The provided syntax and semantics changes assume coding of the DLT in the slice header, as proposed in D0054 and coding of DLT values with Mediatek’s RCBM method. With very minor changes these changes also apply to coding of the DLT in the VPS.

# Syntax Changes

|  |  |
| --- | --- |
| slice\_header() { |  |
| ... |  |
| **dlt\_flag**[ i ] | u(1) |
| if( dlt\_flag[ i ] ) { |  |
| **dlt\_update\_flag**[ i ] | u(1) |
| if( dlt\_update\_flag[ i ] ) { |  |
| **code\_singlerange\_dlt\_flag**[ i ] | u(1) |
| if(code\_singlerange\_dlt\_flag[ i ] ) { |  |
| **code\_full\_bit\_map\_flag**[i] | u(1) |
| if(!**code\_full\_bit\_map\_flag**[i]){ |  |
| **min\_dlt\_value**[i] | u(v) |
| **diff\_max\_dlt\_value**[i] | u(v) |
| } |  |
| for(j=0;j< MaxDltValue[i] - min\_dlt\_value[i] – 1;j++) |  |
| **bit\_map\_flag**[i][j] | u(1) |
| } |  |
| else { |  |
| **min\_dlt\_value1**[i] | u(v) |
| **diff\_max\_dlt\_value1**[i] | u(v) |
| for(j=0;j< MaxDltValue1[i] - min\_dlt\_value1[i] – 1;j++) |  |
| **bit\_map\_flag1**[i][j] | u(1) |
| **diff\_min\_dlt\_value2**[i] | u(v) |
| **diff\_max\_dlt\_value2**[i] | u(v) |
| for(j=0;j< MaxDltValue2[i] - MinDltValue2[i] – 1;j++) |  |
| **bit\_map\_flag2**[i][j] | u(1) |
| } |  |
| } |  |
| } |  |
| ... |  |
| } |  |

# Semantics

**code\_singlerange\_dlt\_flag**[i] specifies whether to code the single range or multi-range DLT (containing 2 sub-ranges) with layer\_id equal to i.

**min\_dlt\_value1**[i] specifies the smallest value in the depth lookup table for depth view components with layer\_id equal to i. The number of bits used to represent it is log2(MAX\_DEPTH\_VALUE + 1). When min\_dlt\_value[i] is not present, it shall be inferred to be -1.

**diff\_max\_dlt\_value1**[i] specifies the difference between the largest value in first sub-range of the depth lookup table and smallest value in the depth lookup table for depth view components with layer\_id equal to i. MaxDltValue1[i] is computed as follows: MaxDltValue1[i] = min\_dlt\_value1[i] + diff\_max\_dlt\_value1[i]. The number of bits used to represent diff\_max\_dlt\_value1[i] is log2(MAX\_DEPTH\_VALUE + 1 - min\_dlt\_value1[i]).

**bit\_map\_flag1**[i][j]specifies the j-th entry in the bit map for first sub-range depth view components with layer\_id equal to i.

**diff\_min\_dlt\_value2**[i] specifies the difference between the smallest value in second sub-range of the depth lookup table and largest value in the first sub-range of the depth lookup table for depth view components with layer\_id equal to i. MinDltValue2[i] is computed as follows: MinDltValue2[i] = MaxDltValue1[i] + diff\_min\_dlt\_value2[i]. The number of bits used to represent diff\_min\_dlt\_value2[i] is log2(MAX\_DEPTH\_VALUE + 1 - MaxDltValue1[i]).

**diff\_max\_dlt\_value2**[i] specifies the difference between the largest value in second sub-range of the depth lookup table and smallest value in the second sub-range of the depth lookup table for depth view components with layer\_id equal to i. MaxDltValue2[i] is computed as follows: MaxDltValue2[i] = MinDltValue2[i] + diff\_max\_dlt\_value2[i]. The number of bits used to represent diff\_max\_dlt\_value2[i] is log2(MAX\_DEPTH\_VALUE + 1 - MinDltValue2[i]).

**bit\_map\_flag2**[i][j]specifies the j-th entry in the bit map for second sub-range depth view components with layer\_id equal to i.