

ISDCF Main Meeting Notes – June 26, 2019

Upcoming Meetings

Wednesday July 31, 2019

[August 30/October 1 - Image Testing????]

Wednesday October 2, 2019

Immersive Audio Plugfest November 18/19, 2019

ISDCF November 20, 2019

~~Image Testing (as built) November 21/22, 2019 (Will need to move)~~

Part 1: General Reporting

Housekeeping:

- Introductions around the room
- Set next meeting dates (above). Inter-Society pays for lunches.
- 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 for the coffee and treats
- Meeting notes from April '19 approved
- InterSociety requests you be a member! \$500/company. You can join from the link on the front page of ISDCF dot com.
- Legal reminder / press reminder / 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. The information is on the front page of isdcf(dot)com. We have added the no-social-media request for discussions held at ISDCF.

* 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.

Note: No drive on after noon day before ISDCF meeting. If you want to attend and have not added your name to the drive on, please CALL IN.

Attendance is at end of these notes.

Action Items from June 26, 2019

1. Please Join Inter-Society! <http://isdcf.com/ISDCF/membership-status.html> \$500 per company per year, \$100 individual membership.
2. Create immersive audio page on ISDCF website for link to guidelines and test content (SteveLL/MikeR/JerryP)
3. Update ISDCF website to include the link to Dolby's immersive audio restriction document.
4. Request to see servers/TMS to use the SMPTE CPL metadata (i.e. extract FFMC flag). Call for participation in the Plugfest in November 2019
5. Server manufactures are asked to evaluate the efforts needed to implement 3D variable-z subtitle engine. To be reported at next meeting.
6. For November plugfest create a "mock up" 3D subtitles to compare burned in too rendered to fixed Z.

From Last Meetings (These items are on long-term hold until the next plugfest and/or standards have been finished.)

7. Make a test package with slightly different content in the CPL Content Title Text, PKL text, etc for testing at the next plugfest or to conduct a field test of systems to see where the user displayed content is from for different TMS/Servers.
8. Post new versions of the framing charts.
9. Get a new version of SMPTE-DCP B2.1 with fixed CPL.

Organizational Issues:

Should we change from StartMeeting to Zoom? Nope, StartMeeting is OK
We will add a video camera to show (in poor quality®) the room. (Let's see if this helps.)

REMEMBER to speak up so on-line folks can follow the conversation. MOST IMPORTANT IS THE AUDIO!! Remove side conversations!!

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Ghost Server

celluloidjunkie dot com/2019/06/06/hunting-ghost-no-1-chinas-most-sophisticated-movie-piracy-ring/

Not really an appropriate topic for ISDCF, but there are technical issues of security that can be discussed and clarified.

We don't really know what happened - for some people information about the problem is subject to NDA and cannot be shared. It appears it was not a break of the security of digital cinema.

The published report implies that it might be possible to get private keys from deployed servers. But others are not as convinced that the private key has been retrieved. Too much is not known.

In the conversation, there was agreement that the basic security of digital cinema has not been compromised.

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ISDCF Immersive Audio

Dolby submitted a "Draft ISDCF Immersive Audio Bitstream Guideline - 04-10-2019.pdf" that was distributed to the ISDCF reflector yesterday. (It is a Dolby document and is NOT an official ISDCF at this time - although it might become one.) It is for discussion at this time. The link to Dolby's document will be posted on the Technical document page on ISDCF. We anticipate creating a special page for immersive audio - Steve LLamb, Mike Radford and Jerry Pierce will create for more information.

Although early, we decided to put an immersive audio plugfest on the calendar. Tentatively we picked November 18/19, 2019. We think there will be at least 3 rendering solutions available for testing.

The SMPTE documents are very close to publishing. More to come!

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Aspect Ratio Feedback

An exhibitor reported on customer surveys taken and tried to determine if an odd aspect ratio had an influence on customer appreciation of the quality of the image (although not directly a question on aspect ratio). The comments are below - no conclusion, but interesting observation.

Following a recent theatrical release in a ‘bespoke’ aspect ratio (in a flat container), I asked our Customer Service team to crunch some numbers. They came back with the observation that:

- Of the five bespoke-ratio films that I identified for them
- In the first week of release
- A bespoke film would receive a fifth of any picture-related presentation complaints (as distinct from sound, ads&trailers, food, cleanliness, etc).
- *We average between twenty and thirty titles a week.*

By the time you whittle down the number of admissions (between 11m and 12m a year), who provided an email address or were a loyalty member, who clicked on the survey link, and could be bothered completing it, the sample size is understandably not huge; probably about 60,000 respondents per year. However, it’s still noteworthy that of any picture complaints in a week, just one bespoke-ratio film would be responsible for a fifth of picture complaints.

Obviously we will continue to play DCPs just as they are delivered by the studio, to the best of our ability. It would just be nice for word to get out that guests don’t necessarily understand the artistic thinking behind bespoke ratios. I’ll continue working on the numbers as admissions for the latest title continue to roll in, and perhaps there will be something worth sharing in August. And by then there may even be a fifth distributor to throw into the anonymised mix.

Q: Was the aspect ratio of the title provided to the theaters prior to release?

A: Yes - theater’s know about the aspect ratio prior too presenting to customers. Customers see the black bars and they see this as an error.

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Bit Rate Settings “Skinny DCP”

There was a brief discussion on the reflector about lower bitrate DCPs. While delivery on hard drives it is not critical on the size of the DCP, but delivery over networks makes size critical.

MOST distributors understand these trade offs. Others should be aware that it is not necessary to compress at highest bit rate.

Original DCI spec was 250mb/s. Practical limit for internal IMBs is about 400 to 450mb/s.

Distributors can make any bitrate under the technical maximum.

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Trailer Levels

It appears that TASA and NATO have reached an impasse and some studios do not want to change the standard. There is some drive to conduct another demonstration with the right people in the room.

It is not clear how we will make progress.

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SMPTE-DCP Updates

The domestic market is essentially running SMPTE-DCP equipment. A few outliers are not upgraded - mainly generation 1 equipment - distributors/service providers are dealing with these few sites.

Now that most features are being delivered in SMPTE-DCP, it's time to look at how equipment can make use of the metadata that is included in the CPL.

EDCF reported on world wide status (<https://www.smptedcp.com/status>). Things are moving forward. It's now region by region. The EDCF continues to monitor and encourage transition.

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ISDCF definition of VB2.1

RDD project in SMPTE is underway...

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3D (dynamic - variable Z) subtitles - will it ever happen/how do we get there?

Note: dynamic Z is in the spec - as it option - but no current server implements the dynamic Z.

Reality:

- 1) Projector rendered subtitles in series 1 projectors will never do dynamic-Z.
- 2) Projector rendered subtitles in series 2 projectors probably will never dynamic-Z.
- 3) Server rendered subtitles MIGHT be able to do dynamic-Z (no one does it today)

The goal is to get *specific territories* for dynamic-Z 100% implemented.

Discussion of NEED for dynamic-Z since there is a default Z position specified — general feeling was that the default Z is not good enough.

Server manufacturers have been asked to estimate the effort to implement dynamic-Z.

The issue is how to ultimately encourage the engineering effort to implement the feature in servers and how to encourage deployment. The current method of “burned in subtitles” is the current working solution.

There was a desire to see content rendered with both dynamic-z and static-z presentations. Can we see what it looks like? Maybe a mock up to understand “if-we-build-it-will-they-(creatives)-will-accept-it” which includes font and positioning viewing.

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Plugfest in November:

Immersive Audio

Metadata display from CPL / Automation -

(“Here is what you are missing, here is what you could ask your vendor to implement and use/display”)

Marker display / use

MCA sub-descriptors - Sound format selection (5.1/7.1)

Show and Tell of what’s there

Variable Z subtitles - demo to understand what it looks like

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Update on Laser Regulations

Laser Notice 57 from the FDA - Presentation by Pete Lude (powerpoint version posted to isdcf.com/MeetingNotes).

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Lunch Break

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Digital Cinema Picture Levels

NATO has launched an effort to do testing of current and newer image creation systems in an effort to quantify real-world systems and to understand the creative impact of contrast ratios and brightness. This open process is getting started and NATO is asking ISDCF to assist in conducting these demonstrations. (The document used during the meeting was posted to isdcf.com/MeetingNotes)

The motivation for the digital cinema picture level project is:

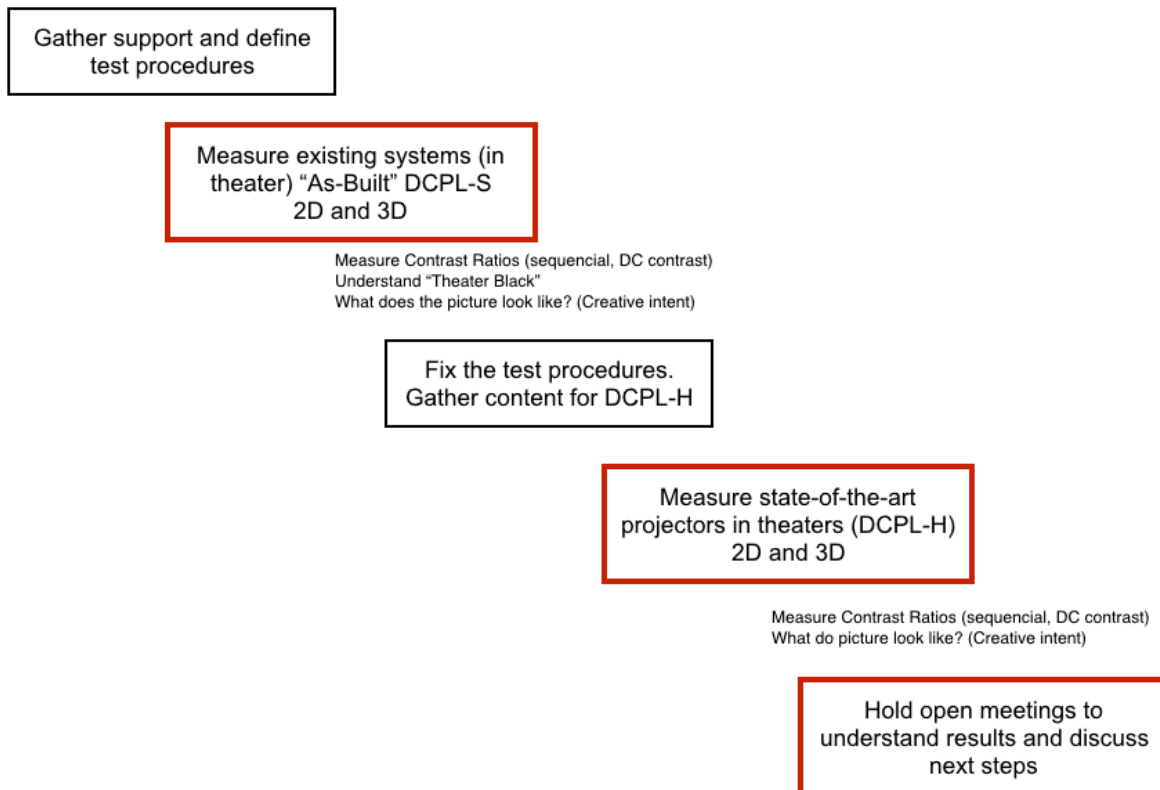
- > Need for projector replacement / upgrades over the next decade
- > Desire to consider higher brightness / higher contrast - especially for PLF theaters and **3D**
- > Need to work with industry to understand benefits of higher brightness - creatives / manufactures / studios => Need to see it and talk about it.
- > Desire to understand in-theater experience (not just projector specs)

Need to gather some info and develop a test procedure for consistent demonstrations.

Proposed Nomenclature:

Digital Cinema Picture Levels	Name	Master
DCPL-S	Standard	Standard Master
DCPL-Sc	Standard High Contrast	Standard Master
DCPL-H	High Brightness	High Brightness Master
DCPL-Hc	High Brightness High Contrast	High Brightness Master
DCPL-E	Extended Highlights	Extended Highlights Master

The high level approach:



Discussion: Is this an effort to look at possible DIY (do it yourself) PLF (premium large format) systems? NATO: that is one possible outcome.

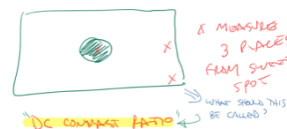
Is this an approach to test at a level between standard and that described by DCI in their HDR document? Yes.

First phase would only use current mastered content (DCPL-S) and not extended range. Phase 2 might use a PQ master, or not.

- Brightness - center / edges - fL
- Theater Black (nothing from projector) - nt
- Sequential Contrast Ratio - nt/nt
- DC Contrast Ratio (new) - nt/nt
- Color rendering accuracy
- Collectively look at images with creative feedback - STEM, plus selected clips



Critical white point
RGB color points
white brightness
Gamma points check



In terms of what to measure, the initial suggestion (to be refined):

The general opinion was that these should be supported by ISDCF and helping NATO.

Is this approach trying to define a new projector standard? The industry has defined Standard, Dolby Cinema and the DCI/HDR possibility. Distributors don't want to create new deliverables.

Exhibitors are considering purchasing projectors with higher performances (higher brightness/higher contrast) and would like to use a master to make use of the higher performance. Perhaps this can be the Dolby Cinema master or one like it.

One person broke down the proposed efforts into three possible goals. 1) To survey / audit current systems to understand performance (to create a 'vocabulary' and common language to talk about systems and to develop test procedures) 2) To understand if a deliverable master can be used by more than one set of projector characteristics and 3) To develop "reference" projector specs for a new type of displays. Phase I would focus on the first of these goals.

Most of the thinking here is still "fuzzy" and will be refined as the project moves forward.

If we don't do something with the variety of display systems we have coming to market, we will end up with the same problems we have had with immersive audio.

We would either need to define baseline performance or ways to compensate.

There is recognition that what is measured in the laboratory is not the same as in the field in real theaters.

There was an interesting side comment that one theater owner felt that customers that saw trailers in the theater were more likely to come back to the theater to see that feature IF the trailer was impactful when viewed. This drives that theater to

have the image in good condition - house lights as low as possible for best image quality. This encouraged the testing to measure the house light levels for both features and trailers as part of the testing.

One comment was to make sure we document the screen type and characteristics as part of the measurement procedures.

There seemed to be no objection to conducting the first phase of the project - measurements of current in-theater characteristics.

It was recommended we have pre-meetings to look at existing test image content (SMPTE and others).

We looked at November 21/22 for possible first phase of the project. [Subsequent we were reminded that these dates are just ahead of Thanksgiving weekend and is not good for theaters. Another date will be proposed.]

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Naming Convention

968 facilities - getting close to 1,000!!

The use of DBOX instead of D-BOX (Naming Convention Website will be updated)

CPL for trailers scope inside of flat or flat inside of scope?

Naming convention for *TRAILERS* scope inside a flat package or flat inside a scope package. Quick discussion: it's not broken, a trailer labeled as scope should be played in scope, or flat/flat.

Normal procedure is for distributors to make a trailer in both scope and a flat container.

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TDL

Reflector very quiet. Leave it on the agenda for now...

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High Frame Rate

Paramount has been doing a good job of getting ready for Gemini Man, due out in October 2019. Final decisions on the formats that will be released have not been made.

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Laser Direct View

A Samsung Onyx was installed in Houston, 2nd one in the US. (30 world wide).

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Special formats

A 2.0 aspect ratio feature is coming in November 2019.

A 1.78 aspect ratio in a flat container September 2019 (animated).

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Review of Action Items from last meeting.

Action Items from April 17, 2019

1. Please Join Inter-Society! <http://isdcf.com/ISDCF/membership-status.html> \$500 per company per year, \$100 individual membership.
2. Organized an ISDCF Immersive Audio Drafting group to discuss how best to deal with constraints for authoring. (Steve LLamb to organize) DONE.
3. NATO to share the resolution for fader levels with ISDCF. DONE.

From Last Meetings (These items are on long-term hold until the next plugfest and/or standards have been finished.)

4. Make a test package with slightly different content in the CPL Content Title Text, PKL text, etc for testing at the next plugfest or to conduct a field test of systems to see where the user displayed content is from for different TMS/Servers.
5. Post new versions of the framing charts.
6. Get a new version of SMPTE-DCP B2.1 with fixed CPL.

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Update: Eclair is able to do demos. Contact Cedric.

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Attendance on next page.