

## GEM 1.0.2 Errata #2

### 1. Introduction

This document lists solutions for those errors in the GEM 1.0.2 specification (ETSI TS 102 819 V1.3.1) which DVB has considered and where agreement has been reached on a solution. The solutions are separated into two categories: Technical Issues, and Editorial and Informative Changes. Changes are identified by their issue number from the DVB project's MHP Umbrella Group (MUG) issue database which is accessible to members of the DVB project and to organizations that have a liaison agreement with DVB-MUG. This database contains the original problem report that motivated each change.

At the time of this writing, the DVB project has not decided when or if to publish a version 1.0.3 of the GEM specification. Publishing a new version of GEM is generally triggered by a request from one or more organizations with a liaison arrangement with the MUG.

Errata #2 adds only one issue to the previous errata document, #1. This is issue 209, which appears in this document in section 2.2.3.

### 2. Technical Issues

#### 2.1 Clause 11

##### 2.1.1 Issues 164 and 165

In clause 11.4, "Presentation APIs", `org.davic.media.FreezeControl` shall be considered to not be present in the bulleted list of classes that are not required to be present. The following text shall be considered to be present after this bulleted list:

For the packaged media target, the following classes are required by MHP [1], clause 11.4.2.5.2 but are not required by the present document:

- `org.davic.media.FreezeControl`
- `org.davic.media.MediaFreezeException`

##### 2.1.2 Issue 166

In clause 11.7.7, "Common error reporting", the text:

Support for the interface `NotAuthorizedInterface` and the exception `NotAuthorizedException` is not required for GEM terminal specifications that do not include the MHP conditional access API

shall be considered to be replaced by:

`NotAuthorizedInterface` and `NotAuthorizedException` are required to be present for GEM terminal specifications that include the section filter API. However, for GEM terminal specifications that do not include the MHP conditional access API, `NotAuthorizedException` shall not be generated by the platform.

NOTE: In such terminal specifications, there is consequently no mechanism for obtaining a platform object that implements `NotAuthorizedInterface`.

Clause 11.4, “Presentation APIs”, shall be considered to have the following text appended:

The following class is required by MHP[1], clause 11.4.2.5.2 but is only required by the present document for terminal specifications that do include the MHP conditional access API:

- `org.davic.media.NotAuthorizedMediaException`

### 2.1.3 Issue 168

In clause 11.7.6, “Content referencing”, in the first paragraph the text:

The DAVIC class `DvbLocator` is not required by the present document.

shall be considered to be replaced by:

The DAVIC package `org.davic.net.dvb` is not required by the present document.

### 2.1.4 Issue 171

In clause 11.7.7, “Common error reporting”, the following paragraph is considered to be appended:

Support for the exception `TunerException` is not required for GEM terminal specifications that do not include the MPEG-2 Section Filter API.

## 2.2 Clause 15

### 2.2.1 Issue 172

In clause 15.0, “General”, the row of table 7 for the area “Data Access” and specification “11.5.5, ‘Mid-Level Communications API’ as modified by 11.5, ‘Data access APIs’”, both “-“ entries for the enhanced profiles shall be considered to read “O”.

NOTE: This means that the `org.dvb.net.rc` package may optionally be present, and may be required to be present in the enhanced profile(s) of GEM terminal specifications.

### 2.2.2 Issue 178

In clause 15.0, “General,” the following text at the bottom of table 7 shall be considered to not be present:

NOTE: The `javax.tv.graphics.TVContainer.getRootContainer` method shall return an instance of `org.havi.ui.HScene` or null.

### 2.2.3 Issue 209

In clause 15.6 “Functional Equivalents,” change table 8 “Functional Equivalents” as follows. In the row for “Application Authentication” under the columns for the broadcast profiles, change “M\*” to “M”.

## 2.3 Annex A

### 2.3.1 Issue 152

In clause A.1, “Errata to MHP,” add new clause:

A.1.4 `org.dvb.io.persistent.FileAttributes` class

In `org.dvb.io.persistent.FileAttributes`, the following constructor shall be considered to be present;

```
/**
 * Constructor.
 *
 * @param expiration_date an expiration date or null
 * @param p the access permissions to use
 * @param priority the priority to use in persistent storage
 *
 */
public FileAttributes(Date expiration_date, FileAccessPermissions p,
                    int priority) {}
```

### 2.3.2 Issue 174

In clause A.1, “Errata to MHP,” add new clause:

A.1.5 `org.davic.media.LanguageControl` class

In clause A.6.6.4, “LanguageControl”

a) insert a new heading immediately following this heading as follows;

A.6.6.4.1 Class description

b) Insert the following additional clause

A.6.6.4.2 selectLanguage(String)

The following additional text shall be considered to form part of the description of this method;

When this method returns normally, the language will have been synchronously selected.

### 2.3.3 Issue 177

In clause A.1, “Errata to MHP,” add new clause:

A.1.6 `application_id` range for unsigned applications

In clause 10.5.1, “Encoding”, table 12, “Table 12 : Value ranges for `application_id`”,

a) in the row “Application\_ids for unsigned applications”, in the cell “`application_id` values”, the text “`0x0000...0x3fff`” shall be considered to read “`0x0001...0x3fff`”

b) a new row shall be considered to be added immediately after the heading as follows;

`0x0000` shall not be used

### 2.3.4 Issue 181

In clause A.1, “Errata to MHP,” add new clause:

A.1.7 Permission Request File `grantoridentifier`

In clause 12.6.2.6, in table 55, in the “`grantoridentifier`” row, the “comments” column shall read;

This element contains the 32 bit organization id identifying the grantor organization. The encoding of the CDATA attribute id of this element is “0x” followed by the encoding defined in 14.5, "Text encoding of application identifiers" on page 222.

## 2.4 Annex U

### 2.4.1 Issue 183

In Annex U, “Extended Graphics APIs”, the following text:

MHP [1], annex U is included in the present document.

Is considered to be replaced with:

MHP [1], annex U is included in the present document with the following notes and modifications.

U.1 `org.dvb.net.tuning.DvbNetworkInterfaceSIUtil`

The following text is considered to be appended:

U.2 `org.dvb.ui.DVBGraphics.setXORMode()`

The following behavior is specified in MHP clause U in the documentation for the class `org.dvb.ui.DVBGrahpics`:

- Calling `setXORMode` on an instance of this class shall be equivalent to calling `setDVBComposite` with a special and implementation dependent `DVBAlphaComposite` object which implements the semantics specified for this method in the parent class.
- Calling `getDVBComposite` when `setXORMode` is the last `DVBComposite` set shall return this implementation dependent object. Conformant MHP applications shall not do anything with or to this object including calling any methods on it.

This behavior is not required for GEM termianls, and GEM applications shall not rely on this behavior.

## 3. Editorial and Informative Changes

### 3.1 Clause 7

#### 3.1.1 Issue 173

In clause 7,3, “Resident fonts”, the following note is considered to be appended:

NOTE: `java.awt` requires that a default font be available, but does not specify what it is. It is recommended that applications explicitly specify a known font for consistent results.

## 3.2 Clause 11

### 3.2.1 Issue 170

In clause 11.3, “Fundamental DVB-J APIs”, the text:

MHP [1], clause 11.3.2.1 contains a reference to the class `org.davic.net.dvb.DVBLocator`. This class is not required by GEM. For GEM terminal specifications that do not include the MHP definition of the functional equivalent named "Content Referencing" as defined in clause 15.6, "Functional Equivalents," this is to be interpreted as allowing a valid locator as described in the following two paragraphs.

Shall be considered to not be present.

NOTE: The referenced version of MHP no longer contains a clause 11.3.2.1.

### 3.2.2 Issue 180

In clause 11.5.1, “Broadcast Transport Protocol Access API”, the text:

NOTE 1: Absolute and relative paths may be used in accordance with the APIs concerned, e.g. `java.io.File` and `java.net.URL` when used with a "file://" string.

Shall be considered to be replaced by:

NOTE 1: Absolute and relative paths may be used in accordance with the APIs concerned, e.g. with `java.net.URL` (when used with a "file://" string prefix) and with `java.io.File`.

## 3.3 Clause 14

### 3.3.1 Issue 167

In clause 14.9, “Service identification”, the text:

`org.davic.net.DvbNetworkBoundLocator`

shall be considered to be replaced by

`org.davic.net.dvb.DvbNetworkBoundLocator`

## 3.4 Annex C

### 3.4.1 Issue 187

In clause C.2, “Other informative references” in informative reference [C] the text:

NOTE: <http://www.blu-raydisc.com/Section-13890/Index.html>

shall be considered to be replaced with:

NOTE: <http://www.blu-raydisc.com/> under “Technical Info”, “Public Specifications”

## 3.5 Annex P

### 3.5.1 Issue 160

In clause P.2.0, “General”, the text:

A small number of the MHP methods are not required in GEM terminal specifications.  
Additionally,

shall be considered to not be present.

### 3.5.2 Issue 176

In clause P.1, “Overview”, the method names in the bulleted lists shall be considered to start with “`DSMCCObject.`”

In clause P.2.1, “DSMCCObject”, the following note shall be considered to be appended:

NOTE: See also the semantic limitations on methods of this class under certain conditions specified in clause P.1