

**DPP Compliance Programme**  
**AMWA AS-11 DPP**  
**Product Test Report** (See note 5, on next page)  
 DPP Lab, BBC R&D, Centre House, 56 Wood Lane, W12 7SB, UK

OEM	Avid
Product (Note 6)	Media Composer
Product Version (Note 6)	MC 7.0.4.1 + AMA AS-11 v.1.0.3 plugin.
Test Report Date	12 November 2014

<b>OVERALL TESTING RESULT</b>	<b>PASS</b>
-------------------------------	-------------

HD Test Artifacts Used	
Writer Functionality	Reader Functionality
File Conformance Test Suite	File Reader Tests
(Note 1, on next page)	(Note 2, on next page)

<b>F1.1</b>	<b>R1.0</b>
-------------	-------------

SD Test Artifacts Used	
Writer Functionality	Reader Functionality
File Conformance Test Suite	File Reader Tests
(Note 1, on next page)	(Note 2, on next page)

<b>Not Tested</b>	<b>Not Tested</b>
-------------------	-------------------

GENERIC FUNCTION CATEGORIES		Functionality Tested
<b>File Writers</b>	Products that <b>write</b> AS-11 UK DPP HD files. Tests are carried out to determine whether a file written by a device conforms to the AMWA AS-11 UK DPP HD Shim v1.1 as defined by the rules for conformance [available at the link below], as well as the requirements for Descriptive Metadata.  <a href="http://www.amwa.tv/projects/rules/as-11/">http://www.amwa.tv/projects/rules/as-11/</a>	<b>Tested</b>
<b>File Readers - Players</b>	Products that have the ability to read AS-11 DPP HD files and then <b>play</b> the contents of the file to a video and audio monitor. These devices may additionally include the ability to display Timecode, Descriptive Metadata and Programme Parting/Segmentation information. It is not a requirement that products should have all possible functionality. Products are only tested for the features that they have.	<b>Tested</b>
<b>File Readers - Transcoders</b>	Products that have the ability to read AS-11 DPP HD files and then <b>transcode</b> the contents to a different format. Transcoded output files are then tested following the Player testing procedure.	<b>Tested</b>

AMWA CERTIFICATION AUTHORITY
The <b>AMWA Certification Authority</b> uses these TEST REPORTS as the basis for awarding Certification. Please see the web page below.  <a href="http://www.amwa.tv/certification">http://www.amwa.tv/certification</a>

Template version	v1.0	09 September 2014	Release version
------------------	------	-------------------	-----------------

NOTES	
<b>Note 1</b>	<b>Writer Functionality, File Conformance Test Suite:</b> This identifies the tests carried out on AS-11 DPP <b>OUTPUTS</b> of the product and describes the file conformance tests used. This document is available from the DPP Compliance page on the DPP website.
<b>Note 2</b>	<b>Reader Functionality, File Reader Tests:</b> This identifies the File Reader Test procedure, including the list of tests carried out by the OEM on their own product, with the results to be noted. This document is available from the DPP Compliance page on the DPP website.
<b>Note 3</b>	<b>Input media used:</b> For <b>Writer</b> tests this identifies the <b>INPUT MEDIA</b> files and / or SDI and metadata sources to be used for the creation of output AS-11 DPP files specified.
<b>Note 4</b>	<b>Input AS-11 DPP files used:</b> For <b>Reader</b> tests this identifies the a set of AS-11 DPP test files that are used as <b>INPUTS</b> to the product.
<b>Note 5</b>	This <b>Product Test Report</b> is also known as the <b>TEST REPORT</b> for the purposes of applying for AMWA Certification.
<b>Note 6</b>	The test results (and any Certificate ultimately issued) will be tied to the version of the product tested. This means that an actual 'release' of a product must be submitted for testing.
<b>Note 7</b>	Certain faults are classed as 'warnings'; certain faults are classed as 'errors' but result in 'Pass with Conditions' rather than 'Fail'. The overall test result takes the worst case result from individual tests. That is, if any individual test result is a 'Fail' then the overall test result is a 'Fail'.

TEST PROCEDURE - Overview	
<b>Writer Test Procedure</b>	<p><b>Stage 1:</b> Once signed up to the DPP Compliance Programme, the OEM should send some representative file samples to the DPP lab to be tested. The File Conformance Test Report then shows how they performed against the conformance criteria. Individual tests <i>may</i> have one of four outcomes: <b>PASS</b>, <b>WARNING</b>, <b>PASS with CONDITIONS</b>, and <b>FAIL</b>. Some tests may just have <b>PASS</b> or <b>FAIL</b>. If the initial files tested are a 'Fail' then new files will need to be submitted once the product has been updated with a fix for the issue. Once the files are a 'Pass', or 'Pass with Conditions' then the manufacturer can move to step 2 and formally request that the lab test the product at Certification Level.</p> <p><b>Stage 2:</b> The OEM will need to provide the lab with additional information about the product's functionality and operation using the Initial OEM Product Submission Form. The Lab, in discussion with the OEM, will then agree the method(s) by which the product being tested will create files for Certification Level Testing. Once stage 2 testing has been completed and the Product Test Report (showing Pass or Pass with Conditions) is issued to the OEM. They can then go ahead and apply for Certification from the AMWA. Please note: If the device also includes '<b>Reader</b>' functionality then this will also require a 'Pass' or 'Pass with Conditions', in order for the Product Test Report to be issued.</p>
<b>Reader Test Procedure</b>	File Reader testing is primarily 'self-serve'. The test procedure may be carried out by the OEM at any time. It principally involves downloading the set of AS-11 UK DPP HD Reader test files and asking the product to read each one, and the OEM recording the results. The ability to do this is assessed by The DPP Test Lab against set criteria which include checks for player functionality, and transcode functionality if present. (This is subject to change as new files and tests are included). A declaration form is to be completed and the results returned to the DPP Lab. Results are verified and if they are a 'Pass' or 'Pass with Conditions' a Product Test Report is issued to the OEM. Please note: If the device also includes ' <b>Writer</b> ' functionality then this will also require a 'Pass' or 'Pass with Conditions', in order for the Product Test Report to be issued.
<b>Application to AMWA</b>	Once a Product Test Report has been issued by the DPP, an OEM may follow the AMWA procedure to apply for Certification.

PASS or PASS WITH CONDITIONS	
<b>What it means</b>	The capability of version X of product Y to read and / or write AMWA AS-11 UK DPP HD Shim files has been tested by the DPP Compliance Lab and all the tests performed (as referenced in this report) under the specified "realistic" operating conditions have either "Passed" or "Passed with Conditions".
<b>What it DOES NOT mean</b>	<ul style="list-style-type: none"> <li>a) All files produced by a Writer are always fully conformant to the "AMWA AS-11 UK DPP" Shims</li> <li>b) Files from Writers will always work correctly with Readers</li> <li>c) Files from Writers will never be rejected by UK Broadcasters</li> <li>d) All modes and features of the product have been tested</li> </ul>



Overall WRITER Result	PASS
-----------------------	------

**WRITER SUBMISSION FORM - For DPP Compliance Testing of PRODUCT to Certification Level**

The OEM is to complete the following sheet and submit it to the DPP Compliance Programme, together with any output files, for testing to be undertaken.

<b>COMPLETING THE FORM</b>	All required information should be detailed below. Please see the notes section below and also comments (In blue) for guidance on what is required. Please adjust the size of fields as necessary.
----------------------------	--

<b>GENERAL</b>	OEM Name	Avid Technology
	Product Name	Media Composer
	Product Version	7.0.4.1

<b>DEVICE OPERATION</b>	Can the product be used to <b>Write</b> AS-11 DPP HD files?	Y/N Yes
	Can the product be used to <b>Read</b> AS-11 DPP HD files?	Y/N Yes
	Give details of the <b>range of product features</b> that were used in writing these test files: from inputs used through to output being produced; e.g. ingest; transcode; edit metadata. Details for each individual file submitted should be provided in the table below.	Output of AS-11 files using DPP sources linked via AMA, (AVID_HD_A case), or Consolidate/Transcode from AMA linked files to OPAtom, (AVID_HD_B and AVID_HD_C cases as outlined below). Spanned markers were used to define program segmentation and metadata was entered manually before export.
	For these product features, please detail the <b>capabilities</b> , the and any restrictions on the capabilities	Linking to files using AMA provides a direct link to the essence and metadata within the original file. Users can then edit with the AMA files or have the option to Consolidate or Transcode to native OPAtom files (AVCI or other compressions). Once editing is completed, the user can then apply a Spanned Marker (marker with duration) to the TC1 track to define Program Segmentation. The user can then select AMA File Export, AS-11, and then select the UK DPP HD or SD shim, followed by entering required and optional AS-11 core/DPP descriptive metadata. Entries can be saved in a profile for automatically populating the fields for future exports. Clicking Save will export the file to the specified directory on the file system.

<b>CONFIGURATION</b>	Details of product configuration in order to use the features: for example, output settings.	A user can run in Media Composer on PC or Mac in software-only mode or with HW (EOM or 3rd party) for monitoring/output beyond the host machine. Files submitted for this report were created on an HP z820/16gb/Win7 using Media Composer 7.0.4.1 and the AMA AS-11 v.1.0.3 plugin. It's important to note that 7.0.4.1 ships with version 1.0.2 of the AS-11 plugin and the plugin was updated in order to create compliant single essence MXF partitions. The AS-11 1.0.3 plugin will be available for 7.0.4.1 users and will be included with installers for all 7.x builds going forward.
	Sufficient information must be provided to allow a configuration to be replicated by the test lab.	
	If necessary any detailed configuration settings could be attached as an appendix to this report	

<b>AS-11 DPP FILES</b>		List all AS-11 DPP MXF files submitted for testing, with details?					<i>DPP LAB USE Result: P, C, W, F</i>
New file name	Duration of file (hh:mm:ss:ff)	Number and duration of parts (Segmentation)	Number of audio channels	Source of DPP metadata	Source media used (DPP or OEM supplied in brackets)	How you should make the file: Product features used to produce the file	
AVID_HD_A.mxf	Approx 10 mins	Single	16	Writer Test Input DM - A	<b>DPP_Writer_Test_Input_A.mov</b> (DPP)	Input media is via <b>AMA link</b> to source file, DM text or XML I/p if possible, otherwise manual (please say), complete T/L is from input file [RM_Avid: File output was based on AMA linked sources using the Quicktime AMA Plugin. Metadata was entered manually]	PASS
AVID_HD_B.mxf	Approx 10 mins	2 parts	16	Writer Test Input DM - B	<b>DPP_Writer_Test_Input_B.mov</b> (DPP) for the first and second parts of the finished programme.	Input media is via <b>AMA consolidate</b> (to OPAtom) to source file, DM Manual i/p, T/L to be built by edit product, segmentation timing as per DM [Note: Use the DM set B to identify the part breaks (segmentation) and build the programme on the timeline with local black/ident <b>added</b> between parts.] [RM_Avid: File output was based on Consolidated ProRes OPAtom media from AMA linked sources using the Quicktime AMA Plugin. B&T(GLITZ) & Slate information built locally. Metadata was entered manually]	PASS

AVID_HD_C.mxf	Approx 30 mins	Single	4	Any. Manually enter as appropriate.	<p>(1) <b>DPP_Writer_Test_Input_C.mov</b> (DPP) for the first part of the timeline, and then</p> <p>(2) <b>AS11_DPP_HD_EXAMPLE_3</b> (DPP, from the reader test set of files) for the next part of the timeline, then:</p> <p><b>Repeat this sequence up to about 30 mins programme duration.</b> [see details of TCs in next cell]</p>	<p>DM Manual i/p, AV from multiple files as listed and AMA accessed as below, T/L built by edit product, as follows:</p> <p>Use input media file (1) <b>DPP_Writer_Test_Input_C.mov</b> via <b>AMA consolidated</b> (to OPAtom), for first 4 mins of output programme, and then use the input media file (2) <b>AS11_DPP_HD_EXAMPLE_3</b> via <b>AMA transcode</b> to <b>DNxHD 120</b>, for the next 2 mins of output programme, from the in point at <b>10:06:44:15</b> in the source file.</p> <p><b>Repeat this sequence up to about 30 mins programme duration.</b> [Note: Local black/ident added between parts.] [RM_Avid: File output was based on Consolidated ProRes OPAtom media from AMA linked sources using the Quicktime AMA Plugin (Input C) and DNxHD 120 by transcoding originally AMA linked MXF AVCI media (EXAMPLE_3). Metadata was entered manually]</p>	PASS
---------------	----------------	--------	---	-------------------------------------	---	---	------

NOTES	
<b>Writer Test Procedure</b>	<p>Tests should use the equipment under realistic operational conditions to produce DPP files.</p> <p>The Lab will test that common workflows for the particular equipment under test are capable of producing valid DPP files.</p> <p>We're not out to trick equipment into producing non-conformant files, nor are we interested in testing every possibly configuration a piece of equipment might have.</p> <p>Equipment is not required to produce all allowed variants of AS-11 DPP files.</p> <p>The test Lab is not part of the QA process for product development.</p> <p>We're not testing the equipment's ability to analyse and validate its input.</p> <p>While we encourage OEMs to produce stable equipment that copes well in the presence of faulty input, we're not testing that here. As such, all input artefacts (audiovisual essence, metadata values) will conform to the relevant specifications.</p>

<b>Input artefacts</b>	Different types of equipment will require different types of input.
	Using different input as stimulus will also test different aspects and workflows within the same equipment.
	<b>Input content (files) will be provided by the Lab, as shown above</b>
	Content will be provided in a variety of formats intended to represent likely operational inputs. Not all equipment is expected to utilise all available input artefacts. The variety on offer is designed to support the range of equipment submitted for testing and to exercise the various aspects of that equipment. For instance, a transcoder might behave differently if asked to produce a DPP file from MPEG2 essence, than if asked to do the same from AVC-Intra essence.
	Descriptive metadata (DM) will identify audio track layout and programme segmentation timecodes. The DM does not necessarily match the content of the media.
	<b>SDI</b>
Equipment may require HD SDI as input. This is sufficiently standardised that it can be sourced locally. All files submitted to the Lab may be used to test other equipment, so content sourced on SDI must be <b>Royalty Free</b> .	
<b>Output artefacts (DPP files) to be produced</b>	Outputs need to reflect the advertised capabilities of the equipment, and test a range of the (user-configurable, as opposed to developer-configurable) variation allowed by the specification. They should also be representative of real programmes likely to be delivered to broadcasters.
	The following features need to be considered in light of these requirements:
	Duration (30 minutes say, to represent a typical finished programme, and other shorter test files of say 5 to 10 minutes)
	Segmentation or programme parts
	Audio channel count (4, 16 channels)
	Audio track layout
	Other options such as additional data streams, but only if they are advertised in the user interface for AS-11 DPP files
	The number of files required will depend on the functionality of the equipment under test.
There are no Writer tests that do not result in an AS-11 DPP file.	

<b>Document version</b>	v1.1	3/9/14	Second issue - Overall result panel and column added, layout revised
<b>Document Notes</b>			
1) This document is now a second issue and will likely change in the future. This will include the revision of existing tests and addition of new ones.			

OEM	Avid
Product	Media Composer
Version	MC 7.0.4.1 + AMA AS-11 v.1.0.3 plugin.
File	AVID_HD_A
File ref	513
Date	11 November 2014

WRITER TESTING: FILE TEST REPORT	
<b>P</b>	<b>PASS</b>
<b>W</b>	<b>PASS with Warning</b>
<b>C</b>	<b>PASS with Conditional Error</b>
<b>F</b>	<b>FAIL with Critical Error</b>

	Fault Description
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	WARNING:Details of the Container Duration could not be found in the Multiple Descriptor of the Top Level File Package. SMPTE ST 377-1:2011, 9.5.5, 17 specifically defines this property for the Top Level File Package and the table in SMPTE ST 377-1:2011 F.2 states 'A file writer should write the best value it can write' for the ContainerDuration property.[Warning]
40	WARNING: DM_AS_11_UKDP::The following metadata fields are unexpectedly present: OtherIdentifier; OtherIdentifierType; AudioComments; VideoComments [Warning] These non mandatory DM fields are present but empty. However, it is good practice not to include empty unexpected fields.

PASS / FAIL	Test	Tool	Error or Warning Category (refer to accompanying notes)
			Note
P	Test 1	Media Player checks:	media duration audio plays ok video plays ok qty of audio channels a/v in sync and same length
P	Test 2	DPP Metadata tool	DPP Metadata Validation
P	Test 3	mxfxml validation	c1-12 Mandated DM is present c13-36 DM conditional & mandated values in range c37-40 Line-up and Ident T/C in range, part T/Cs c41 Timecode timebase is 25 fps b61, b87 Exactly 1 audio channel in a track
P	Test 4 - 6 (Misc)	All the following: AQC 1 AQC 2 mxfxml analyser	a1 AVC syntax: SMPTE RP 2027:2011 Class 100 a2 SPS and PPS location a3-6 Video essence: frame size, 25 fps, interlaced, 10 bit a7 Sound Essence Bytes a8 Closed Captions
P	Tests 4 - 6 (MXF)	All the following: AQC 1 AQC 2 mxfxml analyser	a12 MXF Conformance a13 Op1a a14 Header Partition Status a15 KLV Fill following Header Metadata a16 Random Index Pack pressence a17 KLV Alignment Grid a18 Index Table presence a19 Index Table location a20 Index Table completeness a21 Index Table correctness a22 Essence Container a23 Essence Container Wrapping a24 Essence Container Location a25 Essence Container Parent Partitions a26 Essence Track Referencing a27 1 Material Package Picture Track a28 Picture Essence Elements Used a29 4 or 16 Material Package Sound Tracks a30 Sound Essence Elements Used a31 Material Package Sound Track Numbers a32 1 Material Package Timecode Track a33 Footer Presence
W	Tests 7 - 8 (Essence Descriptors)	All the following: mxfdump, MXFDump	b1-112 Consolidated Essence Descriptors: Presence and Value
W	Test 3	mxfxml validation	c1 - c36 DM_AS_11_UKDP

OEM	Avid
Product	Media Composer
Version	MC 7.0.4.1 + AMA AS-11 v.1.0.3 plugin.
File	AVID_HD_B
File ref	514
Date	11 November 2014

WRITER TESTING: FILE TEST REPORT	
<b>P</b>	<b>PASS</b>
<b>W</b>	<b>PASS with Warning</b>
<b>C</b>	<b>PASS with Conditional Error</b>
<b>F</b>	<b>FAIL with Critical Error</b>

	Fault Description
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	WARNING:Details of the Container Duration could not be found in the Multiple Descriptor of the Top Level File Package. SMPTE ST 377-1:2011, 9.5.5, 17 specifically defines this property for the Top Level File Package and the table in SMPTE ST 377-1:2011 F.2 states 'A file writer should write the best value it can write' for the ContainerDuration property.[Warning]
40	WARNING: DM_AS_11_UKDP: The following metadata fields are unexpectedly present: OtherIdentifier; OtherIdentifierType [Warning] These non mandatory DM fields are present but empty. However, it is good practice not to include empty unexpected fields.

PASS / FAIL	Test	Tool	Error or Warning Category (refer to accompanying notes)
			Note
P	Test 1	Media Player checks:	media duration audio plays ok video plays ok qty of audio channels a/v in sync and same length
P	Test 2	DPP Metadata tool	DPP Metadata Validation
P	Test 3	mxf2xml validation	c1-12 Mandated DM is present c13-36 DM conditional & mandated values in range c37-40 Line-up and Ident T/C in range, part T/Cs c41 Timecode timebase is 25 fps b61, b87 Exactly 1 audio channel in a track
P	Test 4 - 6 (Misc)	All the following: AQC 1 AQC 2 mxfl analyser	a1 AVC syntax: SMPTE RP 2027:2011 Class 100 a2 SPS and PPS location a3-6 Video essence: frame size, 25 fps, interlaced, 10 bit a7 Sound Essence Bytes a8 Closed Captions
P	Tests 4 - 6 (MXF)	All the following: AQC 1 AQC 2 mxfl analyser	a12 MXF Conformance a13 Op1a a14 Header Partition Status a15 KLV Fill following Header Metadata a16 Random Index Pack presence a17 KLV Alignment Grid a18 Index Table presence a19 Index Table location a20 Index Table completeness a21 Index Table correctness a22 Essence Container a23 Essence Container Wrapping a24 Essence Container Location a25 Essence Container Parent Partitions a26 Essence Track Referencing a27 1 Material Package Picture Track a28 Picture Essence Elements Used a29 4 or 16 Material Package Sound Tracks a30 Sound Essence Elements Used a31 Material Package Sound Track Numbers a32 1 Material Package Timecode Track a33 Footer Presence
W	Tests 7 - 8 (Essence Descriptors)	All the following: mxfdump, MXFDump	b1-112 Consolidated Essence Descriptors: Presence and Value
W	Test 3	mxf2xml validation	c1 - c36 DM_AS_11_UKDP



OEM	Avid
Product	Media Composer
Version	MC 7.0.4.1 + AMA AS-11 v.1.0.3 plugin.
File	AVID_HD_C
File ref	516
Date	11 November 2014

WRITER TESTING: FILE TEST REPORT	
<b>P</b>	<b>PASS</b>
<b>W</b>	<b>PASS with Warning</b>
<b>C</b>	<b>PASS with Conditional Error</b>
<b>F</b>	<b>FAIL with Critical Error</b>

	Fault Description
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	WARNING:Details of the Container Duration could not be found in the Multiple Descriptor of the Top Level File Package. SMPTE ST 377-1:2011, 9.5.5, 17 specifically defines this property for the Top Level File Package and the table in SMPTE ST 377-1:2011 F.2 states 'A file writer should write the best value it can write' for the ContainerDuration property.[Warning]
40	WARNING: DM_AS_11_UKDP: The following metadata fields are unexpectedly present: OtherIdentifier; OtherIdentifierType [Warning] These non mandatory DM fields are present but empty. However, it is good practice not to include empty unexpected fields.

PASS / FAIL	Test	Tool	Error or Warning Category (refer to accompanying notes)
			Note
P	Test 1	Media Player checks:	media duration audio plays ok video plays ok qty of audio channels a/v in sync and same length
P	Test 2	DPP Metadata tool	DPP Metadata Validation
P	Test 3	mxf2xml validation	c1-12 Mandated DM is present c13-36 DM conditional & mandated values in range c37-40 Line-up and Ident T/C in range, part T/Cs c41 Timecode timebase is 25 fps b61, b87 Exactly 1 audio channel in a track
P	Test 4 - 6 (Misc)	All the following: AQC 1 AQC 2 mxfl analyser	a1 AVC syntax: SMPTE RP 2027:2011 Class 100 a2 SPS and PPS location a3-6 Video essence: frame size, 25 fps, interlaced, 10 bit a7 Sound Essence Bytes a8 Closed Captions
P	Tests 4 - 6 (MXF)	All the following: AQC 1 AQC 2 mxfl analyser	a12 MXF Conformance a13 Op1a a14 Header Partition Status a15 KLV Fill following Header Metadata a16 Random Index Pack presence a17 KLV Alignment Grid a18 Index Table presence a19 Index Table location a20 Index Table completeness a21 Index Table correctness a22 Essence Container a23 Essence Container Wrapping a24 Essence Container Location a25 Essence Container Parent Partitions a26 Essence Track Referencing a27 1 Material Package Picture Track a28 Picture Essence Elements Used a29 4 or 16 Material Package Sound Tracks a30 Sound Essence Elements Used a31 Material Package Sound Track Numbers a32 1 Material Package Timecode Track a33 Footer Presence
W	Tests 7 - 8 (Essence Descriptors)	All the following: mxfdump, MXFDump	b1-112 Consolidated Essence Descriptors: Presence and Value
W	Test 3	mxf2xml validation	c1 - c36 DM_AS_11_UKDP

<b>Overall READER Result</b> (DPP Test Lab review of OEM supplied test results)	<b>PASS</b>
--	-------------

**FILE READER TEST results - For DPP Compliance Testing of PRODUCT to Certification Level**

<b>6a Table 1 - GENERAL DETAILS (OEM to complete)</b>	
OEM name	Avid Technology
Product name	Media Composer
Product version	7.0.4.1
Date of tests	9.19.14

<b>6b Table 2 - PRODUCT DESCRIPTION and CAPABILITIES (OEM to complete)</b>	
Brief description of product / product type	Non-Linear Editor
What are its primary functions in relation to AS-11 UK DPP Reader tests? Please list the main ones.	Ability to link to and ingest AS-11 compliant files and display related metadata, including program segmentation.
Does the device render both video and audio from the AS-11 DPP file for use by the device?	Yes. Linking to the file provides direct access to the audio and video essence.
Player functionality: Does the device render to video on to a display? If so how is this presented to the display?	Yes. Depending on attached HW: Component, Composite, HDMI, SDI, HDCSI.
Player functionality: Is audio decoded to outputs suitable for monitoring purposes?	Yes. Media Composer will support up to 24 tracks of audio in the timeline and has the ability to mix and monitor mono, stereo, 5.1 and 7.1 surround depending on attached HW.
Transcode functionality: Does the device render the AS-11 DPP video to a different file format as part of its operation?	AS-11 MXF OP1a files will be presented to Media Composer through AMA, allowing a direct link to the essence. The user will have the opportunity to either: 1) Continue to edit with the AMA linked clip 2) Consolidate (re-wrap only) to MXF OPAtom 3) Transcode to other formats wrapped as OPAtom such as DNxHD, J2K, XDCam, etc.
Does the device perform a partial file read of video and/or audio?	Yes. Sub clips can be created from the original Master Clip
Is there a display of media Timecode?	Yes.
Does the device read AS-11 DM (descriptive metadata) and/or UK DPP DM? If so how is this used and displayed?	Yes. Upon linking to the file, the metadata is displayed in Bin Columns.
Is there any display of programme segmentation / programme parting?	Program segmentation is represented as a Spanned Marker (Marker with duration) in the Source/Record Timeline. Respective metadata can be seen in the Marker and Markers window as well as a Bin column.
Does the product have the capability to jog, shuttle and jump to a new T/C?	Yes

<b>6e NOTES (OEM to complete if there are any other relevant details)</b>
Transcoded files were tested by the Media Composer player engine.

<b>DECLARATION</b>	
<b>7 DECLARATION</b>	<p>The detailed test results for File Reader Tests, and the resulting overall READER result, is based on information provided by the OEM in self testing. When submitting the detailed test results the OEM representative signed the following declaration confirming that they agreed to the statement below. The details were then reviewed by the DPP Test Lab to determine the overall READER result shown at the top of this page.</p> <p>"I confirm that the information in this report has been completed honestly and is an accurate representation of the results obtained. Also, that these results provide a fair assessment of the product's ability to read and work with AS-11 DPP files in a way reasonably expected for a product of this type and functionality, and that these results were achieved when using the product in a configuration which would reasonably be regarded as normal operational use."</p>

Advanced Media Workflow Association

DPP COMPLIANCE PROGRAM  
CERTIFICATION AGREEMENT

**THIS AGREEMENT** made the 22<sup>nd</sup> day of December, 2014 by and between Advanced Media Workflow Association (“AMWA”), having offices at 436 N. Westfield Road, Madison, WI 53717 USA and the entity (“OEM”) whose name and address appears on the signature page to this agreement (“Agreement”).

**Background**

AMWA, in collaboration with the Digital Production Partnership (“DPP”) has developed the DPP Compliance Programme (“DPP Programme”) for evaluating whether products provided by OEMs comply with DPP Technical Standards (“DPP Standards”). Subject to the terms of this Agreement, OEM devices (“Products”) found to be in compliance with DPP Standards may be eligible for inclusion on a list maintained by AMWA, in which case the OEM will be granted, and may display, a certification logo recognizing such compliance, all as further provided in this Agreement. OEM wishes to participate in the DPP Programme, and to submit product(s) for testing and evaluation. AMWA and OEM are sometimes referred to below as the “Parties,” and each individually as a “Party.”

In consideration of the mutual covenants found below and other lawful and valuable consideration, the Parties agree as follows:

**1. DEFINITIONS**

**1.1 Certification**, with respect to a given Product, means that AMWA has confirmed that the Test Report relating to such Product indicates that it has met the Certification Criteria for that Product.

**1.2 Certified Product** means a Product that has been successfully tested against the applicable Certification Criteria as evidenced by a favorable Test Report submitted to AMWA by the OEM and verified by AMWA.

**1.3 Certification Criteria** for a given Product means the criteria established by DPP as being applicable for testing of a Product to a given version of a given DPP Standard, and the type and form of any marking which must be used on or in connection with the Product and related information in the event OEM references successful certification under the DPP Programme in connection with such Product.

**1.4 Certification Logo** means the certification mark owned by AMWA which an OEM is licensed to display under this Certification Agreement in connection with a Certified Product, subject to the terms of this Agreement.

**1.5 Certification Logo License Agreement** means the agreement of the same name that AMWA is at any time using in connection with the Certification Logo. AMWA’s current version of such agreement is attached to this Agreement as **Exhibit A**.

**1.6 Certification Registry** means the registry of Certified Products AMWA maintains at the AMWA Web site.

**1.7 DPP Test Facility** means a facility maintained or authorized by DPP to test and evaluate Products against the appropriate Certification Criteria and issue Test Reports to the OEMs submitting such Products.

**1.8 Registration** means the process of AMWA adding a Certified Product to the Certification Registry and confirming to an OEM that it has the right display the Certification Logo in connection with such Certified Product.

**1.9 Product** means an OEM product, a representative example of which has been submitted to DPP for testing against the relevant Certification Criteria.

**1.10 Test Report** means a report indicating whether or not a submitted Product has met the applicable Certification Criteria, and describing in detail the performance of a Product against such applicable Certification Criteria. Test Reports are issued to the OEM by DPP.

**2. CERTIFICATION**

**2.1 Role of AMWA.** OEM understands and agrees that AMWA does not test or evaluate Products or have any control over DPP Test Facilities, and that its sole responsibilities under the DPP Compliance Programme with respect to a given Product are to:

- (a) review the related Test Report to confirm whether it states that the Product has met the Certification Criteria for such Product in relation to the designated DPP Standard;
- (b) if the Product has satisfied the applicable Certification Criteria, complete the Registration of such Product; and
- (c) to execute and deliver a Certification Logo License Agreement to OEM at OEM's request.

**2.2 DPP Control of Certification Criteria.** OEM understands and agrees that:

- (a) AMWA has no control over the nature or elements of the Certification Criteria, the nature or frequency of their revision, the continued availability of testing against any given Certification Criteria, or the continuation of the DPP Certification Programme in the event that DPP wishes to terminate the same;
- (b) AMWA has no control over the DPP Test Facilities or any right to review their processes or whether their testing and evaluation is conducted in a fair and accurate fashion. Only DPP has these rights; and
- (c) Any revision or withdrawal of the Certification Criteria by DPP may affect OEM's rights to maintain a given Product on the Certification Registry and to display the Certification Logo in connection with such Product.

**2.3 Representations and Warranties of OEM.** By submitting a Test Report to AMWA, OEM represents and warrants to AMWA as follows:

- (a) OEM has not altered the Test Report in any way, and that the Test Report submitted to AMWA relates to the Product, and Product version (if any) referenced in its request for Certification;
- (b) If at any time OEM modifies or changes the design or source(s) of any components of the relevant Product it will do so in such a way as to maintain compliance with the applicable Certification Criteria; and
- (c) OEM will maintain a quality control program appropriate and sufficient to ensure continuing Product compliance with the Certification Criteria.

**2.4 Ongoing OEM Obligations.** As preconditions to OEM's ongoing right to maintain the Certification status of a given Product, it agrees to:

- (a) keep a record of all complaints made known to the OEM, relating to a Product's compliance with the applicable Certification Criteria;
- (b) make such records available to AMWA if requested;
- (c) in the event that DPP updates any Certification Criteria, the OEM will either resubmit any Certified Products to a DPP Test Facility or make clear in such manner as AMWA may require that any Products it continues to sell were tested against the prior version of the Certification Criteria.
- (d) comply with all of the terms of any Certification Logo License Agreement in force between the Parties.

**2.5 Non-Confidentiality of Test Report.** OEM agrees that any Test Reports it submits to AMWA will be regarded as non-confidential and that AMWA may post part or all of such Test Report on public or member-only sections of its Web site and otherwise make use of such Test Report, provided that at the written request of OEM, AMWA will not post a Test Report or enter a Product on the Certification Registry until OEM has made public mention of such Product.

**2.6 Certification Logo License.** Upon confirmation that a Product has met the applicable Certification Criteria and upon the request of OEM, AMWA shall execute and deliver to OEM a Certification Logo License, making reference to the Certified Product, and granting display rights with respect (only) to such Certified Product.

**2.7 Non-refundability of Fees.** OEM acknowledges and agrees that no fees paid in connection with this Agreement or the Certification Logo License will be refunded in the event that OEM receives notice that a Product has been removed from the Certification Registry and that OEM's rights under the Certification Logo License as to such Product have been suspended or terminated for any reason permitted under this Agreement or the Certification Logo License.

**3. INDEMNIFICATION AND LIABILITY**

**3.1 Indemnification.** OEM agrees to hold AMWA harmless and to defend and indemnify AMWA against any liability, loss, or damage from claims, demands, costs (including legal fees), or judgments arising out of any material breach by OEM of any of its representations or warranties under this Agreement. In the event that any third party claim or proceeding is initiated for which indemnification is sought pursuant to this Section 3.1, AMWA shall notify OEM within a reasonable time after the AMWA learns of the commencement of the same, shall cooperate fully in the defense of such claim, and shall permit OEM or OEM's insurance carrier to defend and/or settle such claim using legal counsel reasonably satisfactory to the AMWA. AMWA shall not compromise or settle any claim or action that is the subject of OEM's defense obligations without the prior written consent of OEM.

**3.2 Liability.** Neither party will, under any circumstances, be liable to the other party for any indirect, special, punitive, or consequential damages, or any third party claims which may arise as a result of the services provided in this Certification Agreement. Each party's liability to the other party, whether in contract, tort (including negligence or breach of statutory duty, misrepresentation, or otherwise), or for any common law or statutory cause of action or otherwise arising by reason of or in connection with this Agreement will be limited to U.S. \$1,000,000.

#### **4. FAILURE TO COMPLY WITH AMWA REQUIREMENTS**

**4.1 Remedial Action.** In the event that AMWA becomes aware that a Certified Product no longer complies with the applicable Certification Criteria, or that OEM is making improper or unauthorized use of AMWA name or the Certification Logo in relation to a Product, AMWA reserves the right, upon written notice to the OEM and in its sole discretion, to take such action as it deems necessary, including but not limited to:

- (a) Suspending or revoking the relevant Certification(s);
- (b) Removal of the Product from the Certification Registry;
- (c) Termination of this Certification Agreement pursuant to Article 5;
- (d) Such action as it may deem to be advisable in order to comply with any applicable statutes, rules or regulations.

**4.2 Suspension.** Upon an OEM's failure to comply with any of the requirements of this Certification Agreement, AMWA may issue a letter of suspension which shall notify OEM of the nature of the failure. In the event that such notice specifies a date by which compliance must be restored and OEM fails to resolve the cause of suspension by such date, this Certification Agreement may be terminated by AMWA pursuant to Article 5.

#### **5. TERMINATION OF THE AGREEMENT**

**5.1 Termination by OEM.** OEM may, for any reason, terminate this Agreement, as to any Product, or this Agreement as to all of its Certified Products, upon not less than sixty (60) days written notice to AMWA. Such notice shall designate a termination date and the notice period shall be deemed to commence upon the date of mailing of the notice to AMWA by registered or certified mail, return receipt requested.

**5.2 AMWA Right to Terminate as to a Product.** AMWA may terminate this Agreement, as to any Product, if AMWA determines that such Product fails to comply with the appropriate Certification Criteria, and OEM fails to submit a new Test Report within forty-five days demonstrating that such Product is in compliance. Such cure period may be extended as mutually agreed upon by the Parties.

**5.3 AMWA Right to Terminate Agreement.** AMWA may terminate this Agreement upon any of the following:

- (a) the OEM remains in breach of any material term of this Agreement thirty days after the giving of notice by AMWA describing the nature of such breach;
- (b) giving 60 days' notice prior to the anniversary date of this Agreement or any renewal; or
- (c) by giving thirty days' notice of the termination of the DPP Program.

**5.4 Termination for Bankruptcy, etc.** Either party may terminate this Agreement upon written notice to the other party if the other party (i) applies for or consents to the appointment of a receiver, trustee or liquidator for substantially all of its assets, or such a receiver, trustee or liquidator is appointed for the other party; (ii) has filed against it an involuntary petition for bankruptcy that has not been dismissed within sixty (60) days thereof; (iii) files a voluntary petition for bankruptcy or a petition or answer seeking reorganization, becomes or is insolvent or bankrupt, admits in writing its inability to pay its debts as they mature, or makes an assignment for the benefit of creditors; or (iv) ceases to operate in the ordinary course for a period of thirty (30) days or more. In no event shall Licensor's merger with or assignment of rights and obligations to a successor entity that carries on with the Licensor's purpose constitute a material breach or cessation of operations under the terms of this Agreement. Termination of this License Agreement in any manner shall not discharge the liability of Licensee for License Fees accrued or unpaid at the time of such termination.

**5.5 OEM Obligations Upon Termination.** Upon termination of this Agreement, the OEM shall pay any remaining outstanding charges owing to AMWA, if any.

**5.6 Survival.** The following provisions shall survive any termination or expiration of this Agreement: 1, 2.1-2.3, 2.5, 3, 5.5, 5.6, 6.1, and 6.5.

**6. ADMINISTRATIVE PROVISIONS**

**6.1 Fees.** With the exception of the fee for initial certification of a product, which shall be paid in full prior to the CA issuing a certificate, OEM agrees to make payments in such amounts, and at such times, as are provided in **Exhibit B** to this Agreement. Charges will be billed to OEM at its address designated for such purposes in such Exhibit, and shall be due and payable within thirty (30) days from receipt of invoice. OEM shall be considered in breach of this Agreement if any invoice is not paid within sixty (60) days.

**6.2 No Assignment.** The rights running to the OEM under this Certification Agreement may not be assigned to or acquired by any other person or corporation without AMWA's prior written authorization, except for assignments or delegations arising from internal administrative reorganization (including, but not limited to, mergers and acquisitions of OEM, its parent company, or their affiliates. AMWA shall consider the OEM to be the sole point of contact for all matters related to this Agreement.

**6.3 Term.** This Certification Agreement shall continue in effect for a period of one year from the date first above written and shall automatically be renewed thereafter for periods of one year, unless the termination rights provided for in this Certification Agreement are exercised.

**6.4 Jurisdiction.** This Agreement shall be governed by and construed under, and the legal relations among the parties hereto shall be determined in accordance with, the laws of the State of Delaware, excluding conflicts of law principles that would cause the application of the laws of any other jurisdiction. Each of the Parties hereto irrevocably consents to the exclusive jurisdiction of any court located within such State.

**6.5 Notice.** Any notice required or permitted under this Agreement shall be deemed to be effective three days after deposit for delivery by first class mail or one day after deposit for overnight delivery, in each case addressed to the other Party at its address as it appears in this Agreement, or to such subsequent address as a Party delivers to the other by the same means.

ADVANCED MEDIA WORKFLOW ASSOCIATION  
(OEM Name)

By \_\_\_\_\_  
(Authorized AMWA Individual)

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Avid Technology, Inc.

By: John W. Frederick  
John W. Frederick (Dec 23, 2014)  
\_\_\_\_\_  
(Authorized Signature)

By: John W. Frederick  
\_\_\_\_\_  
(Name)

Title: EVP  
\_\_\_\_\_

Date Signed: Dec 23, 2014  
\_\_\_\_\_

## ADVANCED MEDIA WORKFLOW ASSOCIATION

### CERTIFICATION LOGO LICENSE AGREEMENT

**THIS AGREEMENT**, dated as of the later of the two dates indicated on its signature page, is made by and between Advanced Media Workflow Association, having offices at 436 N. Westfield Road, Madison, WI 53717 USA (“Licensor”), and the entity (“Licensee”) whose name and address appears on the signature page to this agreement (“Agreement”). Capitalized terms not defined in this Agreement shall have the same meanings given to them under the DPP Programme Certification Agreement previously entered into between such parties, as from time to time amended (“Certification Agreement”).

In consideration of the mutual representations, covenants, and other terms and conditions contained herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

#### Terms and Conditions

1. License. Licensor hereby grants to Licensee a limited, non-exclusive, non-transferable, revocable license to use the logo found on **Appendix A** (“Licensed Mark”) in connection with the Product listed on **Appendix B**, for so long as (a) it remains current on all fees due and owing to Licensor under this Agreement and the Certification Agreement, (b) the Product remains compliant with the applicable Certification Criteria, (c) it is not in breach of this Agreement, and (d) it has not received notice from Licensor that its Certification with respect to the Product has been suspended or terminated under the Certification Agreement. **Appendix B** may be amended by the parties at any time to add or delete Products from Appendix B, and if at any time **Appendix B** lists more than one Product, then each such Product shall be the subject of an individual license, and in the event that the Certification of one Product is suspended or withdrawn due to the failure of such Product to comply with the applicable Certification Criteria, this Agreement shall remain in effect with respect any other Product(s) so listed that remain Certified. Licensee Fees. Licensor shall provide Licensee with a minimum of six (6) month’s written notice before imposing any increase in License Fee for use of the Licensed Mark.

2. Quality Standards and Maintenance. Licensee acknowledges and agrees that its use of the Licensed Mark shall at all times comply with Licensor’s then-current Trademark Guidelines, as Licensor may from time to time approve and amend for such purpose in its sole discretion, the current version of which can be found at the following Web page: [<http://www.amwa.tv/policies>] <http://www.amwa.tv/resources/licenses.shtml>. Each Product also must at all times comply with the applicable Certification Criteria under which Certification was obtained. From time to time, upon request and without cost to Licensor, Licensee shall submit to Licensor, or its duly authorized representative, a reasonable, limited number of samples of each commercially available Certified Product, as well as reasonable evidence that the Product continues to comply with the Applicable Certification Criteria. If, at any time, in the Licensor’s sole discretion, Licensor determines that Licensee’s use of the Licensed Mark fails to comply with the Trademark Guidelines or that the Product fails to comply with the applicable Certification Criteria, use of the Licensed Mark in connection with the Product shall constitute a breach of this Agreement. Licensor may notify Licensee of such determination and shall request that Licensee cure such failure through one of the actions and within the timescales defined in the Certification Agreement.

3. Form of Use.

(a) Attribution. Licensee agrees to use the Licensed Mark only in the form and manner and with appropriate legends as prescribed from time to time by Licensor. The Licensed Trademark may be used only to indicate that a Product has successfully completed the DPP Compliance Programme and is in compliance with the applicable Certification Criteria and all rules and requirements from time to time relating to the DPP Compliance Programme and/or the Certification Agreement (“Programme Requirements”).

The following statement must accompany all uses of the Licensed Trademark on permitted product packaging, Internet pages, and collateral:

“The AMWA Certified logo is a trademark or registered trademark of Advanced Media Workflow Association in the United Kingdom and in other countries.”

(b) Notice. Licensee shall mark each use of the Licensed Mark with the “TM” symbol unless advised by Licensor to use the “®” symbol. If the Licensed Mark is used multiple times in related document, advertisement or other material, the symbol need only be used in connection with the most prominent use of the Licensed Mark in

such document, advertisement or other material, or if all uses are substantially the same in terms of prominence, then the symbol need only be used in connection with the first use of the Licensed Mark in such document, advertisement or other material. Licensee shall use best efforts in complying with Licensor's trademark attribution requirements, but in the event that the placement of the trademark attribution is not commercially feasible, Licensee may include the trademark attribution on printed matter distributed together with the Product, provided that the trademark attribution statement above is prominently displayed where other third party trademark attributions, if any appear.

(c) Statements of Compliance. Licensee may not refer to any software or service offering as being AMWA-certified, AMWA-conformant, or AMWA-compliant. Licensee may refer to a device as being Certified under the Licensor - DPP Compliance Programme. The Trademark Guidelines provide specific detail on required usage of the Licensed Mark.

4. Reservation of Rights in Marks. Licensor expressly reserves the sole and exclusive ownership of the Licensed Mark and all of Licensor's other intellectual property rights. The parties expressly agree that except for the license granted hereunder, Licensee shall not have any right, title or interest in or to the Licensed Mark or any of Licensor's other intellectual property rights. Licensee agrees that it will do nothing inconsistent with such ownership and that its use of the Licensed Mark shall inure to the benefit of Licensor. This Agreement does not grant Licensor any right, title, or interest in Licensee's trademarks, service marks, or trade names. Licensee shall not acquire or attempt to acquire trademark or domain name registrations containing the Licensed Mark, alone or in combination with Licensee's other marks. Upon termination of this Agreement, Licensee will cease all use of the Licensed Mark, except as provided herein.

#### 5. Term and Termination of Agreement.

(a) Term. This Agreement shall commence as of the Effective Date and may be terminated in accordance with the terms of this Agreement and the Certification Agreement. Licensee may terminate this Agreement upon sixty (60) days' written notice to Licensor.

(b) Termination for Cause. This Agreement may be terminated by Licensor on forty-five (45) days' written notice to Licensee upon the default by Licensee in the performance of any of the material terms, conditions, or covenants of this Agreement or the Certification Agreement, and failure to remedy such default within (i) forty-five (45) days after written notice or demands, in the case of a breach of this Agreement, or (ii) the time period for cure specified in the Certification Agreement, as the case may be.

(c) Effect of Termination.

(i) Upon suspension or termination of Licensee's license with respect to a single Product by Licensor, Licensor shall remove such Product from the Certification Registry, and Licensee shall immediately discontinue all use of the Licensed Mark and any advertising, marketing collateral, product packaging or any other materials or documentation that might make it appear that Licensee is still handling, selling, or promoting such Product under the Licensed Mark.

(ii) Upon termination of this Agreement for any reason, and subject to the provisions of Section 5(c)iii, Licensor shall remove Licensee's Product(s) from the Certification Registry, and Licensee shall immediately discontinue all use of the Licensed Mark and any advertising, marketing collateral, product packaging or any other materials or documentation that might make it appear that Licensee is still handling, selling, or promoting any Products or products under the Licensed Mark.

(iii) In the event that this Agreement is terminated for insolvency, bankruptcy, or cessation of operations, Licensee shall immediately discontinue all use of the Licensed Mark in connection with any advertising, marketing collateral, product packaging or any other materials or documentation that might make it appear that Licensee is still handling, selling or promoting products under the Licensed Mark; provided, however, that if (A) Licensee possesses any inventory of such Product(s), or such Product(s) are under production as of the effective date of such termination and (B) such Product(s) in inventory or under production conform to the applicable Certification Criteria and Trademark Guidelines, Licensee may advertise and sell off such Product(s) in inventory and under production for a period of six (6) months after such effective termination or withdrawal date; provided further that after such six (6) month sell-off period, Licensee shall no longer use, either directly or indirectly, the Licensed Mark or any other name, title, expression or mark so nearly resembling the Licensed Mark as to be likely to lead to confusion or uncertainty or to deceive the public, or in connection with such Product(s). For the avoidance of doubt, Licensee shall not have the right to contract for the manufacture of additional advertising, marketing collateral, product packaging or any other materials or documentation bearing the Licensed Mark after the effective termination or withdrawal date.

#### 6. Representations and Warranties.



(a) Licensor Warranty. Licensor represents and warrants that it has the unencumbered right to license the Licensed Trademark in those jurisdictions in which the Licensed Trademark is registered and that use of the Licensed Trademark in connection with the products recited in the registration in a given jurisdiction does not and will not infringe any third party trademark rights. A list of countries where registration of the Licensed Trademark has been completed or is pending can be found at <http://www.amwa.tv>.

(b) Disclaimer of Warranties. EXCEPT AS OTHERWISE PROVIDED IN THIS SECTION 6, THE LICENSED MARK IS PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, OR COMPLETENESS.

7. Indemnity. Except for claims of trademark infringement, Licensor assumes no liability to Licensee or to any third party with respect to the Product(s) sold by Licensee under the Licensed Trademark, and Licensee will indemnify Licensor against losses incurred through claims of third persons against Licensor involving the manufacture or sale of such Product(s). Licensor will indemnify Licensee for claims of trademark infringement of the Licensed Trademark in the United States, the United Kingdom, and in any jurisdictions where the Licensed Trademark is registered. Except as set forth in this Section 7, Licensor shall not indemnify Licensee for claims of trademark infringement in jurisdictions in which the Licensed Trademark is not registered or in connection with products or services not specified in the registration of the jurisdiction in which trademark infringement is alleged.

8. Limitation of Liability. EXCEPT AS OTHERWISE PROVIDED IN THIS AGREEMENT IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY CLAIM, OR ANY DIRECT, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, BUSINESS INTERRUPTION, LOSS OF GOODWILL OR OTHERWISE, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE USE OR PERFORMANCE OF THE SPECIFICATION(S) OR THE LICENSED MARK, EVEN IF LICENSOR IS EXPRESSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING LIMITATIONS OF LIABILITY AND EXCLUSION OF CERTAIN DAMAGES SHALL APPLY REGARDLESS OF THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDIES AVAILABLE TO EITHER PARTY. Each party's liability to the other party, whether in contract, tort (including negligence or breach of statutory duty, misrepresentation, or otherwise), or for any common law or statutory cause of action or otherwise arising by reason of or in connection with this Agreement will be limited to U.S. \$1,000,000.

9. Infringement Proceedings. Licensor shall have the sole authority and responsibility to prosecute any infringement of the Licensed Mark, at its sole option.

10. Relationship of the Parties. This Agreement shall not be construed to make either party the agent, partner or legal representative of the other, and neither party may assume or create any obligations for, on behalf of, or in the name of the other party, or commit any act, make any representation, or advertise in any manner that may adversely affect any rights of the other party or be detrimental to its name or reputation.

11. Assignment. Licensee may not assign, sell, transfer or delegate any rights or obligations under this Agreement to another party without Licensor's prior written consent. Any such purported assignment, sale, transfer, delegation or other disposition by Licensee, except as permitted herein, shall be null and void. Subject to the foregoing, this Agreement shall be binding upon and shall inure to the benefit of the parties and their respective successors and permitted assigns.

12. Injunctive Relief. Licensee acknowledges that any breach of its obligations under this Agreement, including, without limitation, its obligations set forth in Sections 3 or 4, may cause the Licensor irreparable damage. Accordingly, Licensee agrees that in the event of such breach or threatened breach, in addition to remedies at law, Licensor shall have the right to seek injunctive or other equitable relief to prevent Licensee's violation of its obligations hereunder.

13. Survival of Terms. Without intending to exclude other provisions of this Agreement that by their nature survive terminations hereof, notwithstanding anything to the contrary in this Agreement, Sections 5-11 shall survive any termination of this Agreement.

14. Severability. If any provision of this Agreement, or the application thereof to any person, place or circumstance, shall be held by a court of competent jurisdiction to be invalid, void or otherwise unenforceable, such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties, or, if incapable of such enforcement, shall be deemed to be deleted from this Agreement, and the remainder of this Agreement and such provisions as applied to other persons, places and circumstances shall remain in full force and effect.

15. Waivers. The waiver by either party of a breach of or a default under any provision of this Agreement, shall not be effective unless in writing and shall not be construed as a waiver of any subsequent breach of or default under

the same or any other provision of this Agreement, nor shall any delay or omission on the part of either party to exercise or avail itself of any right or remedy that it has or may have hereunder operate as a waiver of any right or remedy.

16. Governing Law. This Agreement shall be governed by and construed under, and the legal relations among the parties hereto shall be determined in accordance with, the laws of the State of Delaware, excluding conflicts of law principles that would cause the application of the laws of any other jurisdiction. Each of the parties hereto irrevocably consents to the exclusive jurisdiction of any court located within such State, in connection with any matter based upon or arising out of this Agreement or the matters contemplated hereby and it agrees that process may be served upon it in any manner authorized by the laws of such State for such persons and waives and covenants not to assert or plead any objection which it might otherwise have to such jurisdiction and such process.

17. Independent Contractors. Except for the specific obligations set forth in this Agreement, nothing hereunder shall be deemed to constitute, create, give effect to or otherwise recognize a joint venture, partnership or business entity of any kind, nor shall anything in this Agreement be deemed to constitute either party the agent or representative of the other. Neither party may assume or create any obligations for, on behalf of, or in the name of the other party, or commit any act, make any representation, or advertise in any manner that may adversely affect any rights of the other party or be detrimental to its name or reputation.

18. Notices. All notices, requests, demands and other communications required or permitted under this Agreement shall be written in English and shall be (i) delivered by hand, (ii) deposited in the United States mail from any jurisdiction, postage prepaid and registered or certified with return receipt, (iii) transmitted by electronic mail or facsimile so long as such transmission is followed by transmission confirmation or demonstrated by electronic or other means or (iv) delivered by prepaid courier service. All such notices, requests, demands and other communications shall be deemed to have been duly delivered upon receipt and shall be delivered:

If to Licensor:

Advanced Media Workflow Association  
436 N. Westfield Road, Madison, WI 53717  
Facsimile:  
email:

If to Licensee, to the address supplied by Licensee at the end of this Agreement or at such other address as may be furnished in writing to Licensor.

19. Headings. Headings used in this Agreement are for reference purposes only and shall not be deemed a part of this Agreement.

20. Entire Agreement. This Agreement, and the Appendices, applicable Certification Criteria documentation and Trademark Guidelines referenced herein (each of which, as amended from time to time, is incorporated by reference into and made a part of the Agreement), together constitute the entire agreement of the parties hereto with respect to its subject matter. This Agreement may be amended or modified only in writing and signed by duly authorized officers of both parties; provided however that DPP Production Partnership may amend any applicable Certification Criteria materials, and AMWA may amend the Trademark Guidelines at any time and from time to time in its sole discretion. This Agreement supersedes all previous, contemporaneous and inconsistent agreements, negotiations, representations and promises between the parties, written or oral, regarding the subject matter hereunder. There are no oral or written collateral representations, agreements or understandings except as provided herein. This Agreement may be executed in one or more counterparts, each of which shall be an original and all of which, when taken together, shall constitute one and the same Agreement.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed under seal by their duly authorized representatives.

On behalf of the Licensor:

ADVANCED MEDIA WORKFLOW  
ASSOCIATION

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

On behalf of the Licensee:

Avid Technology, Inc.

By: John W. Frederick  
John W. Frederick (Dec 23, 2014)

Name: John W. Frederick

Title: EVP

Date: Dec 23, 2014

Address: Avid Technology

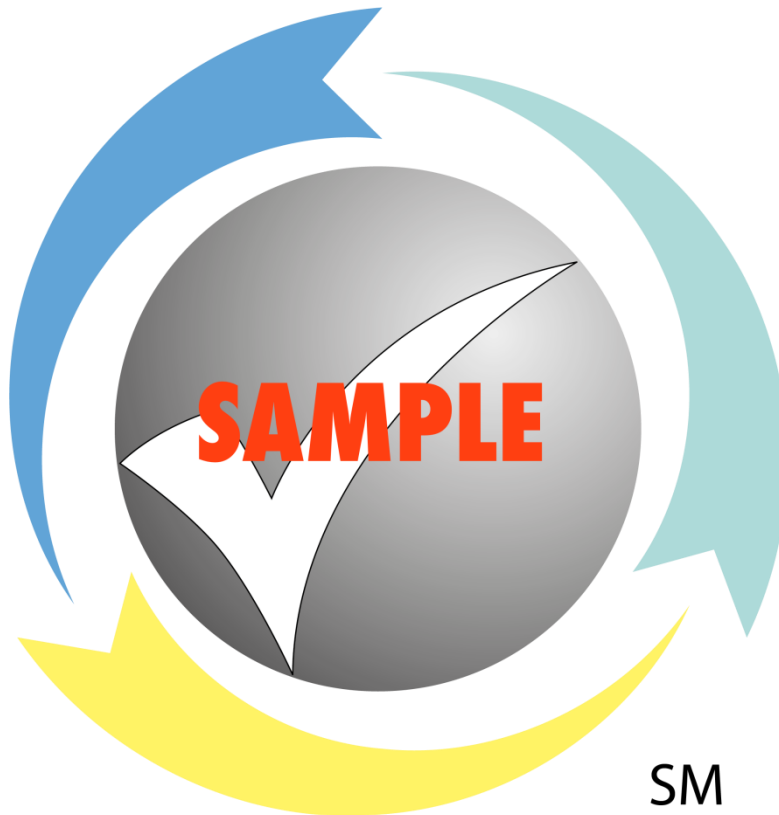
Appendix A

LICENSED MARK

**AMWA**  

---

**CERTIFIED**



**AS-11 dpp<sup>TM</sup>**

## Appendix B

### PRODUCTS AND FEES

1. Product (including version, etc. data):

**Media Composer 7.0.4.1 with AMA AS-11 plugin version 1.0.3**

2. License term:

**One Year**

3. License fee:

**No Fee is due. The initial certification fee of \$1750 is waived for Avid as a sitting board member of AMWA.**

4. Invoicing address:

**Avid Technology**

**75 Network Drive**

**Burlington, MA 01803**



Avid  
75 Network Dr.  
Burlington, MA 01803  
United States  
Tel: +1 978 640 6789  
Fax: +1 978 640 1366

December 22, 2014

To AMWA Certification Authority,

Having successfully passed through the Digital Production Partnership testing labs for both reading and writing AS-11 DPP files, Avid Technology is seeking AMWA AS-11 certification for Avid Media Composer 7.0.4.1 with the AS-11 Plugin v.1.0.3.

The primary contact to be linked with the proposed certification is:

Randall Martens  
[randy.martens@avid.com](mailto:randy.martens@avid.com)  
O) 978.640.3187  
C) 617.285.3628  
75 Network Drive  
Burlington, MA 01803

Thank you and we look forward to your reply.

Sincerely,

Randall Martens  
Principle Product Designer, Avid | Media Composer