

ing Vice-President Stan Baron, and Editorial Director, Motion Pictures, John Baptista. We certainly appreciated the hospitality extended to us while in the Soviet Union, and we thank Vladimir Makoveev, Vladimir Jegorov, Eleanora Vinogradova, and Valery Belousov.

Accompanied by other officers, I also represented the Society at the

European Broadcasting Union Conference in Stockholm, Sweden. SMPTE was also represented at the International Broadcasting Convention in Brighton, England.

My term of office as President ends this year. I would like to take this opportunity to express my thanks and gratitude to the officers, Board of Governors, and the Headquarters

staff for their support and dedication during my term of office. I would also like to give special thanks to the Canadian Broadcasting Corp., which has sponsored my participation in Society activities for the past three decades. I would also like to thank my wife, Brigid, and my family for their continued support and encouragement over the years.

Engineering Report

By Stanley N. Baron, Engineering Vice-President

The American National Standards Institute (ANSI) and the Standards Engineering Society (SES), along with major members of the standards community, have jointly declared the week of October 14, 1990, as National Standards Week in recognition of the importance of standardization. This national effort coincides with the 21st annual World Standards Day designated by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). To all of us here today, both as manufacturers and users of standardized technology and as members of the SMPTE, this is an ideal opportunity to consider our relationships to the standardization process.

Standards as the Basis of Corporate Technical Policy

Successful managers understand the need to clearly define their goals and to provide direction by establishing standards of performance in the form of business plans supported by a system of financial policies, personnel policies, and the like. In this modern world, no less important are the technical standards which form the basis of corporate technical policy.

The Role Played by SMPTE as a Neutral Standards Developer

To most of us, the term "standards" means the promotion of interchangeability among systems; in the interfacing of hardware and supplies and most importantly, in the use of the end product produced by the system and distributed to the end users. Unfortunately, some believe that "standards" are choices or selections



Engineering Vice-President Stanley Baron delivering the engineering report at the opening session.

of a single "right" way to achieve an end result. As we all know, there is always a different (and sometimes a better) way to achieve the same goal. No standards-developing organization can decide which of the various ways to reach that goal may be best or right for a specific user's needs. That decision rests with the user, who will decide which standard best fills his own needs. In understanding and accepting the voluntary, nonexclusionary status of standards, both manufacturers and users can contribute to an effective standardization process.

While some may look to standards-developing organizations like the SMPTE as the source of new technologies described in standards, the real responsibility for the development and evolution of standards rests on the shoulders of both manufacturers and users. The standards developer can-

not act as a research and development lab . . . the development of new products and systems appropriately belong to commercial organizations who can accept the rewards (and the risks) of such development. What the standards developer can and does do, is provide a structure and a forum in which users can express their needs to manufacturers, and the manufacturers can gain input from the general body of users.

The standardization of new technologies always rests on the horns of a dilemma. On one hand, we want to rush a new technology to standardization so that users can immediately understand and utilize it, and so that other products can interface to it. The proponents of a new technology may see quick standardization as a marketplace advantage . . . their system is first, and sometimes, because of the mistaken concept that standardization means "exclusive," they may believe that being first denies the possibility of competitive technologies.

On the other hand, we need to ensure that standardization correctly describes the technology. Should we hesitate to undertake the standardization process for a technology which we feel may not succeed in the marketplace? No, it is the marketplace that must make that determination, not the standards developer. We have all heard the story that in the early days of the computer industry, one corporation, having developed an electronic computer, then decided that computers were a curiosity and that 12 such devices would meet the total needs of the world market. They, therefore, decided not to take the product to production but to build a short run of engineering prototypes.

That company then watched IBM overtake them and dominate the world market. There is no way to accurately predict the correct course to follow when dealing with new technologies. Only market forces can determine the winner for a specific application. And often, standards developed for one application, prove to be important in unforeseen markets.

However, while the success of a technology in the marketplace is not properly a consideration for the standards developer, we do recognize that the assurance of correctness in a standard may require some period of time in actual use in some cases. The dilemma can be stated very simply — it's hard to run while you're dragging your feet. Fortunately, most standards-developing organizations manage to at least *walk*, and often jog along this fine line, although not always to the complete satisfaction of those who hold either view.

In understanding and learning to work within this dichotomy, manufacturers and users can contribute significantly to an effective standardization process. But why should any of us, manufacturers, users, . . . members of the SMPTE, participate in the standardization process? Anyone concerned with interchangeability of equipment or products should be concerned about standards. At one level, to the user, standards provide a level of equipment interface and product conformity within a system which allows the user to purchase equipment and services in a competitive market with at least some understanding of what he's getting, and with the assurance that what he buys will interface with other elements of the system, thus reducing the risk and cost of implementation and use. For the manufacturer, standards provide a system identification and a means of developing consumer confidence, thus reducing the risk of failure and the cost of marketing.

At another level, the standardization process gives the user a voice in the manufacturer's decisions and gives the manufacturer access and understanding of the user's needs, thus reducing the cost of development which produces savings for both. And to all of us, as manufacturers, users, SMPTE members, and individual participants in the motion-picture and television technologies, the standardization process gives us an oppor-

tunity to contribute to the orderly advancement of those technologies and the industries they effect.

International Standards

Equally important to all of these is another rapidly emerging reason for participating in the standardization process. The role played by the SMPTE in providing international standardization continues to grow in importance. Unlike American national standards, international standards are not always voluntary. In an increasing number of areas, particularly in public health and safety, international standards take on the effect of law. In the case of multinational organizations like the ITU or ETSI, recommendations may be mandatory for members. Individual nations may adopt international standards from such organizations as the ISO and the IEC as mandatory national or multinational standards. Thus the equipment we manufacture and the products the equipment produces under a voluntary standards system may be required to meet regulations that have been drawn from those same standards.

Clearly, this is of vital importance to a manufacturer. Equally, it may be vitally important to a user, who must produce a product that meets the regulations in order to have it accepted in another country. To address this importance, it is essential that manufacturers and users participate in the development of the original standards.

This Year's Achievements

Soon after assuming this office, as part of my personal contribution to this process, I began a study of the standards document preparation process, along with Si Becker, the Director of Engineering, and a team of individuals with proven experience in standards work. My intention was to minimize the time and resources which must be invested in developing a standards document. The team has developed a plan to streamline that process and to reduce the resources required to generate standards. This plan is now before the Standards Committee for final review.

One step has already been completed and I am pleased to report that we have agreed upon, purchased, obtained, and have installed a desktop publishing system that will enable us not only to better support the activi-

ties of the committees, but improve the cycle and reduce the cost required to have the results of that work appear in the *Journal*.

The system was designed to both facilitate the development of documents by the headquarter's staff and the acceptance of documents from outside sources. The Engineering Dept. staff has developed the capability to accept text or drawings on a large assortment of media formatted on IBM or compatible computers and can edit text from a broad spectrum of word-processing and other software systems.

With the old system the Society incurred outside costs of \$110 for each page of documentation processed. With the new system the outside processing costs are \$7 per page. During the last month, we processed 16 pages, for a savings of over \$1600. The system purchase price was approximately \$15,000. Si Becker and his staff should be commended for the excellence of their work.

Some Final Thoughts

Those of us associated with standards have a definite responsibility to our management. The company executive, to be successful, must understand how technology is changing and how it affects the company. The company's engineers must not only keep the company informed but must be involved in the preparation of the standards which the company will be forced to follow to make sure that the company's interests and goals are properly served.

Our Society assists its members in serving that role well, by providing a neutral playing field for developing voluntary standards and certifying the technical competency of those standards. In doing so, the Society depends upon your help, investing your resources in the work of the Society. Your return on your investment is the reduction in risk and the reduced costs of development, marketing, and implementation that I mentioned before. Remember *our* success as a Society is dependent on *your* participation . . . your willingness to devote a portion of your personal and corporate resources to this task. This is not a spectator sport . . . at the end of the game, the individuals and companies that sit in the stands watching others participate may find that they are in no position to contribute to the final score.