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

**Part 27:  
3D Graphics conformance**

**AMENDMENT 6: Pattern-based 3D mesh  
coding conformance**

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

*Partie 27: Conformité aux graphiques 3D*

*ISO/IEC 14496-27:2009/Amd 6:2015*

*AMENDEMENT 6: Conformité de codage d'un réseau 3D fondé sur un modèle*

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The committee responsible for this document is ISO/IEC JTC 1, *Information technology, SC 29, Coding of audio, picture, multimedia and hypermedia information*.

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# Information technology — Coding of audio-visual objects —

## Part 27: 3D Graphics conformance

### AMENDMENT 6: Pattern-based 3D mesh coding conformance

All the files required for conformance testing are available as electronic insert.

| Name (for bitstream file-name, add .tri) | Attribute/Parameter  |
|--|--|
| leaf_translation                         | File with a 3D mesh which contains 6 repeated tree leaves with the same size and orientation but with different positions. The instance transformation consists of translation transformations and is encoded in elementary instance data mode.  |
| leaf_rotation                            | File with a 3D mesh which contains 6 repeated tree leaves with the same size but with different positions and different orientations. The instance transformation consists of translation and rotation transformations and is encoded in elementary instance data mode.  |
| leaf_reflection                          | File with a 3D mesh which contains 2 repeated tree leaves with the same size but with different positions and different orientation (one being a reflection of the other). The instance transformation consists of translation and reflection transformations and is encoded in elementary instance data mode.   |
| leaf_unique                              | File with a 3D mesh which contains a unique cube and 6 repeated tree leaves with the same size but with different positions and different orientations. The instance transformation consists of translation and rotation transformations and is encoded in elementary instance data mode. The unique part is coded on its own without any patterns usage.  |
| leaf_scaling                             | File with a 3D mesh which contains 2 repeated tree leaves with the same orientation but with different sizes and different positions. The instance transformation consists of uniform scaling and translation transformations and is encoded in elementary instance data mode.   |
| leaf_instagrouped                        | File with a 3D mesh which contains 12 repeated tree leaves with the same size but with different positions and different orientations. The instance transformation consists of translation and rotation transformations and is encoded in grouped instance data mode.  |
| leaf_errorcompen                         | File with a 3D mesh which contains 2 repeated tree leaves with the same size but with different positions and different orientations. The instance transformation consists of translation and rotation transformations and is encoded in elementary instance data mode. Error compensation data is included in the compressed bitstream and shall be decoded by the decoder too.   |
| leaf_texcoord & leaf_texture.jpg         | Files with a textured 3D mesh which contains 3 repeated tree leaves with the same size but with different positions and different orientations. The instance transformation consists of translation and rotation transformation. Among the 3 textured leaves, 2 leaves have the same texture content while the other one has a different texture. The instance transformation and texture coordinate data are encoded in elementary instance data mode. Texture image is rearranged after the repeated parts are removed. leaf_textue.jpg contains the rearranged texture image that the decoder shall decode. |

| Name (for bitstream file-name, add .tri) | Attribute/Parameter   |
|--|---|
| leaf_attribute                           | File with a 3D mesh with color attribute data, which contains 4 repeated tree leaves with the same size but with different positions, different orientations and different color properties. The instance transformation consists of translation and rotation transformation. The instance transformation and color attribute data are encoded in elementary instance data mode. Note: Normal and other attribute are encoded using the same method as for encoding color attribute data. Therefore no extra conformance test is needed for them. |

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