

Horst Schachlbauer

Sometimes there are people who have an outsized influence on work in places where they do not personally participate, yet their impacts are widely felt. Sometimes the influence of such people is not recognized by those on whom the influence impacts most. Such a person was Horst Schachlbauer, who, until his retirement, worked at the Institut für Rundfunktechnik in Munich, Germany, but whose influence was felt around the world—particularly, within the work of SMPTE standardization committees.

Schachlbauer benefitted from the international parentage that left him an unaccented speaker of both German and (American) English. He leveraged his facility with multiple languages, ultimately to speak eight languages—five of them fluently (German, English, French, Italian, and Spanish) and three of them somewhat less (Japanese, Hungarian, and Turkish). He was so facile with languages that he could sit at an international group dinner and hold conversations with people speaking each of the languages he knew, moving from one conversation to another without skipping a beat. Combined with his quiet and gentle nature and technical skills of great depth, these language abilities helped to make Schachlbauer a consummate technical diplomat. Technical diplomacy is a trait that can contribute greatly to reach consensus in standards development. In Schachlbauer's case, the combination of technical diplomacy and language skills was ideal



for participation in international standards bodies.

Although Schachlbauer was a SMPTE Member and Fellow, he did not participate actively in the SMPTE standardization process. Nevertheless, he greatly influenced its work over the past two decades. Schachlbauer served as a co-chair of the SMPTE/EBU Task Force for Harmonized Standards for the Exchange of Programme Material as Bit Streams (TF-HS). Objectives of the TF-HS were to examine what would be required as the television and related industries transitioned from realtime to file-based workflows and to develop a roadmap for the standardization that would be needed over the following one or two decades to support the transition. The Task Force operated from 1996 to 1998 and had participation of over 200 engineers from around the world, meeting more than 20 times in less than two years. The Task Force produced two reports that encapsulated its findings and recommendations. Those reports are still available on the SMPTE website.

Because of the work of the TF-HS, numerous technical concepts were recognized as required in future electronic media systems if a file-based workflow were to be facilitated. Nearly all of those concepts have now been adopted and are being further developed. Included are notions such as essence and metadata, layers and planes in processing and coding, workflows, object models, containers and wrappers, file format types, registers and registration processes, incorporation of compression into production and post-production processes, networks and transfer protocols, multiplexed networks, control systems, stream synchronization, realtime and non-realtime content delivery, and the list continues. Results of the TF-HS work and its further impact are represented by well-known abbreviations like MXF, BXF, AXF, and IMF and numerous other protocols.

Indeed, the results of the TF-HS work were so influential that SMPTE restructured its standards development committee organization to adopt the layers identified in the Task Force work and to produce layered standards of the sort identified by the TF-HS. One of the goals for the Task Force was to prepare a roadmap for standards needed over the following one to two decades. Now, 20 years on, the industry still is on the roadmap prepared by the Task Force. Much of the credit for that achievement is owed to Schachlbauer, who, in a tour de force of technical diplomacy, helped to lead the Task Force and, through it, SMPTE and the industry into the future that we all now enjoy.

—Merrill Weiss

