David L. George

A long time ago I had an engineering professor who insisted that the Meter Kilogram Second (MKS) system, on which much of our science is based, should really be the MKS$ system. His argument was that the $ (dollar) had as much effect on what was developed as the M and the K and the S combined. In truth, in our industry, he could have added a P for Politics as well, since political considerations have also done much to define the technologies on which modern day mass media is based.

When we accept the fact that economic and political pressures have been exerted on the development and application of technology over time, and that these factors constrain what the MKS factors suggest is not only possible but optimum, we can understand why there are so many different solutions in place to accomplish very similar tasks. These solutions differ regionally due to the legacies of earlier political decisions and are also graduated within those regions by perceptions of relative cost and preferred levels of performance.

While this was once reflected in myriad analog standards, the almost universal adoption of digital processing has led to a variety of digital manifestations of much of that diversity and added several levels of innovation of its own. To be fair, we must then acknowledge the recent variables associated with the introduction of DTV/HDTV and include the effects of their associated cost, performance, business, regional, and political considerations.

In a technologically shrinking world, now more than ever, we need the ability to effectively share important ideas and information throughout and between regions, overcoming many previous economic and political barriers. But to do so we must now address a range of necessary digital conversions that are, to say the least, challenging.

Beginning with film and the virtually universal nature of early SMPTE film standards, several decades ago we welcomed the new ability to share stories and ideas through the magic of moving images. Now regular program exchange has become possible and often commonplace among the nations of the world, though the flow of program material (along with the associated political, idealistic, and moral messages) has been uneven, mostly in one direction and reflective, mainly, of one ideology. But, as the world becomes more of a global village, at least in electronic terms, we have a real opportunity to improve on avenues for the free exchange of program material if we can come to grips with challenges that may now be more technical than political. The digital underpinnings of our industry may have exacerbated the challenge, but digital techniques also provide the key to developing a range of potential solutions.

Taking up the challenge, the SMPTE/EBU Joint Task Force on Harmonized Standards for the Exchange of Program Material as Bit Streams was formed in 1996. It's a long name, but there seemed to be no simple designation that really reflected the wide composition of the group, its many talented participants, and its ultimate purpose. The Task Force was divided into subgroups addressing the subject areas of compression, wrappers and metadata, file management and transfer protocols, and physical connections and systems. It immediately set out to accomplish its assigned task, presented its initial report at NAB97, and published it in the *Journal* in June of that year. That report is also available on the SMPTE Web site at http://www.smpte.org.

It was hoped that the final report, representing the completion of an enormous amount of work and the expenditure of a great deal of effort in a very short time, could be presented at NAB98. However, the amount of work required proved overwhelming, and the issuance of the final report is now scheduled to coincide with IBC in the fall.

This is meaningful work undertaken by a number of gifted and talented volunteers from many parts of the world. And it's only one example of the wide range of important work being done by your Society.

Want to become more involved? Just let us know.

SMPTE President David L. George is with IMMAD Broadcast Services, Markham, Ontario, Canada, L3R 0H3.