



## European Digital Cinema Forum

EDCF Technical Support Group Meeting 04 October 2007

Meeting minutes (by B. Michel, XDC)

The meeting took place from 10.30 until 16.10.

11 persons attended:

Peter Wilson	<a href="mailto:peter.wilson@hddc.co.uk">peter.wilson@hddc.co.uk</a>
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Wolfgang Ruppell	<a href="mailto:wolfgang.ruppell@t-systems.com">wolfgang.ruppell@t-systems.com</a>

Kommer Klein, P. Walford & Richard Welsh sent apologies.

### **Agenda Topics**

*Update on the Digital Cinema Situation in Germany*

*Wolfgang Ruppel, T-*

*systems*

New T-systems D-Cinema servers almost ready, 3 cinemas equipped as a pilot project.

*Update on Training*

*Angelo Dalessio*

We must prepare training for the teachers, not directly for end-users.

EDCF training modules should focus on educators.

EDCF is looking for members interested in training (XDC is interested as training WP responsible within EDCINE)

Mastering and display are the less known areas.

3D is a problem: no experts or too many experts saying all others are not experts???

P. Wilson says that the BFI has good projector training subsidised by the Skillset initiative (UK gov) for Projectionists.

P. Wilson hopes run a new 3D mastering course in the new year.

*Update on Digital in Venice*

*Angelo Dalessio*

Angelo suggested that we create a "D-Cinema guide for festival organisers" following the disastrous experience at the Venice festival where even big names from Hollywood do not know that their DCP also needed a KDM to be played... Even the basics are NOT known.

4K tests production were made in Rome, with participation from the DCCJ (Japan), CSC (France) and Duomo

Production, Post and Venue were in 4K. We are still far from real time because of throughput, file sizes, display sizes (they used four 2K displays to look at images). There is a "making of" video. Angelo will look to obtain it; should be instructive if not useful.

Angelo noted a lot of ignorance in terminology leading to misunderstandings and communication problems (DCF, 4K, color space terms,...)

### *ITU document about HD formats in TV*

*Peter Wilson*

The ITU have formalised a series of LSDI (Large Screen Digital Imagery) formats for transmission, ITU-T Documents J601, this includes 4K 3840x2160 and 8K 7680x4320.

This is backed by NHK.

### *Dirac*

Dirac small talk : Some explanations about Dirac and its interest for broadcasters ; I-only version is used in post. Main advantage of Dirac is its open technology royalty-free use (compared to MPEG and its MPEG-LA fees)

### *Update on Fraunhofer Digital Cinema tool sets (Fraunhofer)*

*Alexander Schmitt,*

DCP player & DCP validation tool (not a commercial product) (yet??), KDM tool, tools developed within the WorldScreen EC project framework.

The validation tool could become a commercial product but lots of issues remain to insure maintenance, get royalties for FHG, etc...

### *SMPTE Frame Rate Study group progress*

*P. Wilson*

An Original EDCF discussion championed by Kommer Klein who wrote the Imago position paper on frame rates for Digital Cinema. Progress status: a draft was written in the DC28.10 mastering group. The doc is available on the SMPTE FTP. This is good progress after just one year of the introduction of the idea at SMPTE. The Study group Document was accepted by DC28.10. An adhoc group is now formed to generate standards documents. Lots of issues to clarify to insure proper maintenance, upgrade of existing servers and projectors, bitrates concerns, etc... 25,30, 50 and 60 will go to the standard. Legacy compatible rates such as 16 or 20 will be optional and most probably used only by cinematheques and other archives.

### *Alternative content, what does it mean and how to handle it? Peter Wilson*

- Non Hollywood movies and local productions may be considered alternative content in the sense they often do not require DCI level security, sometimes use DVD (or Bluray in the future) for transport to local cinemas. Non-DCI networks examples are Docuzone, Cinesuit ([www.cinesuit.de](http://www.cinesuit.de)) Emerging Pictures USA.
- Non Hollywood movies can also be treated as would a regular Hollywood Movie. And mastered in exactly the same way.
- Live events content : concerts, sport events
- Educational content (interactive ??)
- Advertisement, often SD or HD, often unencrypted and unprotected.

Suggestion : they could use the JPEG encoding and DCP packaging from OpenJPEG or commercial solutions to access DCI-compliant cinemas, Bluray for non-DCI venues

A key issue is that Movies may need some processing such as precision Colour Grading prior to Mastering.

There is a need for an '**EDCF Alternative content guide**' for newcomers to D Cinema, how to connect set-top boxes to D-Cinema servers or projectors, set-up, aspect ratio, FIPS concerns for the connectivity, how to setup a projector and sound system for alt. content. If EDCF-T collects a list of topics, we will find the needed specialists to write the chapters.

Training of operators is mandatory. They should understand the workflow from the satellite dish to the screen and loudspeakers.

*The works of the ISDCF*

*Peter Wilson*

Peter Walford sends apologies.

#### *FIPS Certification :*

The DCI spec implies that projectors may contain the server, the media block and maybe ultimately the sound system or be separate elements using secure connections between the media block and projector. DCI has maybe not perceived the far reaching implications of the FIPS norm.

The Projector is unlikely to pass the FIPS certification without exceptions about the lamp house EMI problems. Projectors could become L2 for the lamp part, L3 for the rest. Clarification is required for FIPS, ideally by the studios themselves.

PW's questions:

Is the DCI downgrade from level three to level two for FCC EMC testing valid in the context of FIPS-140-2? (FIPS being a higher authority)

If level three certification is ultimately necessary does the Consumer level FCC requirement prevent certification of individual blocks and insist on full product testing.

*EDCINE*

*Benoit Michel*

Presentation of the work done (see [www.edcine.org](http://www.edcine.org) for details) and European concerns about the Security. Publication of the EDCINE "Digital Cinema Security White Book" end of October 2007. If you are an EDCF member and if you want a free early copy, send an email to [webmaster@edcine.org](mailto:webmaster@edcine.org) with subject = "WHITE BOOK REQUEST FOR EDCF MEMBER".

*IDIFF*

*Peter Wilson and Benoit Michel*

IDiff will be in Paris on January 30 – Feb 1st, 2008. An EDCF conference will be held Thursday afternoon featuring Creating the DCP & making Movies in 3D. There will also be IP-Racine results public presentation, most probably followed by a digitally produced movie avant-premiere (t.b.c.). It is also intended to hold a Technical Support Group meeting at IDIFF – Thursday morning tbc.

*Cooperation request for training*

*Angelo Dalessio*

Angelo would like to organize a training seminar (a weekend ?) ; use the RED camera for stereoscopy shootings ; also to address practical issues inside the projector booth (issue raised by Christie)

*End of meeting open session : Question about cinemas without Dolby setup*

There are some 30% of german cinemas without Dolby or DTS system as far as we know. Is the problem significant when switching to digital? Feedback from installers could help answer the question...

*Benoit Michel / Peter Wilson*

*19 October 07*