

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

**Coding of moving pictures and audio**

**Convenorship: UNI (Italy)**

**ISO/IEC JTC 1/SC 29/WG 11 N19354**

**Document type: Approved WG 11 document**

**Title: G-PCC EE 13.37 on planar coding improvement**

**Status: Approved**

**Date of document: 2020-05-15**

**Source: 3DG**

**Expected action:**

**No. of pages: 3**

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**INTERNATIONAL ORGANISATION FOR STANDARDISATION**

**ORGANISATION INTERNATIONALE DE NORMALISATION**

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**CODING OF MOVING PICTURES AND AUDIO**

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**Alpbach, AT – April 2020**

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# Abstract

This document provides a description of Exploration Experiment 13.37 on planar coding improvement.

# Mandates

The mandates of the experiment are:

* to improve the performance of the proposed tool.
* to evaluate the complexity of the proposed tool.

# Participants

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| --- | --- | --- | --- |
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| Blackberry | Jonathan Taquet | jtaquet@blackberry.com | crosschecker |

# Description of the tool

In contribution m53522[1], we propose an improvement of planar coding mode by further taking into account available neighbour information. More specifically, information of the parent neighbours and already-coded neighbours at the same octree level is considered. This information is then used as contexts when coding the *isPlanar* flag and *planePosition* flag.

# Evaluation

## Test condition

Following test conditions will be evaluated under CTC[2].

* C1 AI lossless geometry – (lossy attribute)
* C2 AI, lossy geometry – (lossy attribute)
* CW AI, lossless geometry – (lossless attribute)
* CY AI, lossless geometry – (near lossless attribute)

## Test model, datasets

The proposed tool shall be implemented on top of TMC13v10 [3]. All tests are to be performed on categories 1 and 3 datasets.

# Timeline

* 2020-05-15: Expected date for release of cross-verified TMC13v10 software and anchors
* 2020-05-29: EE Software and results are released to cross-checkers
* 2020-06-06: Preliminary feedback from cross-checkers to proponents
* 2020-07-01: MPEG document upload deadline

# References

1. “[G-PCC] [New] Planar coding improvement”, ISO/IEC JTC1/SC29/WG11 MPEG2020 Doc. m53522, Brussels, BE, January 2020.
2. “Common Test Conditions for PCC” ISO/IEC JTC1/SC29 WG11 MPEG2020 Doc, w19324, Alpbach, AT, April 2020.
3. “G-PCC Test Model v10”, ISO/IEC JTC1/SC29/WG11 MPEG2020 Doc. w19323, Alpbach, AT, April 2020.