



Information technology — Coding of audio-visual objects — Part 21: MPEG-J Graphics Framework eXtensions (GFX)

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Codage des objets audiovisuels —

Partie 21: Extensions du cadre graphique (GFX) pour MPEG-J

RECTIFICATIF TECHNIQUE 21

Technical Corrigendum 1 to ISO/IEC 14496-21:2006 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

In subclause 5.3.5.1 “VideoRendererControl”, replace:

- **`void setRenderer(Renderer renderer)`** – attaches a Renderer to this Player.
- **`void bindTexture(int name)`** – assigns a name to the video output of this Player. For OpenGL ES Renderer, it is the GL texture name obtained by, for example, **`glGetTextures()`**. For M3G, it could be the `userId` of a Texture2D object (this requires the application to ensure desired texture has correct id).

with:

- **void setRenderer(Renderer renderer)** – attaches a Renderer to this Player.
- **void bindTexture(int name)** – binds the video output of this Player to a named texture. This method can only be used when the renderer, attached using **setRenderer()**, is one which identifies textures by name. For example, for the **GLRENDERER** name is the GL texture name obtained from **glGenTextures()**. If the renderer does not use texture names, an **IllegalStateException** will be thrown.
- **void bind(Object target)** – binds the video output of this Player to a target Object. This method can only be used when the renderer attached using **setRenderer()** is one which uses a Java object to hold the image data for a texture. For example, for the **M3GRENDERER** target is an object of type **javax.microedition.m3g.Image2D**. If the renderer does not use a Java object to hold the image data, an **IllegalStateException** will be thrown. If target is not of a suitable object type, an **IllegalArgumentException** will be thrown.

In subclause 5.9.3.2 “Fine-grained playback control”, correct the sample code. Replace:

```
Player p;
RenderingControl rc;

try {
    p = resourceManager.createPlayer("http://webserver/movie.mpg");
    p.realize();

    // Grab the video control and set it to the current display.
    rc = (RenderingControl) p.getControl("org.iso.mpeg.mpegj.media.RenderingControl");
    if (rc != null)
        rc.setRenderer(renderer);

    // texture mapping code for the renderer to draw video CB onto surfaces

    p.start();

} catch (IOException ioe) {
} catch (MediaException me) { }
```

with:

```
Player p;
VideoRendererControl rc;

try {
    p = resourceManager.createPlayer("http://webserver/movie.mpg");
    p.realize();

    // Grab the video control and set it to the current display.
    rc = (VideoRendererControl)
        p.getControl("org.iso.mpeg.mpegj.media.Control.VideoRendererControl");
    if (rc != null)
        rc.setRenderer(renderer);

    // texture mapping code for the renderer to draw video CB onto surfaces

    p.start();

} catch (IOException ioe) {
} catch (MediaException me) { }
```