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### **International Internet Connection, Construction of Japan's First Portal Site**

In August 1988, a TCP / IP connection experiment was successfully conducted between NTT and a gateway installed at Stanford University, and IP packets crossed the Pacific Ocean for the first time. In this experiment, the IP over X.25 protocol, which transfers IP packets in X.25 packets, was used. In September of the same year, IP interconnection with ARPANET started. In September 1993, NTT launched the Web server "NTT Homepage (www.ntt.jp)", which was developed as Japan's first portal site, including "What's New in Japan" and "URL Square", which introduced other Web pages, and during the Great Hanshin-Awaji Earthquake in January 1995, the usefulness of information sharing via the Internet was demonstrated.

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### **Line Spectrum Pair (LSP) Method for High Compression Rate Voice Coding**

The LSP method was developed by Nippon Telegraph and Telephone Public Corporation in 1975 as a basic technology for achieving high compression coding of voice to perform many voice communications in a limited transmission band. In the 1990s, it was adopted by almost all international standards for voice coding, and is a very important technology that has contributed to the rapid spread of mobile phones and IP phones worldwide.

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### **Advanced Technology of Broadcasting System**

This is the result of a comprehensive broadcasting automation system and a TV standard format converter.

The integrated broadcasting automation system was developed to include functions such as the automatic allocation and control of equipment for producing broadcasting programs, automatic control of program transmission, and centralized control of a nationwide broadcasting network, and it has dramatically improved the economy, reliability, maintenance and operability of the broadcasting industry. This service was fully launched in November 1968, and was highly evaluated by highly industrialized nations in the United States, the United Kingdom, Germany, and France and their broadcasting organizations.

In addition, the TV standard system converter was completed for the first time in the world as an all-electronic system converter that can convert both the European system and the Japanese system in one direction, and has made a major contribution to the international exchange of television programs.