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| *Title:* | **Cross-check report for CE1 - Motion Data Storage Reduction, test A.4** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Information | | |
| *Author(s) or Contact(s):* | Andrea Gabriellini and Marta Mrak  Centre House  56 Wood Lane  W12 7SB, London, UK | *Email:* | marta.mrak@bbc.co.uk |
| *Source:* | British Broadcasting Corporation | | |

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# Abstract

This document reports cross-check results for test A.4, as defined in CE1: Motion Data Storage Reduction. Four inter configurations were cross-checked:

- random access high efficiency,  
- random access low complexity,  
- low delay (B) high efficiency, and  
- low delay (B) low complexity.

Provided source code for this test, as distributed in CE1, includes bug fix 146. The results are compared to HM3.0, and summarised in Table 1.

Average BD-rate results match the results reported in [F513] except for the cases where the difference is ±0.1 %, between the results reported here and the results reported in [F513]. This can be due to different anchors (with or without the bug fix). The running times are close to the times reported in [F513] and within the range of variability associated with the cluster used for the experiments. The complete set of results can be found in the associated Excel spreadsheets.

# References

[E700] Frank Bossen, “Common test conditions and software reference configurations”, JCTVC-E700, Geneva, CH, March. 2011.

[E701] Joel Jung, Patrice Onno, "Description of Core Experiment 1 (CE1): Motion Data Storage Reduction,"JCTVC-E701, Geneva, CH, March. 2011.

[F513] Y. Chiu, L. Xu, W. Zhang, Y. Han, "CE1: Results of experiment A.4," JCTVC-F513, Torino, I, July 2011.

Table 1 Results for test A.4 with HM3.0 anchors

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Random access | | | Random access LC | | |
| Y BD-rate | U BD-rate | V BD-rate | Y BD-rate | U BD-rate | V BD-rate |
| Class A | 1.0 | 0.8 | 1.1 | 1.1 | 1.0 | 1.3 |
| Class B | 0.7 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 |
| Class C | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| Class D | 1.0 | 1.0 | 0.9 | 1.0 | 0.9 | 1.0 |
| Class E |  |  |  |  |  |  |
| All | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 |
| Enc Time[%] | 101% | | | 100% | | |
| Dec Time[%] | 100% | | | 102% | | |
|  |  |  |  |  |  |  |
|  | Low delay | | | Low delay LC | | |
|  | Y BD-rate | U BD-rate | V BD-rate | Y BD-rate | U BD-rate | V BD-rate |
| Class A |  |  |  |  |  |  |
| Class B | 0.9 | 1.1 | 0.9 | 1.1 | 0.7 | 0.5 |
| Class C | 1.2 | 1.2 | 1.0 | 1.3 | 1.2 | 1.1 |
| Class D | 1.1 | 1.3 | 1.3 | 1.1 | 1.1 | 0.9 |
| Class E | 1.5 | 0.3 | 1.0 | 1.1 | 0.6 | 0.5 |
| All | 1.2 | 1.0 | 1.0 | 1.1 | 0.9 | 0.7 |
| Enc Time[%] | 100% | | | 98% | | |
| Dec Time[%] | 101% | | | 101% | | |