Steady Growth

The three Type I common carrier telecommunications businesses, which started services in 1987 in competition with Nippon Telegraph and Telephone Corp. (NTT), have done much better than expected in 1988.

The combined contract telephone circuits of Daini-Denden Inc. (DDI), Japan Telecom Co. and Teleway Japan Corp. are believed likely to top 4 million circuits by the end of fiscal 1988, compared with 2.65 million the year before.

In fiscal 1989, the contract circuits of the three medium- to long-distance service firms are expected to show a steady growth as DDI's and Japan Telecom's service areas are spreading. The two carriers' service areas, which were limited to Tokyo, Nagoya and Osaka, are extending to the Sanyo (westernmost Honshu), Kyushu and Tohoku regions.

More telecom companies have also entered the field. In regional services, Tokyo Telecommunication Network Inc., which operates leased circuit services, started a telephone service in May 1988. In the field of mobile communication business. Tokyo Bay Marinet Telecommunication Co. has launched a ship-to-shore radio telephone service.

In the telecommunications industry, NTT's inauguration of ISDN (integrated services digital network) in April 1988 is a noteworthy event linked with the next generation of information services. The network, termed "ISDN Net 64," can rapidly transmit voice, data and images (pictures) simultaneously over a single fiber-optics digital circuit. ISDN has made it possible to offer various communications services, such as high-definition facsimile transmission, animated drawings and other images transmission and



high-speed data transmission, to homes, businesses and public enterprises.

The service is currently limited to the Tokyo-Nagoya-Osaka area. Aiming at the nationwide spread of public fiber-optics digital communications circuits, NTT plans to invest some \(\fomage 20\) trillion in digitalization and terminal development projects by the year 2000. The ISDN diffusion rate by that year is estimated at 70% for enterprises and 10% for homes.

In the information-processing service industry, the creation of NTT Data Communications Systems Corp. is the outstanding event of 1988. This company, created by separating the data communications division from NTT, is Japan's largest information service company. It is a Type II common carrier telecom giant which has a work force of 6,800 and envisages annual sales of ¥220 billion (\$1.76 billion). Its future activities are expected to have a major effect on Japan's VAN (value-added network) service field.

As a result of the liberalization of VAN services between Japan and the United States in September 1987, a total of over 20 companies have entered the special (large-scale) Type II telecom business, which conducts a telecom business, leasing circuits from Type I common carriers like NTT. An increasing number of companies are also starting a common Type II telecom business. The total number of such firms is estimated to have reached close to 600. This compares with 315 at the end of 1986 and 465 at the end of 1987.

The year 1989 will witness the start of a variety of new services in the information-processing and communications industry. In the international communications field, International Telecom Japan Inc. and International Digital Communications Inc., which both acquired business licenses in November 1987, are due to start services in spring 1989. They are building earth stations and exchanges and negotiating with foreign carriers for communications linkups.

In the domestic satellite communications field, Japan Communications Satellite Co. and Space Communications Corp., which have both obtained business licenses, are expected to start services by launching satellites in the first half of 1989

In the field of international VAN services, Japan and Britain are nearing a final agreement. Japan and France are also starting negotiations.

At the same time, the Type I common carrier telecom business is expected to inaugurate new types of services like "Teleterminal" (a mobile communications service using facsimiles) in 1989. Some Type II telecom businesses are also expected to start new services, leasing circuits from the Type I common carriers.

(Koichi Hasegawa, economist)

Telecommunications and Information-Processing Market

(¥ billion) FY 1980 FY 1985 FY 1981 FY 1982 FY 1983 FY 1984 FY 1986 FY 1987 4,006.3 5,353.6 4,167.1 4,344.3 4,552.4 4,756.2 5.091.4 5,662.0 **NTT** revenue (3.9)(4.0)(4.3)(4.5)(7.0)(5.1)(5.8)1480 1650 170.5 1921 211.9 216.1 224.0 248.5 **KDD** revenue (4.3)(11.4)(3.4)(12.6)(10.4)(1.9)(3.7)(10.9)Sales of information-669.8 805.7 1,095.3 2,299.3 1,386.0 9119 1,561.8 1.918.2 processing services (12.3)(20.3)(13.2)(20.1)(26.5)(12.7)(22.8)(19.9)

Notes: 1. Figures in parentheses represent growth rate over the previous year.

2. Figures for sales of information-processing services are based on the "Report on a Survey of Specific Service Industries" by the Ministry of International Trade and Industry.