



RECOMMENDATION DPP003

CARRIAGE OF USER METADATA IN SMPTE TSP 2121

Abstract

The Interoperable Mastering Format (IMF) makes provisions for some mandatory and some optional user-provided metadata. Adopters of IMF in the broadcast and online distribution industry may require additional metadata to be carried with the bundle.

This DPP Recommendation defines usage of common user metadata elements and their carriage in SMPTE TSP 2121-1 IMF Packages. In particular, it addresses the use-case of carrying metadata intended for downstream packaging into an AMWA AS-11 file.

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1 INTRODUCTION

This introductory section is informative and is designed to help the reader understand the concepts presented in the normative sections.

1.1 Overview

The Interoperable Mastering Format provides the foundations to enable a step-change in the efficiency of workflows for versioning content. The DPP has been delivering a programme of works under the banner of *IMF for Broadcast & Online*, including the publication of SMPTE TSP 2121 IMF Application DPP.

Metadata is crucial to an efficient content supply chain, and there are many well-founded arguments on aspects of its use. There are probably as many different implementations of metadata workflows and frameworks as there are organisations involved in the media supply chain. While it may never be possible to have every stakeholder in the global media industry agree on all aspects of metadata and how to handle it, in order to realise the benefits of IMF adoption, some commonality on metadata is required.

This document provides a protocol for the carriage of user metadata in IMF. This framework will allow end to end automation within broadcast and online workflows whilst also accounting for legacy metadata requirements. A special case of this requirement is the expectation to conform a CPL to output an 'Air Ready Master', such as an AMWA AS-11 file, in which the metadata is embedded in the output asset.

1.2 Metadata Provisions in SMPTE ST 2067

IMF, as defined in SMPTE ST 2067, provides two locations for the inclusion of user-provided metadata for a composition within an IMF package¹.

1. Composition Playlist
2. Sidecar Files

1.2.1 Control File Metadata

SMPTE ST 2067-3:2016 specifies a number of metadata fields in the Composition Playlist (CPL) Prologue, of which some are mandatory and some are optional.

Some descriptive metadata may be carried in specific CPL elements such as the Segmentation or the Multi-Channel Audio (MCA) labels. Provision is made to link CPL to external metadata registers from local 'house numbers' to global systems such as EIDR, ISAN etc. Other files such as the Package List (PKL) have similar provisions for metadata. The CPL also provides for "Extension Properties" which allow additional elements to be added by any user.

1.2.2 Sidecar File Metadata

A "sidecar" is an additional file which supplements the contents of the IMF Package (IMP). Any file can be included in an IMF package via a Sidecar Composition Map. Such a file may well be a metadata document, e.g. in the form of an XML structure. It

¹ At the time of publication, a project is under way in the DPP to facilitate a third mechanism of metadata carriage, including time-variant metadata which is not currently catered for in SMPTE ST 2067. The release of that mechanism will likely lead to a revision to this Recommendation.



should be noted that SMPTE ST 2067-9:2018 states that such a Sidecar “should not contain information essential to the processing of the Composition”.

2 NORMATIVE REFERENCES

This documents contain provisions, which, through reference in this text, constitute provisions of this DPP Recommendation. At the time of publication, the editions indicated were valid.

- SMPTE ST 2067-3:2016 Interoperable Master Format — Composition Playlist
- SMPTE ST 2067-2:2016 Interoperable Master Format — Core Constraints
- SMPTE ST 2067-8:2013 Interoperable Master Format — Common Audio Labels
- SMPTE ST 2067-9:2018 Interoperable Master Format — Sidecar Composition Map
- SMPTE ER 2121-2:2018 Business Requirements for DPP Technical Specifications
- SMPTE TSP 2121-1:2018 Interoperable Master Format — Application DPP (ProRes)

3 DEFINITIONS

The following terms are used in this document as defined here.

Term	Definition
Metadata	For the purposes of this document, this term describes any user-provided information about a bundle, timeline, virtual track, or essence asset, which the commissioning body requires for delivery.
Bundle	For the purposes of this document, this term describes the collection of all the media, metadata and control files of a component-based delivery. Several IMF Packages may comprise a bundle, but it is also possible that an IMF Package contains items for more than one bundle.



4 PLACEMENT OF COMMON METADATA IN TSP 2121

Duplication of metadata causes great risk to reliable and stable workflows. As outlined in section 1.2, it is possible to place metadata in more than one place within an IMF package. This section defines authoritative locations for each item of metadata to safeguard interoperability. The location of metadata elements defined here is to be taken as the canonical location².

Note that this Recommendation does not declare whether an element is optional or mandatory. Where these parameters are not defined in TSP 2121-1, they shall be defined in each organisation's Delivery Requirements.

Informative: Metadata required for conversion to AMWA AS-11 files:

Unless a metadata element is declared "N/A" in the column "Maps to AS-11 Element", these elements are required for the creation of any valid AS-11 file. Where a field in this column is preceded by "(M)" this element is only required for the creation of AS-11 files of the type X5/X6.

4.1 Namespace Qualifiers

The namespace qualifiers for the schema described in the Metadata Element Reference table (section 4.2) shall be used:

Qualifier	Value
dpp-meta	http://schema.thedpp.com/imf/cpl/dpp-meta/2016/
xs	http://www.w3.org/2001/XMLSchema

² Note that this Recommendation does not restrict metadata to the elements proposed. It is likely that implementation experience will lead to revision of this document with additional elements. Implementers who find use-cases for additional elements are invited to notify the DPP of those elements. We can then propose these for discussion with our stakeholders and possible inclusion in a future revision.

4.2 Metadata Element Reference

IMF Metadata Element	Location, Namespace	Use Case	Maps to AMWA AS-11 Elements		
			UK DPP HD	X1, X9	X5, X6
ContentVersion "Id"	CPL ST 2067-3	House Number, EIDR, ISAN, etc.	UKDPP_Production_Number	ID Value	ID Value
ContentVersion "LabelText"	CPL ST 2067-3	Text Identifier for ContentVersion "Authority"	n.a.	ID Type	ID Type
ContentVersion "Authority"	CPL E.P. dpp-meta	URN to resolve ContentVersion "ID"	n.a.	ID Authority	ID Authority
EpisodeTitle	CPL ST 2067-3	Editorial Version, e.g. "Texted" or Title Number	AS_11_Episode_Title_Number	Title 3 (Version)	Title 3 (Version)
IssueDate	CPL ST 2067-3	Date of CPL creation	UKDPP_Completion_Date	Completion_Date	Completion_Date
Creator	CPL ST 2067-3	This is often used by products to name mastering system	n.a.	n.a.	n.a.
Issuer	CPL ST 2067-3	Programmes: Content Creator, e.g. "ITV GE" Ads/Commercials: Supplier, e.g. Adstream, IMD	UKDPP_Originator	Originator	Originator
ContentOriginator	CPL ST 2067-3	Mastering Facility, e.g. "The Farm"	UKDPP_Distributor	Distributor	Distributor



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IMF Metadata Element	Location, Namespace	Use Case	Maps to AMWA AS-11 Elements		
			UK DPP HD	X1, X9	X5, X6
ContentTitle	CPL ST 2067-3	e.g. "Coral Reef"	AS_11_Programme_Title	Title_2 (Episode Title)	Title_2 (Episode Title)
SeriesTitle	CPL E.P. dpp-meta	e.g. "Good Omens"	AS_11_Series_Title	Title_1 (Series Title)	n.a.
ContentKind	CPL ST 2067-3	Programmes: e.g. "Episode"	n.a.	n.a.	Material Type
ProductPlacement	CPL E.P. dpp-meta	1/0 (for Yes/No)	UKDPP_Product_Placement	Product_Placement	Product_Placement
SigningPresent	CPL E.P. dpp-meta	Enumeration: "SigningPresent" "SigningNotPresent"	UKDPP_Signing_Present	Signing_Present	Signing_Present
SigningType	CPL E.P. dpp-meta	Enumeration: "Signer with Programme" "Signer only"	UKDPP_Signing_Present (enumeration)	Signing_Type	Signing_Type
SigningLanguage	CPL E.P. dpp-meta	e.g. "BSL", "Makathon" etc.	UKDPP_Sign_Language (enumeration)	Signing_Language	Signing_Language
OpenCaptions_Present	CPL E.P. dpp-meta	Enumeration: "OpenCaptionsPresent" "OpenCaptionsNotPresent"	UKDPP_Open_Captions_Present	Open_Captions_Present	Open_Captions_Present



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IMF Metadata Element	Location, Namespace	Use Case	Maps to AMWA AS-11 Elements		
			UK DPP HD	X1, X9	X5, X6
CaptionType	CPL E.P. dpp-meta	Enumeration: "Translation" "Hard of hearing"	Open_Captions_Present (enumeration)	Open_Captions_Type	Open_Captions_Type
CaptionsLanguage	CPL E.P. dpp-meta	Open Captions Language Code e.g. "EN"	Open_Captions_Language	Open_Captions_Language	Open_Captions_Language
Synopsis	CPL E.P. dpp-meta	Short Synopsis (250 characters)	UKDPP_Synopsis	Synopsis	n.a.
Genre	CPL E.P. dpp-meta	e.g. "Documentary"	UKDPP_Genre	Genre	n.a.
CopyrightYear	CPL E.P. dpp-meta		UKDPP_Copyright_Year	Copyright_Year	n.a.
Language	CPL - Locale List ST 2067-3	Programme Language, e.g. 'EN'	AS_11_Primary_Audio_Language	n.a.	n.a.
Region	CPL - Locale List ST 2067-3	Region of intended distribution, e.g. 'UK'	n.a.	n.a.	n.a.
ProgramHasText	CPL E.P. dpp-meta	Enumeration: "ProgrammeHastext" "ProgrammeHasNoText"	UKDPP_Programme_Has_Text	Programme_Has_Text	n.a.
TextedLanguage	CPL E.P. dpp-meta	Language of texted elements	UKDPP_Programme_Text_Language	Programme_Text_Language	n.a.



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IMF Metadata Element	Location, Namespace	Use Case	Maps to AMWA AS-11 Elements		
			UK DPP HD	X1, X9	X5, X6
Agency-ContentMaturityRating	CPL - Locale List ST 2067-3		n.a.	n.a.	n.a.
Rating-ContentMaturityRating	CPL - Locale List ST 2067-3		n.a.	n.a.	n.a.
DPPSpecIdType	CPL E.P. dpp-meta	DPP TP 2121 namespace, e.g. http://www.digitalproductionpartnership.co.uk/schema/imf/TS P2121-1/2018	n.a.	n.a.	n.a.
V-EssenceDescriptor-ImageAspectRatio	CPL - EssenceDescriptor	e.g. 1:78.1 / 2.00:1 / 2.35:1	UKDPP_Picture_Ratio	Picture_Ratio	Picture_Ratio
MCATagSymbol	CPL - EssenceDescriptor	SMPTE Soundfield Label e.g. 'sg51'	(used to aid mapping of sound-field tracks to MXF)	(carried over to AS-11 X family)	(carried over to AS-11 X family)
MCATagName	CPL - EssenceDescriptor	SMPTE Tag Name e.g. '5.1'	(used to aid mapping of sound-field tracks to MXF)	(carried over to AS-11 X family)	(carried over to AS-11 X family)
RFC5646SpokenLanguage	EssenceDescriptor	RFC... e.g. 'en'	(may be used to inform UKDPP_Secondary_Audio_Language)	(carried over to AS-11 X family)	(carried over to AS-11 X family)
MCATitle	CPL - EssenceDescriptor	Descriptive Label e.g. "Corals Post Watershed AD"	n.a.	(carried over to AS-11 X family)	(carried over to AS-11 X family)
MCATitleVersion	CPL - EssenceDescriptor	Version number of this audio track	n.a.	(carried over to AS-11 X family)	(carried over to AS-11 X family)



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IMF Metadata Element	Location, Namespace	Use Case	Maps to AMWA AS-11 Elements		
			UK DPP HD	X1, X9	X5, X6
MCAAudioContentKind	CPL - EssenceDescriptor	SMPTE Label, e.g. 'PRM'	(used to aid mapping of sound-field tracks to MXF)	(carried over to AS-11 X family)	(carried over to AS-11 X family)
MCAAudioElementKind	CPL - EssenceDescriptor	e.g. '5.1.'	n.a.	(carried over to AS-11 X family)	(carried over to AS-11 X family)
Marker FFBT - First Frame of Bars and Tones	CPL- MarkerSequence	FFBT	UKDPP_Line_Up_Start	Line_Up_Start	Line_Up_Start
Marker LFBT - Last Frame of Bars and Tones	CPL- MarkerSequence	LFBT	n.a.	n.a.	n.a.
Marker FFHS - First Frame of Head Slate	CPL- MarkerSequence	FFHS	UKDPP_Ident_Clock_Start	Ident_Clock_Start	Ident_Clock_Start
Marker LFHS - Last Frame of Head Slate	CPL- MarkerSequence	LFHS	n.a.	n.a.	n.a.
Marker FFOC - First Frame of Composition	CPL- MarkerSequence	FFOC	(used to align MXF timecode to 10:00:00:00 here)	(used to align MXF timecode to 10:00:00:00 here)	(used to align MXF timecode to 10:00:00:00 here)
Marker LFOC - Last Frame of Composition	CPL- MarkerSequence	LFOC	n.a.	n.a.	n.a.
Marker FFXM - First Frame of Textless Elements	CPL- MarkerSequence	FFXM	(used to inform UKDPP_Total_Number_of_Parts & Textless_Elements_Exist)	n.a.	n.a.



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IMF Metadata Element	Location, Namespace	Use Case	Maps to AMWA AS-11 Elements		
			UK DPP HD	X1, X9	X5, X6
Marker LFXM – Last Frame of Textless Elements	CPL- MarkerSequence	LFXM	n.a.	n.a.	n.a.
AnnotationAudio	CPL E.P. dpp-meta	e.g. "Audio very noisy"	UKDPP_Audio_Comments	Audio_Comments	Audio_Comments
AnnotationVideo	CPL E.P. dpp-meta	e.g. "Coding Artefacts in original"	UKDPP_Video_Comments	Video_Comments	Video_Comments
AnnotationTimedText	CPL E.P. dpp-meta	e.g. abbreviations used throughout	n.a.	n.a.	n.a.
Advertiser	CPL E.P. dpp-meta		n.a.	n.a.	Advertiser
Brand	CPL E.P. dpp-meta		n.a.	n.a.	Brand
Campaign	CPL E.P. dpp-meta		n.a.	n.a.	Campaign
Version	CPL E.P. dpp-meta		n.a.	n.a.	Version
ContactEmail	CPL E.P. dpp-meta	For AS-11 programme output this expects the email of the distributor to the broadcaster	UKDPP_Contact_Email	Contact_Email	n.a.



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IMF Metadata Element	Location, Namespace	Use Case	Maps to AMWA AS-11 Elements		
			UK DPP HD	X1, X9	X5, X6
ContactTelephoneNumber	CPL E.P. dpp-meta	For AS-11 programme output this expects the phone number of the distributor to the broadcaster	UKDPP_Contact_Telephone_Number	Contact_Telephone_Number	n.a.
"RDD6"	Sidecar XML	Where a surround sound-field is delivered with RDD6 metadata, the metadata shall be carried as a sidecar XML. Work is ongoing to define best practice in labeling and linking into CPL.	(to be mapped into MXF)	(to be mapped into MXF)	(to be mapped into MXF)
QC Reports	Sidecar XML	QC reports may be carried as a sidecar file. Work is ongoing to define best practice in labelling and linking them into CPL.	(some or all of the results may be carried forward into the MXF)	(some or all of the results may be carried forward into the MXF)	(some or all of the results may be carried forward into the MXF)

5 XML FORMATTING

5.1 Sidecar XML format

Sidecar files carrying metadata shall be authored conforming to the provisions of <https://www.w3.org/2001/XMLSchema-instance>

5.2 Sidecar File Naming

Development is underway for a general practice of linking sidecar files to CPL tracks, such as QC reports or RDD6 metadata. Until the work is complete, the following workaround applies:

Sidecar XML files included with an IMF package (IMP) should be named or annotated in such a way that they can easily be associated with the intended CPL by an operator.

5.3 Namespaces

Whether carried in the CPL or in a Sidecar file, metadata is stored in XML. All XML elements need to be linked to a URL commonly referred to as the “namespace”. For use in TSP 2121, the namespace URL for any elements which are designed to be used by third parties in the supply chain should resolve to a web page from which the associated schema can be accessed.

6 APPENDICES

6.1 Appendix A – dpp-meta Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Copyright (c), DPP Ltd. All rights reserved. Redistribution and use in source and binary forms, with
or without modification, are permitted provided that the following conditions are met: 1.
Redistributions of source code must retain the above copyright notice, this list of conditions and the
following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this
list of conditions and the following disclaimer in the documentation and/or other materials provided with
the distribution. 3. Neither the name of the copyright holder nor the names of its contributors may be
used to endorse or promote products derived from this software without specific prior written permission.
THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED
WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A
PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR
ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR
TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE,
EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. -->

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notice; and (b) retrieve the recent versions of this document,
(c) highlight and explain any modification they make to this document; and (d) report issues to the DPP
at tech@thedpp.com . -->

<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://schema.thedpp.com/imf/cpl/dpp-meta/2019/" elementFormDefault="qualified"
attributeFormDefault="unqualified" xmlns:dpp-meta="http://schema.thedpp.com/imf/cpl/dpp-meta/2019/">
<xs:element name="DPPMetadataType">
<xs:complexType>
<xs:sequence>
<xs:element minOccurs="0" name="DPPSpecIdType">
<xs:simpleType>
<xs:restriction base="xs:string">
<xs:enumeration
value="http://www.digitalproductionpartnership.co.uk/schema/imf/TSP2121-1/2018"/>
<xs:enumeration value="http://www.smpte-ra.org/schemas/2067-21/2016"/>
</xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="SeriesTitle"/>
<xs:element name="EpisodeTitle"/>
<xs:element name="Synopsis"/></xs:element>
<xs:element name="Genre"/></xs:element>
<xs:element name="CopyrightYear" type="xs:gYear"/></xs:element>
<xs:element name="ProductPlacement" type="xs:boolean">
<xs:annotation>
<xs:documentation xml:lang="en">
0 = no Product Placement present
1 = contains Product Placement
</xs:documentation>
</xs:annotation>
</xs:element>
<xs:choice minOccurs="1" maxOccurs="1">
<xs:element name="SigningNotPresent">
<xs:complexType/>
</xs:element>
<xs:element name="SigningPresent" type="dpp-meta:SigningType">
<xs:annotation>
<xs:documentation xml:lang="en">The presence of this element indicates
that the Main Image Track contains signed interpretation.
Where signing is delivered via Auxiliary Image Track,
```



```

        the flag needs to be set by the compositing processor!
    </xs:documentation>
</xs:annotation>
</xs:element>
</xs:choice>
<xs:choice minOccurs="1" maxOccurs="1">
  <xs:element name="OpenCaptionsNotPresent">
    <xs:complexType/>
  </xs:element>
  <xs:element name="OpenCaptionsPresent" type="dpp-meta:OpenCaptionsType">
    <xs:annotation>
      <xs:documentation xml:lang="en">The presence of this element indicates
        that the Main Image Track contains signed interpretation.
        Where signing is delivered via Auxiliary Image Track,
        the flag needs to be set by the compositing processor!
      </xs:documentation>
    </xs:annotation>
  </xs:element>
</xs:choice>
<xs:choice minOccurs="1" maxOccurs="1">
  <xs:element name="ProgrammeHasNoText">
    <xs:complexType/>
  </xs:element>
  <xs:element name="ProgrammeHasText" type="dpp-meta:TextedType">
    <xs:annotation>
      <xs:documentation xml:lang="en">The presence of this element indicates
        that the Main Image Track contains texted elements.
      </xs:documentation>
    </xs:annotation>
  </xs:element>
</xs:choice>
<xs:element name="AnnotationAudio" type="xs:string" minOccurs="0"/>
<xs:element name="AnnotationVideo" type="xs:string" minOccurs="0"/>
<xs:element name="AnnotationTimedText" type="xs:string" minOccurs="0"/>
<xs:element name="Advertiser" type="xs:string" minOccurs="0"/>
<xs:element name="Brand" type="xs:string" minOccurs="0"/>
<xs:element name="Campaign" type="xs:string" minOccurs="0"/>
<xs:element name="EmailAddress" type="xs:string" minOccurs="0"/>
<xs:element name="ContactTelephoneNumber">
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:pattern value="\{0-9\}\{3\}\ [0-9]\{3\}-[0-9]\{4\}" />
    </xs:restriction>
  </xs:simpleType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:complexType name="SigningType">
  <xs:sequence>
    <xs:element name="SigningLanguage" type="xs:language" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation xml:lang="en"> A code to identify the main language and / or
          format of the visible (in-vision) signing contained in the programme.
        </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="SigningType" type="dpp-meta:SigningType" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation xml:lang="en"> A code to identify the main language used in
          the open captions. </xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="OpenCaptionsType">
  <xs:sequence>
    <xs:element name="OpenCaptionsLanguage" type="xs:language" minOccurs="1" maxOccurs="1">

```

```

        <xs:annotation>
          <xs:documentation xml:lang="en"> A code to identify the main language of the open captions
used.
        </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="OpenCaptionsType" type="dpp-meta:OpenCaptionsType" minOccurs="1"
maxOccurs="1">
        <xs:annotation>
          <xs:documentation xml:lang="en"> A code to identify the nature of
the open captions used. </xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="TextedType">
    <xs:sequence>
      <xs:element name="TextLanguage" type="xs:language" minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation xml:lang="en"> A code to identify the main language and / or
format of the visible text contained in the programme.
        </xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:simpleType name="SigningType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Composited">
        <xs:annotation>
          <xs:documentation xml:lang="en"> Indicates that the programme contains visible
(in-vision) signing along with the rest of the programme content
        </xs:documentation>
        </xs:annotation>
      </xs:enumeration>
      <xs:enumeration value="Signer only">
        <xs:annotation>
          <xs:documentation xml:lang="en"> Indicates that the programme contains visible
(in-vision) signing only, with no other programme content
        </xs:documentation>
        </xs:annotation>
      </xs:enumeration>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="OpenCaptionsType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Translation">
        <xs:annotation>
          <xs:documentation xml:lang="en"> Indicates that the programme contains visible
(in-vision) captions which translate the spoken words into local language.
        </xs:documentation>
        </xs:annotation>
      </xs:enumeration>
      <xs:enumeration value="Hard of hearing">
        <xs:annotation>
          <xs:documentation xml:lang="en"> Indicates that the programme contains visible
(in-vision) captions which transcribe the spoken words for the hard of hearing.
        </xs:documentation>
        </xs:annotation>
      </xs:enumeration>
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="dpp-meta">
    <xs:sequence>
      <xs:element name="Authority" type="xs:anyURI" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
</xs:schema>

```

6.2 Appendix B – CPL Example

```
<?xml version="1.0" encoding="UTF-8"?>
<CompositionPlaylist xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.smpte-
ra.org/schemas/2067-3/2016">
  <Id>urn:uuid:e33b7575-16a2-4461-b207-fc64bf113df8</Id>
  <IssueDate>2019-06-12T14:49:07-00:00</IssueDate>
  <Issuer>DPP Lab</Issuer>
  <Creator>DPP Lab</Creator>
  <ContentOriginator>Unknown</ContentOriginator>
  <ContentTitle>DPP IMF for Advertisement Sample</ContentTitle>
  <ContentKind>Test</ContentKind>
  <ContentVersionList>
    <ContentVersion>
      <Id>urn:fakeitv:BD0-3661-FO</Id>
      <LabelText></LabelText>
      <dpp-meta:Authority xmlns:dpp-meta="http://schema.thedpp.com/imf/cpl/dpp-meta/2019/">fake-
itv.com/housenumbers/2019</dpp-meta:Authority>
    </ContentVersion>
    <ContentVersion>
      <Id>urn:eidr:10.5240:0CEC-3E15-7A54-6893-A8D9-6</Id>
      <LabelText>EIDR Abstraction</LabelText>
    </ContentVersion>
  </ContentVersionList>
  <CompositionTimecode>
    <TimecodeDropFrame>0</TimecodeDropFrame>
    <TimecodeRate>25</TimecodeRate>
    <TimecodeStartAddress>00:00:00:00</TimecodeStartAddress>
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Version Control:

Version	Date	Notes
V1.0	16-07-2019	Initial release

Document Accuracy:

Every attempt has been made to ensure that the information contained in this document is accurate. Errors in this document should be reported to the DPP on info@thedpp.com

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