

C24 COMMITTEE ON VIDEO COMPRESSION TECHNOLOGY

David Fibush, Chairman

Scope: The application of the General Scope as it pertains to the encoding, processing, switching, and decoding of video signals to, in, and from the compressed domain.

This technology committee is responsible for two related areas, compression and switching. Based on this combination we have the projects listed below in two categories. Compression systems and constraints may include transcoding per the Task Force request to work on concatenated systems. Compression data for switching is to emphasize that our expertise in compression is to be applied to determination of information to be included in compressed data streams to facilitate switching and synchronization. We do not cover the actual switching methods. Numbers shown identify the individual C24 committee projects.

Compression Systems and Constraints

C24.11, Constraints for 4:2:2 profile: two documents have been developed in close cooperation with the Pro-MPEG Forum. RP 213, MPEG-2 Operating Ranges, defines bit rate ranges and other parameters for SDTV and HDTV; allows I-frame only operation that is fully compatible with MPEG for the encoder but would be a less complex, noncompliant, decoder for production applications. EG 38, MPEG-2 Operating Range Applications, describes several different applications and recommends operating parameters.

C24.12, MPEG-4; the committee is monitoring development of this new standard and its application to television studio processes.

C24.14, Macroblock-aligned encoding: RP 202 has been revised based on trial publication comments. Macroblock alignment reduces artifact generation in multigeneration MPEG-2 encoding.

C24.15, HD-D5 compression: SMPTE 342M, HD-D5 Compressed Video 1080i and 720p Systems—Encoding Process and Data Format has been completed.

C24.18, D10-type compression: SMPTE 356M, Type D-10 Stream Specifications—MPEG-2 4:2:2P@ML for 525/60 and 625/50 has been completed.

C24.19, HD-CAM Compression: The first draft of a proposed standard is out for ballot.

C24.20, DVPRO-HD Compression: A proposed standard specifying 100 Mbit/sec DV-type HD is out for ballot.

Compression Data for Switching

C24.35, Revision of SMPTE 312M, Splice Points for MPEG-2 Transport Streams: The revision indicates that part of the standard may be replaced with methods in an SCTE standard pending validation and general use of the new methods. It is out for Standards Committee ballot.



L6 COMMITTEE ON MOTION PICTURE LABORATORY SERVICES TECHNOLOGY

Alan J. Masson, Chairman



The scope of the L6 committee relates to the preparation, processing, and duplication of motion pictures. This is a mature technology and so the activities of the committee are focused principally on periodic (5-year) reviews of existing standards, recommended practices, and engineering guidelines for traditional laboratory procedures.

In a number of cases these documents require revision to take account of new technology. Although techniques such as telecine scanning and high-resolution scanning and film recording are often operated by motion picture laboratories, standards for these technologies are within

the scope of other SMPTE technology committees. The meetings of the L6 committee are typically scheduled once per year during the SMPTE Fall Conference and are held in conjunction with those of the Committee on Film Technology (F2) as the interests of the members of these two committees, which are largely drawn from the laboratories and film manufacturers, overlap to a certain degree. Some significant document revisions in recent years have included:

- SMPTE 301, Theatre Projection Leader, Trailer and Cue Marks
- SMPTE 55, 35- and 16-mm Television Release Prints—Leaders and Cue Marks
- SMPTE RP 131: Storage of Motion-Picture Films
- SMPTE RP 65: Motion Picture Enlargement/Reduction Ratios