

## EDCF/UNIC SMPTE DCP Project Status Report

May 2015

The EDCF/UNIC SMPTE DCP Project Group is making great headway in addressing the challenges of conversion from the temporary 'Interop' DCP format to the version formally standardised by SMPTE. The Interop DCP format was assembled to allow content producers to deliver digital movies on DCI compliant equipment. The temporary Interop has had to cope with several changes along the road to accommodate evolving capabilities and certain ambiguities in the DCI specifications but many new features have been reserved for the SMPTE version. Although Interop has served us well it was not designed with the rigor that is an integral part of the formal standardisation process of SMPTE.

Many of the players in the movie industry are now ready to embrace the SMPTE standard because it offers important new capabilities including :

Encrypted Sub-Titles	For better content protection.
3D Sub-Titles.	Reduces number of 3D picture versions
CPL Meta Data.	Information about the content - relieving the burden of hieroglyphic names and enabling further automation).
CPL Markers.	Electronic markers that can cue theatre automation systems.
Theatre Key Retrieval.	Capability to support data for automated key retrieval systems (once finalised).
Auxiliary Data.	Data streams required to support ancillary systems. (E.g. Seat-motion Systems and Immersive Sound).

Most importantly, the use of standardised data formats allows for much better support and troubleshooting if things go wrong. The new world of Digital Cinema is still at its genesis and the SMPTE standard has created a structure to provide new capabilities and automation possibilities for the future.

The challenge for this project group was to gain a clear understanding of the pitfalls that might arise in managing the transition to the new format with equipment which has been installed over the last ten years. The goal is to ensure that system installations have predictable outcomes and that downtimes are minimised or better still eliminated.

Our process has been divided into the following tasks:

1. Installed Base Information.
2. Communication.
3. Test Material.
4. Confirmation Plans.
5. Verification Plans.

### Actions

Form a small project team with representatives for:

Projector Companies  
Server and TMS Companies  
Sound Systems Companies  
Content Producers and Distributors  
Major Studios  
System Integrators  
Exhibitors

Team Members are:

Mike Bradbury	Odeon
Guillaume Branders	UNIC
George Eyles	Technicolor
Toby Glover	Deluxe
John Graham (Secy.)	EDCF
Alex Hibbitt	Arts Alliance
Saul Mahoney	Disney
David Monk (Chair)	EDCF
Chris Mullins	Sony Equipment
Rich Phillips	Arts Alliance
Jan Runge	UNIC
Steve Rush	Sony Pictures
Andy Scade	Deluxe
Nick Watson	Dolby

This team is working with the US based ISDCF group who has this same task high on its own priority list.

So far the group has:

- Contacted all projector manufacturers for information.
- Designed a survey which will be sent to all Server and TMS Manufacturers.
- Evaluated and demonstrated existing Test Material.
- Determined a minimum feature set that will be required for ***EDCF UNIC SMPTE DCP Ready*** status in Europe. This major step was reviewed and agreed with US colleagues from NATO, Distributors and Major Studios. We are on the same trajectory and have supported a position that has now become globally agreed.

Limited but significant testing has already begun in the USA with two releases from Disney and other tests including some trailers.

We are preparing to run tests initially in two European territories where we have

- 1) Strong cooperation
- 2) Good knowledge of the deployed equipment
- 3) Excellent NOC and telecommunication infrastructure
- 4) Potential for a rapid conversion of the whole market to SMPTE DCP readiness.

Others are in the wings but these will not stop tests being conducted to verify readiness.

Our plan is not to engage Exhibitors in multiple tests of equipment, versions of SMPTE, and configurations. We are though planning to ensure:

- 1) Firmware/software upgrade status is updated to the latest required level.
- 2) Appropriately configured systems are deployed.
- 3) Confirmation tests are affirmative.
- 4) Features are screened to provide a comprehensive verification.
- 5) Interop backups are in place if required.

We also plan to share the results that each exhibitor, entity or region achieves (subject to permission) for the benefit of the whole industry.

Just now our group has the resources we need so far and is as large as we can practically manage effectively. We plan to expand engagement once we have assembled all the information we are requesting. We expect

to facilitate an open phone call to share results and revised plans based on our experience.

We also plan to post as much information as we can on the EDCF web-site. This will also contain an FAQ to help everyone understand what needs to be done.

Planning Dates are

1) Web Pages Ready for loading	May 22nd
2) Server and TMS Questionnaire sent to manufacturers	May 22nd.
3) FAQs Start loading	Jun 1st
4) Test Content Release 1.0 available.	Jun 30th.
5) Confirmation of 1st Test Partner. Terrestrial Delivery.	May 30th.
6) Confirmation of 2nd Test Partner. Satellite Delivery	Jun 5th.
7) Confirmation. of Major Exhib Partner Mixed Delivery	Jun 30th
8) Presentation at ICTA	Jun 20/21st
9) Presentation at CineEurope.	Jun 25th.
10) First 24p Feature Test.	September?
11) First 25p Feature Test.	September?
12) First 24fpe 3D Feature with Subs.	TBD
13) First 25fpe 3D Feature with Subs	TBD
14) SMPTE Trailers from Studios.	Planned for Q1 2016
15) SMPTE Features from Studios	Planned for Q2 2016

We look forward to working with the whole industry to help this transition to be beneficial to everyone even though it will require some legwork to get all screens ready and tested in time for the expected transition in middle of 2016.

David Monk  
for UNIC/EDCF SMPTE DCP Project Group