

ISDCF Main Meeting Notes – December 11, 2018

Upcoming Meetings

Tuesday January 29, 2019 (in person at Universal 10:30-2:30pm)

Monday / Tuesday February 25 / 26, 2019 Audio Immersive Plugfest

Wednesday Feb 27, 2019 ISDCF

Wednesday April 17, 2019 ISDCF

(Will try for Wednesday meetings as often as possible.)

Part 1: General Reporting

Housekeeping:

- Set next meeting dates (above). Next lunch: Jan'19 Eikon (about \$300-400/lunch for the room)
- NEW WEBSITE PAGE for joining ISDCF / Inter-Society and a list of those that have become members. We strongly encourage joining so we can go back to Inter-Society paying for lunches...
- Antitrust Disclaimer – The official antitrust guidelines are posted on our website and are linked from the main ISDCF page. A short verbal overview of guidelines was given.
- Inter-Society has been providing lunches, but we are not covering our costs!! We will begin marking those that haven't joined / paid. Please become a member!! We discussed how to make this work. We are going back to asking for companies to contribute for lunch.
- Thank you Universal for the facilities and parking.
- Thank you Universal for support of the Chairman.
- Thank you to Inter-Society for providing the funding for travel, general expenses and admin support.
- Thank you to Universal / Intersociety for the coffee and treats
- Meeting notes from October '18 approved
- InterSociety request to be a member! \$500 / company. You can join from the link on the front page of ISDCF dot com.
- Legal reminder / press reminder. A verbal description was provided at the meeting. The information is on the front page of isdcf(dot)com.

* Chatham House Rule:

- * When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

Attendance is at end of these notes.

Action Items from December 11, 2018

1. Please Join Inter-Society! <http://isdcf.com/ISDCF/membership-status.html> \$500 per company per year, \$100 individual membership.
2. Comscore to contact Christie for information on TCC2 upgrade options
3. Pierce will send the next “nastygram” to exhibitors that need to be upgraded in February 2019.
4. Get a new version of SMPTE-DCP B2.1 with fixed CPL.
5. Upload new versions of the framing charts in smaller size packages.
6. Add links to HFR test content on the [ISDCF.com/t/](http://isdcf.com/t/) site.
7. Put dates on test content on the website so we can see if something has been updated. (Pierce/Radford)
8. DTS has additional content to post for immersive audio.
9. Fix link for Fraunhofer immersive audio test content.
10. It would be good to have standard Atmos Test Content (a trailer) from a studio packaged in an immersive audio standard DCP.
11. Move ISDCF Document 14 Digital Delivery of DCP's to final on the website.
12. Contact NATO on methods of posting of movie times for automatic retrieval.
13. Send comments to DCI on the two draft documents on direct view and HDR. dcinfo@dcimovies.com
14. Post updated (short) versions of the framing charts to the ISDCF website.
15. Clean up the Studio Codes for the “Studio Description” in the naming convention spreadsheet for use in CPL metadata.

From Earlier Meetings:

16. Call meeting to create common language for TDL/KDM management

in anticipation of creating an educational series.
17. Create a presentation for education of exhibitors on the options to report changes of equipment.

SMPTE-DCP Updates

Progress is being made on getting to the last sites in US/Canada. We are down to:

288 IOP SITES

196 get less than 50% of all releases over last 2 years (in other words are not active screens)

40 get less than 10 releases over 2 years and 40 have received NO releases

51 REGULARLY GETTING RELEASES (22 ARE TCC2) - These are the ones we really care about...

TCC2 issues -

TCC2 sites can not ingest SMPTE-DCP content due to markers and they need to be updated to TCC3 software. In the past we had been told the upgrade could be a software upgrade (converting to Windows operating system from Linux), but the hardware may not be powerful enough to run Windows. Involved companies will reach out and provide exhibition with definitive answers.

Dolby has been supporting those with Dolby issues...

April 9, 2019 is looking good for full SMPTE-DCP compatibility.

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Update to SMPTE standards to reflect the currently used profile. This effort is underway in SMPTE. Moving forward.

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ISDCF SMPTE-DCP Test Content B2.1

The test content on the ISDCF/t website has a (minor) issue with the CPL not conforming to the spec. It is a duration entry that doesn't have a practical problem, but it needs to be fixed.

Current version posted is B2.1 dated 20171010.

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HFR Test Content

We still have content posted to the ISDCF Test Content site, but not at the ISDCF/t/ site. We will add links to the /t/ site to this content.

Other content should have a date associated with the test content. It should be included in the name...

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Screen-X Specs?

Bottom line: this is a closed system and ISDCF shouldn't become involved with closed systems. There is nothing in a CPL indicating stream-x content.

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Immersive audio plugfest -

Moved back to February 25/26 at Deluxe... Pressure from studios to have the earlier date.

Immersive audio discussion list has been formed (and you can join on-line at <http://isdcf.com/ISDCF/plugfest.html>).

Mike R (Fox) has posted content to that page. Lots of test vectors has been included - more of a "killer reel." (See list below.) Not designed for sound quality, just for functionality.

Initial tests of exchange of the DCP (not rendering) has identified issues that have been fixed in the SMPTE standard. It is finding problems - currently encryption might be a problem for some. We should invite TMS companies to join in the plugfest.

The Fox DCP has the following features:

- 1 Encrypted
- 2 Multiple frame rates (24, 48 & 60 for now, but if you're interested in others, I have all of them).
- 3 Zero-length Preamble
- 4 Sparse IA content in reels (not all reels contain IA as per draft ST 429-19)
- 5 Sparse FSK Sync in reels (not all reels contain FSK sync, as per draft ST 429-19)

The test content itself incorporates the following tests:

- 1 Simple bed channel routing
- 2 Bed Gain Test
- 3 Bed Decorrelation
- 4 Object Gain
- 5 Moving Objects
- 6 Object Snap
- 7 Object Snap Tolerance
- 8 Object Spread (Low resolution, One dimensional, 3D)
- 9 Simultaneous Object Load test (increments from 10 --> 128)
- 10 Authoring Tool Metadata Test
- 11 Multiple Combining Bed
- 12 Replacement Beds

Fraunhofer also has posted content. It includes:

Each test item is provided in a separate MXF file with (unencrypted) IAB essence. The IAB essence has the following properties:

- zero-length preamble
- framerate of 24 fps
- audio sampling rate of 48 kHz
- audio bit depth of 24 bits per sample
- audio encoded using minimal DLC encoding according to SMPTE 2098-2:201x, clause B.11

The following test items are provided (for a more detailed description please see the word document attached to test content):

1. 9.1OH bed channel check
2. AuthoringToolInformation element
3. ObjectDefinition element with AudioDescriptionText
4. BedDefinition element with AudioDescriptionText
5. Conditional Sub-ObjectDefinition elements
6. Conditional Sub-BedDefinition elements
7. Three simultaneous BedDefinition elements

DTS said they would also provide content.

(Dolby has content that requires a license to obtain.)

Studios are ENCOURAGED to create content (trailer, for instance) with standard Atmos content to include in the plugfest test content.

No one reported downloading and testing the content. There was strong support for moving forward with the plugfest in February. The group believes holding the plugfest helps the industry move forward.

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How about restrictions for the bitstream?

Is there the equivalent of B2.1 of SMPTE-DCP constraints? Brian Vessa suggested an approach...

Is “Atmos” rendering the first level of constraints? SMPTE-RDD-29 has a list of features that are being created at this time. SMPTE 2098-2 is the goal of most content distributors.

General feeling is that we should consider constraints AFTER the first plugfest. We may discover both rendering and non-rendering issues. The goal is to not have a constrained bitstream.

Individual companies could provide a list of what they intend to implement (or at least the priority of implementation) so we would

have some guidance of what will actually be properly rendered. The list needs to remain private. At this point it seems that we should expect all aspects of the immersive audio spec will be implemented.

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ISDCF Document 14 Digital Delivery of DCPs

Since there has not been any corrections for this draft document, we are going to move it to final and post on the ISDCF website.

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Getting correct ShowTimes in automated searches

Some exhibitors are not aware of how automated systems determine showtimes. There may be a way to “standardize” on-line presentation of data to make it easier for automated systems get the right information.

We discussed and decided that ISDCF is not the right place, but NATO or UNIC may be appropriate places to go.

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Trailer Sound Levels

Update made. We have sort-of appreciation that Leqm85 is too loud for most folks (mastering and exhibition). There is motion to make changes, but it’s a work in progress. Many issues to be addressed - how to make the change, what other elements need controlling (i.e. pre-show material) and how we get theaters to turn it up as the master gets turned down.

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DCI Draft Documents

HDR/Direct View 0.9 DRAFT documents

DCI is asking for comments on these documents. They want feedback on the decisions that are being made. These documents may turn into specifications and they want feedback via email. dcinfo@dcimovies.com

What is the timeline for DCI? DCI will take this back to give us feedback.

Most of the discussion was concerning the HDR document.

There was one comment asking about tone mapping. But it was a general comment, nothing specific.

Comment: It looks like it is 500nits for direct view peak white and 100nits for projection peak white.

Reply: 500nits is correct for any HDR display technology and 100nits is a point for calibration, but 100nits is not associated with any technology and not as a peak for HDR.

Comment: Is DCI planning to put this through the SMPTE standards?

Reply: Maybe. Still to be determined or maybe portions of these documents.

Question: How would the specification deal with a display technology that can achieve spot areas that are significantly higher than 500nits. How would this document deal with those displays? Does it require a full-screen 500nits white?

Reply: Good question. Send it to the DCI email.

Question: If an installed system was capable of 100nits white and 10K:1 contrast ratio, could it use a master (with tone map) that adhered to the HDR spec? Or could it only use the SDR 50nit peak version and turn down the peak white and reduce the contrast? Does this mean a 100nit projector is not HDR?

Reply: Good questions. Send it to the DCI email.

Question: Does this account for off-center fall-off due to viewing angle?

Reply: The group felt that direct view does have fall-off and shows the same characteristics as a silver screen. We think the spec accounts for that.

Question: Does DCI want “why” questions to be submitted?

Reply: Yes, send them to the DCI email.

Statement: There is a need for a verbose description of the purpose of the

documents submitted by DCI. Since these are so important for the industry there is a need for a full understanding of the goals and motivation for a standard. There needs to be a consideration of the “SYSTEM” of a digital cinema ecosystem which includes costs. There is a need for face-to-face interactive discussions in a workshop style.

Reply: Those discussions have been held with individual manufacturers.

Statement: These documents address the needs of manufacturers but they don't address exhibitors that may not understand what this is trying to achieve. There is no narrative to address those who are continuing to purchase / support projector technologies.

Would DCI consider having a session at ICTA to discuss these standards?

If this became the new standards then maybe studios would create masters that supported this specification (i.e. 500nits peak, very high contrast).

Brazil Sign Language

The current accessibility overview is:

1. The exhibitors and distributors obligation got delayed last November to July 2019.
2. Last week, the Public Prosecutor's Office determined such delay to be reduced to next March. However, they can still legally appeal to maintain the July deadline.
3. Regarding the technologies to display the movies with the accessibility assets, it is stated that it will be only via DCP. I recently talked to Dolby representative in Brazil, and he made sure that the technology is ready to run, including LIBRAS with human interpreters (VP9 file). Another Brazilian company presented a device solution at EXPOCINE, a business fair in Brazil.

In summary, those are the last news about this process. No one is discussing the content of the legislation anymore, only when accessibility shall be offered in movie theaters.

Here you can find more about it (in Portuguese only): <http://www.mpf.mp.br/sp/sala-de-imprensa/noticias-sp/apos-acao-do-mpf-cinemas-em-todo-o-pais-terao-tecnologias-de-acessibilidade-para-pessoas-com-deficiencia>

Not clear which solution (video or avatar) is being supported by Ancine. This is our best guess at this time. We should know more in a few months.

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Naming Convention

There is a need to add Content Type of Episodic (EPS), BUT it needs to be in both the naming convention and CPL metadata.

We are planning to add to the naming convention chart and content type webpage for the naming convention. We also plan to add a column for ContentKind in the same chart.

Perhaps we could use the IMF content type of EPS.
[episode:Part of a dramatic work such as a serial television program.]

429-16 metadata use problems. FullContentTitleText is REAL human readable name of content. Please enter the actual title of the content - no abbreviation please! (As shown in General Notes and Tips in the Naming Convention.)

There is also no “registry” for machine readable content (like 20th Century Fox or Fox or Twentieth Century Fox)

Should we clean up the Naming Convention Studio Registry to be the “official” name for entry into the CPL metadata for Studio? This will be considered and discussed at the next ISDCF meeting, however it may be determined that it is out of scope for ISDCF.

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Reference sizing charts

These have been posted on ISDCF. Shorter versions are on the way...

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Upcoming Special Formats?

A 60FPS title is on its way.

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TDL List management - how to get updates to all TDL owners?

Need for a tutorial for theater operators of options. Need a common naming method for services provided.

(Underway, no update this time.)

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EDCF Update

No report.

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SMPTE Update

Subtitles are being reviewed (Japanese on-screen issues.)

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Attendance on next page.