



DAYTON

Television Applications (22TV)

Chair: Birney Dayton
Co-chair: Michael Dolan

Overview

The committee on Television Applications (22TV) applies to the application of mastered essence to television distribution, including compression, encryption, wrapping, marking, packaging, media, control, display presentation, reproduction, and related topics.

Organization

The work of the Technology Committee is divided into several projects as described in the following section.

Work in Progress

Revision of RP 215

RP 215 (Film Ancillary data mapping document) is being updated to include support for progressive video formats, provision for carrying the ASC Color Decision List data, and provision for an alternative mapping for nonfilm applications (for video originated productions).

Carriage ANC Data Packets in the MPEG-2 Transport Stream

Define the syntax and semantics for the carriage of SMPTE 291M ancillary data packets for carriage in MPEG-2 transport stream PES packets.

Lip Sync Issues

Investigate all aspects of lip sync (A-V) errors through the end-to-end broadcast chain, and potential solutions. Including, but not limited to, sources of sync errors, acceptable tolerances, measurement techniques, and techniques for correction of sync errors.

Image Formatting for Transmission and Display

Investigate all aspects of how video images are formatted for transmission and display, taking account of the various production, transmission, and display formats, and potential problems that may occur.



DOLAN

BIRNEY DAYTON has been active in the broadcast industry since 1968. He spent four years in television production and equipment maintenance, while completing his BSEE at the University of Nevada, Reno. In 1973, he joined Grass Valley Group, Inc., and for the next 16 he designed and managed the design of many products. In 1989, Dayton with two others, founded NVISION, Inc., and he is currently the chair and CTO.

Over the last 30 years, Dayton has spent considerable time working on industry committees helping to advance the state of the art. He was involved in the development of SMPTE analog and digital component video standards, and was co-chair of the SMPTE High Definition Electronic Production working group. He also chaired the Systems Analysis working party of the Advisory Committee on Advanced Television Service.

Dayton has authored numerous industry papers and currently holds 16 patents. He is a SMPTE Fellow.

MICHAEL A. DOLAN is founder and president of Television Broadcast Technology, providing specialized professional encoders, test tools, and technical consulting in the field of digital television. He holds a BSEE degree from Virginia Tech and has worked for and founded various leading-edge computer graphics and realtime systems companies, including early foundational work in W3C technology and analog data broadcasting. Dolan has been involved in digital television engineering for the past eight years; including data broadcast system architecture and digital receiver design and compliance. He also currently chairs the ATSC Data Broadcasting Specialist Group (TSG/S13) and is active in the Consumer Electronics Association (CEA) and the Society of Cable Telecommunications Engineers (SCTE). A SMPTE Fellow, Dolan authors the SMPTE Journal Almanac column, and holds several patents in computer web technology.