | |
| CD | JCTVC-I0076 |
| SPS | 1 | 92 |
| PPS | 0 | 0 |
| Slice Header | 11896 | 1802 |
|  |  |  |
| **Case 3.3 (1000ms RTT -- 600 frames)** | | |
| Field | Required bits | |
| CD | JCTVC-I0076 |
| SPS | 1 | 132 |
| PPS | 0 | 0 |
| Slice Header | 15596 | 1802 |

# Conclusions

It is reported that the encoder software matches the proposal description in JCTVC-I0076, and the results obtained at the encoder log match the results provided by the proponents.