Audio Track Files

Best Practices

# Scope

This document specifies best practices for IMF Audio Track Files, which are specified in SMPTE ST 2067-2. In particular, it provides guidance on the contents of the MCALabelSubDescriptor defined in SMPTE ST 377-4, which adds information to each audio channel and soundfield group.

# Status of this Document

This Best Practice is published by the IMF User Group[[1]](#endnote-1). It may be updated, replaced or obsoleted by other documents at any time. Readers are encouraged to consult the following for a list of current issues, to which they are invited to contribute.

https://github.com/imfug/004-audio-track-files

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# Recommendations

Each Soundfield Group should be wrapped into a single Audio Track File.

EXAMPLE: A 5.1 soundfield group is contained in a single Audio Track File that contains 6 audio channels.

The value of MCA Audio Element Kind should be one of the Use Class symbols specified in PCD ST 377-41:2020[[3]](#endnote-3), Table 3.

The value of MCA Audio Content Kind should be one of the Content symbols specified in PCD ST 377-41:2020, Table 2.

The value MCA Title and MCA Title Version should be n/a if no specific values are provided.

Tag Symbols for 2-channel programs should clearly distinguish the method used to create the soundfield:

* chL and chR (channel) and sgST (soundfield group) for standard stereo; or
* chLt and chRt (channel) and sgLtRt (soundfield group) for matrix encoded Lt-Rt pair.

The value of the MCA Tag Symbol item should be consistent with the value of the MCA Tag Name item.

Table 1 provides examples MCALabelSubDescriptor values for a selection of content types.

Table 1. Examples of MCALabelSubDescriptor values for a selection of content types.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Content Type** | **Spoken Language (RFC 5646)** | **Soundfield Group** | | | | **Audio Channel** | |
| **MCA Audio Content Kind** | **MCA Audio Element Kind** | **MCA Tag Name** | **MCA Tag Symbol** | **MCA Tag Name** | **MCA Tag Symbol** |
| Primary | Language per RFC 5646 (e.g. en-US, es-419) | PRM | FCMP | Lt-Rt | sgLtRt | Left Total | chLt |
| Right Total | chRt |
| Music & Effects | No value required | ME | ICMP | Standard Stereo | sgST | Left | chL |
| Right | chR |
| Dialogue | Language per RFC 5646 (e.g. en-US, es-419) | DX | ICMP | Standard Stereo | sgST | Left | chL |
| Right | chR |
| Sound Effects | No value required | FX | ICMP | Standard Stereo | sgST | Left | chL |
| Right | chR |
| Music | No value required | MX | ICMP | Standard Stereo | sgST | Left | chL |
| Right | chR |
| Primary | Language per RFC 5646 (e.g. en-US, es-419) | PRM | FCMP | 5.1 | sg51 | Left | chL |
| Right | chR |
| Center | chC |
| LFE | chLFE |
| Left Surround | chLs |
| Right Surround | chRs |

1. https://www.imfug.com/ [↑](#endnote-ref-1)
2. http://creativecommons.org/licenses/by-nd/4.0/ [↑](#endnote-ref-2)
3. https://github.com/SMPTE/ST377-4-Revision-and-ST377-41 [↑](#endnote-ref-3)