ISDCF Main Meeting Notes – September 13, 2023
In person at Universal / Zoom

<u>Upcoming Meetings</u>

Wednesday November 8, 2023 At Universal

Thursday January 11, 2024 at Harman

Thank you to companies that have committed to sponsoring ISDCF for 2023.

Part 1: General Reporting

Housekeeping:
- Zoom meeting (provided by NATO)
- Set next meeting dates (above).
- Thank you ISDCF for support of the Chairman.
- Thank you to Dean Bullock for providing general expenses and admin support.
- Meeting notes from August '2023 approved and to post to open website

- 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. Please no-social-media for discussions held at ISDCF.

InterSociety: Board Jerry Pierce (Chair), Steve LLamb, Susie Beiersdorf, Dean Bullock (secretary/treasurer), Mark Collins, Don Tannenbaum. Are you interested in helping guide the organization? Contact us!

Attendance is at end of these notes.

Action Items from September 13, 2023

1. Security homework assignment: Create impact list that were necessitated by the change from FIPS 140-2 to 140-3 to product design. (Bullock to start)
2. Get the background documents that were considered when the CTP was updated. (Radford)
3. Metadata submission of what Deluxe uses on a daily basis (LLamb)
4. Write an open letter for exhibitors to be aware of possible EOCD (end of content delivery) in future. (Jerry/Lefko)
5. Studio to provide smart phone for accessibility details to ISDCF chairman

===

Future of ISDCF - Financial Report

Doing well with payments. Sufficient fund in bank for current activities. Invoices for individual member invoices not sent out (yet).

===

Big Things

It is noteworthy to report that Oppenheimer was a 2.0 aspect ratio and was released in both flat and scope containers. (Much like Avatar 2 was released.) Very few problems were experienced in the field.

Jerry Pierce is no longer the technical advisor to NATO. No new structure for NATO participation in ISDCF has been identified. (See **Hollywood Reporter**)

===

JPEG2000 decoder problem

Mission Impossible - An issue with some Series 1 servers having problem with playback. Investigation underway. Other legacy issues are also being investigated. We look forward to a future recommended practice, but not yet.

This work is widening to cover MANY issues that have been discovered over the years of problems that require work-arounds to allow seamless playback of titles. It seems that this is going to result in a recommended practice for many of these issues. The industry is working very hard in the background to address and discuss these challenges.

In the early days (2005-2015-ish) we did some interoperability testing, but in the last 10+ years the industry has relied on companies to identify issues - mainly to the authoring houses.

TOP MEN/WOMEN continue to work on this issue. Watch this space.

===

CTP VERSION 1.4

DCI Issued a new version of the Compliance Test Plan. This open session allowed discussion of things we have seen since it was released (July '23) for feedback to the industry/DCI.

Issue 1: IAB - the CTP 1.4 tests for the full SMPTE IAB profile and not the constrained to what we determined as a constrained bitstream (SMPTE RDD 57). This seems to be a bit too wide for testing since the industry has not embraced the full SMPTE IAB testing. Maybe back to SMPTE and ask them to incorporate the profile in the base standard.

Would ISDCF members support restricting the IAB standard 429-19 to those from profile 1 / RDD 57? Some felt it should become official. Others felt that this should be only a DCI issue. Some felt that 429-19 should not allow features that can not be

rendered in the real world. There could be an annex to 429-19 so the constraining document is included in the main 429-19.

Issue 2: New pass/fail criteria has changed for many of the image aspects of the spec. One 7512 color accuracy test is an old version and is referenced by the CTP. It's been this way for a while, but now it's a pass/fail requirement.

===

DCSS v 1.4.3 update

DCI also updated Digital Cinema System Specification. One member asked why they are allowing curved screens. Note that off-angle measurement methodology will need to be changed.

No other comments (and no response) was made.

===

Audio Test Material

The ISDCF subcommittee on creating test content for all screens, but more specifically to help evaluate non-perf reflective screens (LED) has continued to meet. They are ready to do some in-theater testing. It is planned for Tuesday October 3 at 1:30pm at the Academy Dunn Theater in Hollywood (Vine Street). Contact Jerry if you want to attend and/or join the committee.

We hope that we can get Radford/Sheby to help us assemble the image portion of the test content.

===

Security subcommittee report

ISDCF has started a security (FIPS) subcommittee to discuss issues with changing security requirements of digital cinema equipment.

We held a productive meeting a few weeks ago. We had a review of that meeting.

2. FIPS

- What has Changed

One big change is the move from SHA-1 to SHA-256. This is being considered in SMPTE so we are not reviewing that in this group. Concern if we will still get support for SHA-1 (that we will need) when the government moves to SHA-256. Not a long conversation.

- Homework assignment

We asked participants to help create a document of items that have changed for security. Especially things that are adding cost and no apparent impact for digital cinema security. (Probably a shared Google Document.)

We have asked DCI for documents that they may have used to consider the changes for security requirements so we can understand the motivation for some of the security changes.

We think we need to get some subject security experts involved in our discussions.

3. Future of FIPS for D-Cinema
    - Danger of changes we cannot follow: export-control, onerous provisions.

We need to understand if some of the FIPS requirements can be exported outside the US (future FIPS). We recognize that items that are currently outside the FIPS boundary may need to be inside the boundary and can cause problems in future products. Some items will need to be supported even after they are changes due to FIPS changes (i.e. random number generator).

    - Does it really improve security: we work to pass CTP as a feature.
    - Cost.

Effort vs value. Does the changes to FIPS improve the security of digital cinema? Especially with regard to the installed base of products.

    - What could we do instead?

This was a major topic of discussion. If we don't use FIPS, but need security review how would this be done? Could we define a current version of FIPS and "freeze" it and use that as the test criteria - how could we find ways to test products?

4. DCI / CTP Changes
   - Should we create an alternative to FIPS review? (See above)
   - Discuss CTP chapters/sections that could be changed to support new architecture / innovation. (Not discussed in detail.)

If you want to join this discussion, please email jerry@jerrypierce.org and ask to join the security discussion.

Is it possible to conduct a FIPS review and ignore some of the test results (not a pass/fail)? To be discussed.

Note: Things have dramatically changed in the understanding of digital security since the creation of the digital cinema standard in 2005. FIPS was a safe harbor in 2005. We need to better understand the real issues for DC security and address the needs as understood today.

In 2005 4K used to be very special, but today 4K is common in the home environment and we should understand the impact of this change.

===

Metadata subcommittee report

Next time… We need exhibitors to participate!

===

End of Life Equipment Discussion

We have seen situations where distributors have made a decision to stop delivering content to specific hardware. It is important that we make exhibitors aware that this is a (not likely) possibility. In particular for products that are past end-of-support/life.

To help in this conversation, is it possible to have a definition for the terminology for terms. Some hardware manufacturers have internal definition for these terms, but is there a general definition we can use at ISDCF?

A suggested set for common discussion (not a legal document that a hardware manufactures might use).

–Current Product - Introduction/Maturity - products with full support by manufacturer
–End of Production (EOP) - product no longer being manufactured. No orders for new products are possible.
–End of Support/Service (EOS) - product *may* not be able to get new updates. No orders for spares and consumables are likely. If a device is not updated it may be at more risk of not being supported.
–End of Content Delivery (EOCD) - specific distributor on specific equipment may decide to no longer providing content to device. This may follow EOS, but can be at any time in equipments lifeline.

How to we share our concern that some equipment may face EOCD in the future. User beware!

Jerry/Lefko will write a draft note to exhibitors about risk of EOCD and the increasing risk over time. In particular as equipment ages and past EOS. Legal counsel will review any note to exhibitors prior to its distribution

===
Future of DMD chips

Is there any risk that we only have a single source for DMD chips. There was a supply chain hiccup for some projectors that had a long delay in getting chips. Is this a problem we should worry about?

We heard from one insider that we should not be worried.

===
Immersive Audio

When will we shift to labeling immersive audio content with the name IAB?

We have had a few titles released to a number of territories that use the IAB name. Very few issues in releasing with IAB. One studio said we should just stay with Atmos as the name. Another studio has a specification to move to IAB. One exhibitor plans to use IAB on content. One manufacturer wants to have the name change to IAB to support all immersive audio hardware playback systems and not use the brand name in the inter-operable content.

It is up to the distribution/studios to make the change.

===

Accessibility with smart phones

At the last meeting the Chairman presented a list of requirements and a candidate solution. The CIT (Center for Innovation and Technology at the Cinema Foundation) is also looking into this topic. The question is: Should ISDCF continue to investigate this topic or should we defer to CIT until or unless things change?

One studio has found that the international community has been using a smart phone app to help with accessibility and it has been very successful. It meets all the criteria for that studio. (Security / geofencing / etc.). We think its a cloud based delivery, but more to come. Solves subtitles, audio and sign language. More information requested! One company want to understand if the equipment is listed on the DCI site. At least one studio is supporting it.

===

Projection Letter Proposal

CIT is moving forward with a service to provide exception letter distribution via an email blast service. We think a website has been started.

===

Naming Convention

Nothing to report. Lots going on, but business as usual.

===

Presentation Monitoring

CIT may be doing a project on this, but for now it's in remission in ISDCF.

Some theaters routinely check the performance and playlists. It is a challenge to find / train individuals that have the skills to perform the checks. It is recognized that we need to do a better job.

===

Terminology Registry

Initial terminology registry has been started! https://registry-page.isdcf.com/terms/
We need to add more terms, but we have the start and the GitHub registry is open and ready for additions and pull request to update (https://github.com/ISDCF/registries/blob/master/src/main/data/terms.json) We need to have an introduction written to the registry. An API version of the JSON is also available at https://registry.isdcf.com/terms/.

We still need the intro.

===

DCP, Live & Event Content in the Booth

We identified a possible project to see if new recommended practices are needed for exhibitor booths with multiple inputs for screen content. This was passed to NATO and CIT. At this point ISDCF is not being asked for help.

===

SMPTE update

Many documents for digital cinema SMPTE standards have been completed. Public CD proposed standard for compression of DCDM lossless JPEG2000. https://github.com/SMPTE/st428-24

The 3D document was also live: https://www.iso.org/standard/81846.html

TC-36 / project to speed up the process for ISO to more quickly embrace and "internationalize" SMPTE input.

===

The Cinema Foundation / CIT

No updates.

===

EDCF

No updates.

===

DCI Updates

No additional updates beyond CTP 1.4 and DCSS 1.4.3 discussed earlier.

Action Items from July 19, 2023

1. Provide example bit streams of problematic JPEG2000 bitstreams that experience issues on some decoders. (Sean?) - active in process
2. Call another audio test content meeting to discuss. Date set to listen.
3. See embedded action items from last meeting (that we didn't complete)

===

Attendance on last page.