

Building Communities

By Hans Hoffmann

Like no other industry, the rapid advances in technology and new content formats pose a particular challenge to media. This goes hand in hand with the transition of technology to more and more software-driven systems of which artificial intelligence (AI), cloud, Internet Protocol (IP), and metadata are prime examples. Users and business are constantly compelled to innovate either in their techniques and products or in new content formats. The annual SMPTE progress report highlights key advances in technology and recognizes the work of many other organizations in the broader media sector. The objective is to share the progress and facilitate a better understanding of the roles of fellow stakeholders in the media ecosystem. Ultimately, we can shape the media future together through collaborations, proactive liaisons, and building communities.

In this edition of the *Journal*, the editorial committee focused specifically on emerging technologies and reports from organizations that are (like SMPTE) driving the technological change in our industry. I am particularly proud that we have been able to include technology updates on global topics such as 5G (including its implications to B2B), blockchain, next-generation audio, new display technologies, and much more. To ensure a broad representation of the various disciplines, we have included important updates from many international organizations such as the International Telecommunication Union, the World Broadcasting Union, Digital Video Broadcasting, the Video Streaming Alliance, Virtual Reality Industry Forum, Consumer Technology Association, Digital Production Partnership (DPP), the UHD-Forum, and the Joint Task Force on Networked Media. I am also happy with the input we received from the Academy of Motion Picture Arts and Sciences, Advanced Television Systems Committee, and the American Society of Cinematographers Motion Imaging Technology Council.

Last but not least, the annual reports from the SMPTE Standards Technology Committees provide updates from work within SMPTE. In this context, I call out the article from Bruce Devlin who discussed how standards organizations survive in an agile software world.

About the Author



Hans Hoffmann is a senior manager and the head of media fundamental and production technologies in the European Broadcasting Union's (EBU's) Technology and Innovation Department. He and his excellent team at the EBU are constantly looking at the next innovations and trends in media, their technological assessment, and providing recommendations to the EBU members. They have been working on many media technology innovations and transitions, including file-based workflows [Material eXchange Format (MXF)/IMF], high-definition television (HDTV), ultrahigh-definition television (UHDTV)-high dynamic range (HDR)-high frame rate (HFR), video and audio codecs, next-generation audio, live IP infrastructures and media cybersecurity, metadata and artificial intelligence [including Natural Language Processing (NLP)], multi-cloud technologies, and how EBU members can manage their transformations through open innovation strategies. Hoffmann is the chair of the Broadcast Technology Futures groups, which consists of senior managers of the research and development (R&D) centers of British Broadcasting Corporation (BBC), Radiotelevisione italiana (RAI), Japan Broadcasting Corp. (NHK), Institute fuer Rundfunktechnik (IRT), and Communications Research Centre (CRC), Canada, and he co-chairs the Forum of Advanced Media in Europe (FAME) and the Inter-SDO Group. He currently serves as SMPTE Executive Vice President and is a past SMPTE Standards Vice President and chaired several SMPTE projects and task forces. Previously, he was with the IRT, Munich, Germany, for nine years.

