To: INCITS Technical Committee T10  
From: Kevin Butt  
Date: February 12, 2008  
Document: T10/07-372r1 — SMC-3 - Medium Magazine Error Codes

1 Revisions

07-372r0. (August 24, 2007) Initial revision  
07-372r1. (February 12, 2008) Expanded to include model section for media magazine.

2 Introduction

The SMC-3 working group is attempting to clarify what additional sense codes are used in SMC devices and when they are presented. I have been given the assignment to propose those codes for Medium Magazines.

NOTE 1 - Sept WG: I need to create the full proposal for when used and where inserted into SMC-3. Perhaps there should be a model clause for these sense codes. Should be linked to Move Medium and exchange media command. Open/Close Import/Export Element.
3 Proposal

3.1.19 **media magazine**: A structure consisting of one or more **elements** *(e.g., import/export element, or storage element)* that is used to contain a set of volumes within the media changer. Some media changer devices allow an operator to remove the magazine from the media changer *(see clause 5.3)*.

### 5.3 Media magazine

A media changer may organize import/export elements or storage elements into physical groupings that may be accessed as one entity using a structure called a media magazine. A media magazine consists of:

- a) one or more import/export elements;
- b) one or more storage elements; or
- c) one or more elements where the elements are a mixture of import/export elements and storage elements.

Table 1 describes when additional sense codes related to media magazines are used.

<table>
<thead>
<tr>
<th>Additional Sense Code</th>
<th>When used</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIT ATTENTION, MEDIUM MAGAZINE REMOVED</td>
<td>A magazine has been removed from the media changer</td>
</tr>
<tr>
<td>UNIT ATTENTION, MEDIUM MAGAZINE INSERTED</td>
<td>A magazine has been inserted into the media changer</td>
</tr>
<tr>
<td>UNIT ATTENTION, MEDIUM MAGAZINE LOCKED</td>
<td>A magazine has been locked; Storage elements in the magazine may now be accessed by the medium transport element</td>
</tr>
<tr>
<td>UNIT ATTENTION, MEDIUM MAGAZINE UNLOCKED</td>
<td>A magazine has been unlocked; Movement of the magazine is allowed and storage elements in the magazine may not be accessed by the medium transport element</td>
</tr>
</tbody>
</table>
| NOT READY, MEDIUM MAGAZINE NOT ACCESSIBLE | A magazine has been changed *(e.g., magazine has been unlocked, position has changed, etc.)* such that the magazine is not accessible by the medium transport element and an attempt to access the magazine is attempted  

**Editor’s Note 1**: Note that there is no method described in the SMC-3 whereby a media magazine may be addressed. I assume those libraries that can move magazines use Move Medium and/or Exchange Medium with a special address. A library vendor who uses media magazines should address this shortcoming.

### 5.4 Volume tag information

**Editor’s Note 2**: Nothing changed in the Volume tag information clause except numbering

6.11.4 **Medium transport element descriptor**
An element disabled (ED) bit set to one indicates that the element is disabled (e.g., a media magazine or drive is not installed or has been logically disabled). An ED bit set to zero indicates that the element is enabled.

7.3.3 Extended Device Capabilities mode page

A storage magazine (SMGZ) bit set to one indicates that the media changer uses medium magazines for some storage elements. A SMGZ bit set to zero indicates that the media changer does not use medium magazines for any storage element.

An import/export magazine (IEMGZ) bit set to one indicates that the media changer uses medium magazines for some import/export elements. An IEMGZ bit set to zero indicates that the media changer does not use medium magazines for any import/export element.