

SMPTe Digital Cinema Summit at NAB 2005

Over six hundred motion imaging professionals attended SMPTe's popular Digital Cinema Session at NAB on Saturday, April 16, 2005. The fourth annual Digital Cinema Summit focused on the motion picture industry's transition to digital technology and covered the science, engineering, testing, standards, economic, regulatory, and political issues surrounding the implementation of D-Cinema.

Presented for the first time was an in-depth look at all facets of the recently completed Digital Cinema Initiative (DCI) specifications along with an analysis of the issues faced in implementing them through SMPTe standards. The distinguished panel of speakers included Howard Lukk, Walt Disney Studios; Walt Ordway, Digital Cinema Initiatives; and Jerry Pierce, Universal Pictures, who explored the global impact of digital cinema on entertainment and technology businesses, as well as content production, post-production, and distribution.

Wendy Aylsworth, Warner Bros., discussed the major objectives, structure, and documents being developed by the DC-28 Committee, SMPTe's Technology Committee on D-Cinema. As chairperson of the DC-28 Technical Committee, Aylsworth coordinates the efforts of over two-hundred international individuals. The DC-28 committee is working on establishing the first set of over 30 interoperability specifications on digital cinema; from the format of master elements, through distribution of the content, and on to exhibition routing and display.

D-Cinema is being deployed around the world, and so a panel of expert international experts from Europe, the U.S., and Asia, was a must. Moderated by SMPTe President Edward Hobson, National TeleConsultants, the panel elaborated on the opportunities, needs, challenges, and business aspects of Digital Cinema. Experts on the panel included Gwendall Auffret, Avanti Digital, Paris; Peter Wilson, European Digital Cinema Forum, United Kingdom; and Hiroshi Yasuda, Center for Collaborative Research at The University of Tokyo. The panel discussion also included an update of the work being done by the European Digital Cinema Forum.

Pierre-Anthony Lemieux, Dolby



Laboratories, discussed the content protection standards, necessary for the interoperable distribution of D-Cinema content. Lemieux explained the basic technology and architecture underlying these emerging SMPTe standards and gave an overview of key documents under consideration by SMPTe's DC-28 Committee.

Not to be ignored was the compression angle of D-Cinema, and Michael Marcellin, professor of electrical and computer engineering at the University of Arizona, gave a dissertation on JPEG2000, the latest international standard for image compression. JPEG2000 has been chosen by Digital

Cinema Initiatives (DCI) for its digital distribution of motion pictures. Marcellin also cited SMPTe's work on wrapping JPEG2000 into MXF. The JPEG2000 discussion provided an excellent forum on the features and benefits of the standard and the motivation for its selection for D-Cinema.

The Session also unveiled proposed D-Cinema Package (DCP) standards documents. Presenter John Hurst, a private consultant in the field, emphasized the tangible form and common use cases of DCP. Hurst supplied an easy-to-follow illustration for the study of the DCP and its related documents for those who were new to the subject, and those aware of DCP were given an update on recent changes to DCP documents.

The several hundred professionals who attended the event included entertainment technology and business executives, those in the creative and technical production and post-production arenas, engineers, those involved in consumer content, users, technicians, and others in the motion imaging field.

The Digital Cinema Summit was a joint effort of SMPTe and the Entertainment Technology Center at USC, in partnership with the National Association of Broadcasters.

