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**Information technology — Coding of  
audio-visual objects —**

**Part 10:**

**Advanced Video Coding**

**AMENDMENT 3: Additional  
supplemental enhancement information**

*Technologies de l'information — Codage des objets audiovisuels —*

*Partie 10: Codage visuel avancé*

*AMENDEMENT 3: Information d'amélioration supplémentaire  
additionnelle*

ISO/IEC 14496-10:2014/Amd 3:2016

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Amendment 3 to ISO/IEC 14496-10:2014 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

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# Information technology — Coding of audio-visual objects —

## Part 10: Advanced Video Coding

### AMENDMENT 3: Additional supplemental enhancement information

Page 346, D.1

Insert the following after the row containing “mastering\_display\_colour\_volume( payloadSize )”:

|                                                                  |   |  |
|------------------------------------------------------------------|---|--|
| else if( payloadType == 181 )                                    |   |  |
| alternative_depth_info( payloadSize ) /* specified in Annex I */ | 5 |  |

Page 760, after I.13.1.6.1

Add the following subclause:

#### I.13.1.7 Alternative depth information SEI message syntax

| alternative_depth_info( payloadSize ) {                        | C | Descriptor |
|----------------------------------------------------------------|---|------------|
| <b>depth_type</b>                                              | 5 | ue(v)      |
| if( depth_type == 0 ) {                                        |   |            |
| <b>num_constituent_views_gvd_minus1</b>                        | 5 | ue(v)      |
| <b>depth_present_gvd_flag</b>                                  | 5 | u(1)       |
| <b>z_gvd_flag</b>                                              | 5 | u(1)       |
| <b>intrinsic_param_gvd_flag</b>                                | 5 | u(1)       |
| <b>rotation_gvd_flag</b>                                       | 5 | u(1)       |
| <b>translation_gvd_flag</b>                                    | 5 | u(1)       |
| if( z_gvd_flag )                                               |   |            |
| for( i = 0; i <= num_constituent_views_gvd_minus1 + 1; i++ ) { |   |            |
| sign_gvd_z_near_flag[ i ]                                      | 5 | u(1)       |
| exp_gvd_z_near[ i ]                                            | 5 | u(7)       |
| man_len_gvd_z_near_minus1[ i ]                                 | 5 | u(5)       |
| man_gvd_z_near[ i ]                                            | 5 | u(v)       |
| sign_gvd_z_far_flag[ i ]                                       | 5 | u(1)       |
| exp_gvd_z_far[ i ]                                             | 5 | u(7)       |
| man_len_gvd_z_far_minus1[ i ]                                  | 5 | u(5)       |
| man_gvd_z_far[ i ]                                             | 5 | u(v)       |
| }                                                              |   |            |
| if( intrinsic_param_gvd_flag ) {                               |   |            |
| <b>prec_gvd_focal_length</b>                                   | 5 | ue(v)      |
| <b>prec_gvd_principal_point</b>                                | 5 | ue(v)      |

|                                                                |   |       |
|----------------------------------------------------------------|---|-------|
| }                                                              |   |       |
| if( rotation_gvd_flag )                                        |   |       |
| <b>prec_gvd_rotation_param</b>                                 | 5 | ue(v) |
| if ( translation_gvd_flag )                                    |   |       |
| <b>prec_gvd_translation_param</b>                              | 5 | ue(v) |
| for( i = 0; i <= num_constituent_views_gvd_minus1 + 1; i++ ) { |   |       |
| if( intrinsic_param_gvd_flag ) {                               |   |       |
| <b>sign_gvd_focal_length_x[ i ]</b>                            | 5 | u(1)  |
| <b>exp_gvd_focal_length_x[ i ]</b>                             | 5 | u(6)  |
| <b>man_gvd_focal_length_x[ i ]</b>                             | 5 | u(v)  |
| <b>sign_gvd_focal_length_y[ i ]</b>                            | 5 | u(1)  |
| <b>exp_gvd_focal_length_y[ i ]</b>                             | 5 | u(6)  |
| <b>man_gvd_focal_length_y[ i ]</b>                             | 5 | u(v)  |
| <b>sign_gvd_principal_point_x[ i ]</b>                         | 5 | u(1)  |
| <b>exp_gvd_principal_point_x[ i ]</b>                          | 5 | u(6)  |
| <b>man_gvd_principal_point_x[ i ]</b>                          | 5 | u(v)  |
| <b>sign_gvd_principal_point_y[ i ]</b>                         | 5 | u(1)  |
| <b>exp_gvd_principal_point_y[ i ]</b>                          | 5 | u(6)  |
| <b>man_gvd_principal_point_y[ i ]</b>                          | 5 | u(v)  |
| }                                                              |   |       |
| if( rotation_gvd_flag )                                        |   |       |
| for ( j = 0; j < 3; j++ ) /* row */                            |   |       |
| for( k = 0; k < 3; k++ ) { /* column */                        |   |       |
| <b>sign_gvd_r[ i ][ j ][ k ]</b>                               | 5 | u(1)  |
| <b>exp_gvd_r[ i ][ j ][ k ]</b>                                | 5 | u(6)  |
| <b>man_gvd_r[ i ][ j ][ k ]</b>                                | 5 | u(v)  |
| }                                                              |   |       |
| if ( translation_gvd_flag ) {                                  |   |       |
| <b>sign_gvd_t_x[ i ]</b>                                       | 5 | u(1)  |
| <b>exp_gvd_t_x[ i ]</b>                                        | 5 | u(6)  |
| <b>man_gvd_t_x[ i ]</b>                                        | 5 | u(v)  |
| }                                                              |   |       |
| }                                                              |   |       |
| }                                                              |   |       |
| }                                                              |   |       |

Page 770, after I.13.2.6.1

Add the following subclause:

### I.13.2.7 Alternative depth information SEI message semantics

The alternative depth information SEI message indicates that the view components of one output view contain samples of multiple distinct spatially packed constituent pictures. The related output view is not suitable to be displayed directly. This SEI message can be used by the application after the decoder