

# SMPTE OVERVIEW

## Interoperable Master Format



### Introduction

The IMF is a file-based framework for the exchange and processing of multiple content versions (airline edits, special edition, languages...) of the same high-quality finished work (feature, episode, trailer, advertisement, etc) destined for distribution channels worldwide. Specialization of the IMF Framework designed to meet the requirements of specific domains is achieved through the definition of IMF Applications.

Provisions common to all IMF Applications are specified in SMPTE ST 2067-2 ("Core Constraints"), while separate documents contain provisions specific to individual IMF Applications – see Table 2 below.

### Document Roadmap

The IMF Framework and its Applications are specified in the SMPTE 2067 suite of documents, which is organized according to Table 1.

**Table 1. Organization of the SMPTE 2067 Suite of Documents**

| <b>Parts</b>     | <b>Scope</b>   |
|------------------|--|
| <b>1 – 19</b>    | Core specifications generally applicable to all IMF Applications |
| <b>20 – 29</b>   | Related to IMF Application #2                                    |
| <b>30 – 39</b>   | Related to IMF Application #3                                    |
| <b>40 – 49</b>   | Related to IMF Application #4 Cinema Mezzanine                   |
| <b>50 – 59</b>   | Related to IMF Application #5 ACES                               |
| <b>100 – 119</b> | Related to the Output Profile List                               |
| <b>200 - 219</b> | Related to IMF Plug-Ins  |

Table 2 lists the latest versions of the documents of the suite available at the time of publication of this document.

Table 2. Documents of the SMPTE 2067 Suite (Latest Versions)

| Document                        | Title   | Library URL   |
|---------------------------------|---|---|
| <b>ST 2067-2:2020</b>           | Core Constraints  | <a href="https://doi.org/10.5594/SMPTE.ST2067-2.2020">https://doi.org/10.5594/SMPTE.ST2067-2.2020</a>                   |
| <b>ST 2067-3:2020</b>           | Composition Playlist  | <a href="https://doi.org/10.5594/SMPTE.ST2067-3.2020">https://doi.org/10.5594/SMPTE.ST2067-3.2020</a>                   |
| <b>ST 2067-5:2020</b>           | Essence Component   | <a href="https://doi.org/10.5594/SMPTE.ST2067-5.2020">https://doi.org/10.5594/SMPTE.ST2067-5.2020</a>                   |
| <b>ST 2067-8:2013</b>           | Common Audio Labels   | <a href="https://doi.org/10.5594/SMPTE.ST2067-8.2013">https://doi.org/10.5594/SMPTE.ST2067-8.2013</a>                   |
| <b>ST 2067-9:2018</b>           | Sidecar Composition Map                                     | <a href="https://doi.org/10.5594/SMPTE.ST2067-9.2018">https://doi.org/10.5594/SMPTE.ST2067-9.2018</a>                   |
| <b>ST 2067-21:2020</b>          | Application #2E   | <a href="https://doi.org/10.5594/SMPTE.ST2067-21.2020">https://doi.org/10.5594/SMPTE.ST2067-21.2020</a>                 |
| <b>ST 2067-21:2020 AM1:2020</b> | Application #2E Amendment 1:2020                            | <a href="https://doi.org/10.5594/SMPTE.ST2067-21.2020Am1.2020">https://doi.org/10.5594/SMPTE.ST2067-21.2020Am1.2020</a> |
| <b>ST 2067-30:2013</b>          | Application #3  | <a href="https://doi.org/10.5594/SMPTE.ST2067-30.2013">https://doi.org/10.5594/SMPTE.ST2067-30.2013</a>                 |
| <b>ST 2067-40:2016</b>          | Application #4 Cinema Mezzanine                             | <a href="https://doi.org/10.5594/SMPTE.ST2067-40.2016">https://doi.org/10.5594/SMPTE.ST2067-40.2016</a>                 |
| <b>ST 2067-40:2016 AM1:2017</b> | Application #4 Cinema Mezzanine Amendment 1:2017            | <a href="https://doi.org/10.5594/SMPTE.ST2067-40.2016Am1.2017">https://doi.org/10.5594/SMPTE.ST2067-40.2016Am1.2017</a> |
| <b>ST 2067-50:2018</b>          | Application #5 (ACES)                                       | <a href="https://doi.org/10.5594/SMPTE.ST2067-50.2018">https://doi.org/10.5594/SMPTE.ST2067-50.2018</a>                 |
| <b>ST 2067-100:2014</b>         | Output Profile List   | <a href="https://doi.org/10.5594/SMPTE.ST2067-100.2014">https://doi.org/10.5594/SMPTE.ST2067-100.2014</a>               |
| <b>ST 2067-101:2018</b>         | Output Profile List — Common Image Definitions and Macros   | <a href="https://doi.org/10.5594/SMPTE.ST2067-101.2018">https://doi.org/10.5594/SMPTE.ST2067-101.2018</a>               |
| <b>ST 2067-102:2017</b>         | Common Image Pixel Color Schemes                            | <a href="https://doi.org/10.5594/SMPTE.ST2067-102.2017">https://doi.org/10.5594/SMPTE.ST2067-102.2017</a>               |
| <b>ST 2067-103:2021</b>         | Common Audio Definition and Macros                          | <a href="https://doi.org/10.5594/SMPTE.ST2067-103.2021">https://doi.org/10.5594/SMPTE.ST2067-103.2021</a>               |
| <b>ST 2067-200:2018</b>         | Dynamic Metadata for Color Volume Transform (DMCVT) Plug-in | <a href="https://doi.org/10.5594/SMPTE.ST2067-200.2018">https://doi.org/10.5594/SMPTE.ST2067-200.2018</a>               |
| <b>ST 2067-201:2021</b>         | Immersive Audio Bitstream Level 0 Plug-in                   | <a href="https://doi.org/10.5594/SMPTE.ST2067-201.2021">https://doi.org/10.5594/SMPTE.ST2067-201.2021</a>               |

## XML Namespaces and Schema Documents

Table 3 lists the XML namespaces defined by the latest version of the documents of the SMPTE 2067 suite. Any XML Schema Document associated with each namespace, if any, can be retrieved at the namespace URL. Please note that in case of a conflict between schema and the prose in the defining document, the prose takes precedence.

**Table 3. XML Namespaces defined in the SMPTE 2067 Suite (Latest Versions)**

|                          |   |
|--------------------------|---|
| <b>Defining document</b> | <b>ST 2067-2:2020</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/ns/2067-2/2020">http://www.smpte-ra.org/ns/2067-2/2020</a>                                     |
|                          | <a href="http://www.smpte-ra.org/schemas/2067-2/2016/PKL">http://www.smpte-ra.org/schemas/2067-2/2016/PKL</a>                   |
| <b>Defining document</b> | <b>ST 2067-3:2020</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/schemas/2067-3/2016">http://www.smpte-ra.org/schemas/2067-3/2016</a>                           |
| <b>Defining document</b> | <b>ST 2067-9:2018</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/ns/2067-9/2018">http://www.smpte-ra.org/ns/2067-9/2018</a>                                     |
| <b>Defining document</b> | <b>ST 2067-21:2020</b>  |
| Namespaces               | <a href="http://www.smpte-ra.org/schemas/2067-21/2016">http://www.smpte-ra.org/schemas/2067-21/2016</a>                         |
| <b>Defining document</b> | <b>ST 2067-50:2018</b>  |
| Namespaces               | <a href="http://www.smpte-ra.org/ns/2067-50/2017">http://www.smpte-ra.org/ns/2067-50/2017</a>                                   |
|                          | <a href="http://www.smpte-ra.org/ns/2067-50/2017/opl-color-scheme">http://www.smpte-ra.org/ns/2067-50/2017/opl-color-scheme</a> |
| <b>Defining document</b> | <b>ST 2067-100:2014</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/schemas/2067-100/2014">http://www.smpte-ra.org/schemas/2067-100/2014</a>                       |
| <b>Defining document</b> | <b>ST 2067-101:2018</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/ns/2067-101/2018/lanczos">http://www.smpte-ra.org/ns/2067-101/2018/lanczos</a>                 |
|                          | <a href="http://www.smpte-ra.org/ns/2067-101/2018/pixel-decoder">http://www.smpte-ra.org/ns/2067-101/2018/pixel-decoder</a>     |
|                          | <a href="http://www.smpte-ra.org/ns/2067-101/2018/pixel-encoder">http://www.smpte-ra.org/ns/2067-101/2018/pixel-encoder</a>     |
|                          | <a href="http://www.smpte-ra.org/ns/2067-101/2018/scale-macro">http://www.smpte-ra.org/ns/2067-101/2018/scale-macro</a>         |
|                          | <a href="http://www.smpte-ra.org/ns/2067-101/2018/color-schemes">http://www.smpte-ra.org/ns/2067-101/2018/color-schemes</a>     |
|                          | <a href="http://www.smpte-ra.org/ns/2067-101/2018/crop-macro">http://www.smpte-ra.org/ns/2067-101/2018/crop-macro</a>           |
| <b>Defining document</b> | <b>ST 2067-102:2017</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/schemas/2067-102/2017">http://www.smpte-ra.org/schemas/2067-102/2017</a>                       |

**SMPTE OV 2067-0:2021**

|                          |   |
|--------------------------|---|
| <b>Defining document</b> | <b>ST 2067-103:2021</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/schemas/2067-103/2014">http://www.smpte-ra.org/schemas/2067-103/2014</a> |

|                          |   |
|--------------------------|---|
| <b>Defining document</b> | <b>ST 2067-200:2018</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/ns/2067-200/2018">http://www.smpte-ra.org/ns/2067-200/2018</a> |

|                          |   |
|--------------------------|---|
| <b>Defining document</b> | <b>ST 2067-201:2021</b>   |
| Namespaces               | <a href="http://www.smpte-ra.org/ns/2067-201/2019">http://www.smpte-ra.org/ns/2067-201/2019</a> |