

## Refinement · Innovation · Breakthrough

Tetsuo KASAI, Executive Vice President, NHK

Technical Research Laboratories was based on the theme: "Digital technology leads to new forms of broadcasting and toward the future". It was an opportunity for STRL to present its research results to the general public. The exhibits ranged from integrated services television and mobile terminals, to Super Hi-Vision (an ultrahigh-definition video system with 4000 scanning lines) and basic technologies that will support a new generation of broadcasting services. The fact that the open house attracted 27,871 visitors and was a great success indicates once again the strong presence of NHK's STRL in the broadcasting industry.

STRL was established in 1930. The legal foundation of STRL is the seventh and ninth articles of the Broadcast Law of 1950. It can easily be said that the history of STRL describes the very history of broadcasting in Japan; STRL has played a central role in spreading broadcasting throughout the country, as well as in improving the quality of broadcasting. I believe that the history of broadcasting is also the history of radio-frequency development, as well as that of broadcasting technology, the purpose of which is to give people in Japan low-cost high-quality service. In general, there is a relationship between the provider's cost and recipient's cost in the case of public services with no competition, in which a lower recipient cost increases the provider cost. NHK has a mission to promote broadcasting nationwide, while maintaining low recipient costs, unlike commercial broadcasters. It is also true that the provider cost must remain low to prevent it from affecting the recipient cost.

Although STRL's extensive research and development output has vitalized the broadcasting industry and the Japanese economy,

a significant increase in secondary revenue through its research and development is still a worthy goal, demanding a thorough examination of cost performance regarding utilization of intellectual properties and research results.

Although I especially enjoyed the open house's exhibits that presented near-market research results, the tour also made me recognize the importance of fundamental research fields. While the issue of near- or far-term research requires discussions from various viewpoints, my personal hope is that STRL will place more emphasis on cutting-edge fundamental research. This will allow STRL to evolve into a "Mecca" for global broadcasting technology R&D and a home to future Nobel Prize winners, which is an admirable national goal.

Prior to TV broadcasting, visual news media were limited to photographs in newspapers and in other printed material and news reels played at movie theatres. Now we can watch a live relay broadcast of a war happening on the other side of the globe. Technological advances are accelerating into an uncertain future. I believe that discussions on various issues, such as the form that broadcasting should take in an advanced information society, will lead to the creation of a new broadcasting culture; by sharing research endevours with other sectors, STRL and institutes like the Broadcasting Culture Research Institute can exceed the boundaries of their research fields. I expect STRL will continue with its free and vigorous research and development.