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Digital Switching Systems

In the 1970s, with regard to digital switching systems, whose research was started in earnest by the Nippon Telegraph and Telephone Public Corporation, the digital data switching system (D50 type) was developed and commercialized in 1980, the digital relay switching system (D60 type) in 1982, the digital city switching system (D70 type) in 1983, and the ISDN service was developed and provided in 1988. Switching systems in this era adopted SDH (New Synchronous Interface) and No. 7 common channel signaling, and developed and commercialized an intelligent network capable of providing advanced services.

ISDN: Integrated Services Digital Network

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Communication Network Design Theory

Basic research on communication network design theory was advanced, and the theory was constructed and systematized. In addition, the effectiveness and reliability of international communication networks were systematically treated, the network architecture was modeled, and quantitative evaluation was made possible. This has contributed significantly to communication network engineering.

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Integrated Nodes

A node system that provides a wide variety of multimedia services such as voice, data, and video was realized with a unified architecture, and it was put into practical use in subscriber line switching, packet switching, ATM switching, and advanced intelligent network (IN) services since 1994. This unified architecture uses a common platform based on a standard OS (IROS) and implements each service on the platform.