

commercials, and the like—now known as the International Standard Audiovisual Number (ISAN). Balloting on ISAN has taken place within the relevant ISO groups and was completed during the recent work period. The ISAN suite of documents should be fully approved within the time frame of publication of this report. A registration organizational structure has been established by ISO to support the implementation of ISAN.

Ongoing work within R30 includes the incorporation of new registers into the information available through the search mechanisms of the SMPTE RA website, the development of the web services method of publication for the site, the preparation of processes for making management of the registers housed on the site easier, and testing the new functionality. In addition, R30 will continue its work to write SMPTE procedures that will make it easier for other committees to easily incorporate registers into the standards documents that they prepare.



Jim Wilkinson

Wilkinson began working in broadcasting at IBA's Engineering Headquarters in 1974. During his time with the IBA, he worked on DICE, video compression using DPCM at 34 Mb/s and other projects. In 1979, he joined the Advanced Development Laboratories of Sony Broadcast as one of the founding members and pursued many activities over a period of 28 years, including digital video recording, image compression and processing, metadata and file/stream formats. He has been awarded over 80 patents; and has participated in standards activities in the AES, SMPTE, and EBU. He was an active member of the EBU/SMPTE Task Force and is now equally active within the SMPTE engineering committees. In 2006, Wilkinson retired from Sony and now works as an engineering consultant in the areas of video and sound with an interest in compression and file/stream formats.

Television Image Technology (I23)

Chaired by Jim Wilkinson

New consumer display technologies continue to make an impact on the professional monitoring side of the business. The work of David Bancroft on documenting the performance of consumer display technology has now seeded research in the EBU and ARIB. Since the single benchmark characteristics of the CRT are rapidly being supplemented by other consumer display technologies, the work is focusing on documenting a virtual display technology that emulates the CRT. The aim is to be able to measure the screen output from the new display types against a virtual CRT reference. Thus, consumers should be able to see the pictures as intended by the content producer. From the content production side, it also provides a virtual reference for non-CRT monitors. The work continues and is expected to benefit both the production and consumer communities.

At the March 2007 meetings, Mr. Mitani gave a presentation of the NHK super-high-resolution system. Many readers might have seen this presented at the trade shows, particularly NAB 2006 and IBC 2006. Although deployment is on an ambitiously lengthy timescale, the very nature of the work drives us to think about the limits of imaging technology. It also includes a 22.2 surround sound system that gives a real sense of 3-D sound.

At the other extreme of scale, mobile/cell-phone operators are still interested in making video services available to mobile phones. It is believed that all the necessary standards are in place for the extraction of small images from SD and even HD sources, but this is still an infant technology so we continue to listen for feedback from those who create content for mobile phones.

A small, but important recent input to I23 was that the nonlinear transfer equations used by the various SMPTE (and ITU) standards are sufficiently accurate for 10-bit, video but may not be sufficiently accurate for 12-bit video at values close to the point where the logarithmic transfer characteristic switches over to the linear transfer characteristic. No change is required at this time, but those wishing to implement 12-bit video systems will require extra precision in the transfer to avoid errors and should contact I23 for advice.