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Interested committees:

Title: Draft BS EN ISO/IEC 23090-3 :2024/Amd 1 Information technology - Coded representation of immersive media. Part 3: Versatile video coding. Amendment 1: Additions and corrections.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

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UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT Amendment

ISO/IEC 23090-3:2024/ DAM 1

Information technology — Coded representation of immersive media —

Part 3: Versatile video coding

AMENDMENT 1: Additions and corrections

ICS: 35.040.40

ISO/IEC JTC 1/SC 29

Secretariat: JISC

Voting begins on:
2025-06-30

Voting terminates on:
2025-09-22

This document is circulated as received from the committee secretariat.

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Reference number
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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*, in collaboration with ITU-T. A technically aligned twin text is published as Rec. ITU-T H.266.

A list of all parts in the ISO/IEC 23090 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Information technology — Coded representation of immersive media —

Part 3: Versatile video coding

AMENDMENT 1: Additions and corrections

In subclause 6.5.1, replace pseudocode segment 21 with the following:

```

if( pps_single_slice_per_subpic_flag )
if( !sps_subpic_info_present_flag ) { /* There is no subpicture info and only one slice in a picture. */
    NumCtusInSlice[0] = 0
    for( j = 0; j < NumTileRows; j++ )
        for( i = 0; i < NumTileColumns; i++ )
            AddCtbsToSlice( 0, TileColBdVal[ i ], TileColBdVal[ i + 1 ], TileRowBdVal[ j ],
                            TileRowBdVal[ j + 1 ] )
    } else
    for( i = 0; i <= sps_num_subpics_minus1; i++ ) {
        NumCtusInSlice[ i ] = 0
        if( subpicHeightLessThanOneTileFlag[ i ] ) /* The slice consists of a set of CTU rows in a tile. */
            AddCtbsToSlice( i, sps_subpic_ctu_top_left_x[ i ],
                            sps_subpic_ctu_top_left_x[ i ] + sps_subpic_width_minus1[ i ] + 1,
                            sps_subpic_ctu_top_left_y[ i ],
                            sps_subpic_ctu_top_left_y[ i ] + sps_subpic_height_minus1[ i ] + 1 )
        else { /* The slice consists of a number of complete tiles covering a rectangular region. */
            tileX = ctbToTileColIdx[ sps_subpic_ctu_top_left_x[ i ] ]
            tileY = ctbToTileRowIdx[ sps_subpic_ctu_top_left_y[ i ] ]
            for( j = 0; j < SubpicHeightInTiles[ i ]; j++ )
                for( k = 0; k < SubpicWidthInTiles[ i ]; k++ )
                    AddCtbsToSlice( i, TileColBdVal[ tileX + k ], TileColBdVal[ tileX + k + 1 ],
                                    TileRowBdVal[ tileY + j ], TileRowBdVal[ tileY + j + 1 ] )
        }
    }

```

```

    }
else {
    tileIdx = 0
    for( i = 0; i <= pps_num_slices_in_pic_minus1; i++ )
        NumCtusInSlice[ i ] = 0
    for( i = 0; i <= pps_num_slices_in_pic_minus1; i++ ) {
        SliceTopLeftTileIdx[ i ] = tileIdx
        tileX = tileIdx % NumTileColumns
        tileY = tileIdx / NumTileColumns
        if( i < pps_num_slices_in_pic_minus1 ) {
            sliceWidthInTiles[ i ] = pps_slice_width_in_tiles_minus1[ i ] + 1
            sliceHeightInTiles[ i ] = pps_slice_height_in_tiles_minus1[ i ] + 1
        } else {
            sliceWidthInTiles[ i ] = NumTileColumns - tileX
            sliceHeightInTiles[ i ] = NumTileRows - tileY
            NumSlicesInTile[ i ] = 1
        }
        if( sliceWidthInTiles[ i ] == 1 && sliceHeightInTiles[ i ] == 1 ) {           (21)
            if( pps_num_exp_slices_in_tile[ i ] == 0 ) {
                NumSlicesInTile[ i ] = 1
                sliceHeightInCtus[ i ] = RowHeightVal[ SliceTopLeftTileIdx[ i ] / NumTileColumns ]
            } else {
                remainingHeightInCtbsY = RowHeightVal[ SliceTopLeftTileIdx[ i ] / NumTileColumns ]
                for( j = 0; j < pps_num_exp_slices_in_tile[ i ]; j++ ) {
                    sliceHeightInCtus[ i + j ] = pps_exp_slice_height_in_ctus_minus1[ i ][ j ] + 1
                    remainingHeightInCtbsY -= sliceHeightInCtus[ i + j ]
                }
                uniformSliceHeight = sliceHeightInCtus[ i + j - 1 ]
                while( remainingHeightInCtbsY >= uniformSliceHeight ) {
                    sliceHeightInCtus[ i + j ] = uniformSliceHeight
                    remainingHeightInCtbsY -= uniformSliceHeight
                    j++
                }
            }
        }
    }
}

```