

Communications Equipment

Japan's communications equipment industry is enjoying sustained growth. Production of communications equipment in 1986 was valued at ¥1,760 billion, a scant 1.3% increase over the preceding year as the global economic recession and the strong yen bit into exports. Yet production picked up in 1987, with aggregate January-April production climbing 8.5% above that of the same period a year before. The Communication Industries Association of Japan predicts the communications industry will average 5.1% annual growth during the five years from 1986 through 1990.

The Japanese communications equipment market breaks down into three sectors. There is the government and public demand sector centered on Nippon Telegraph and Telephone Corp. (NTT), the general domestic demand sector and the export demand sector. Of orders received in 1986, ¥630 billion, or 33.4% of the total, came from the government and public demand sector, ¥673.8 billion (35.7% of the total) from the general domestic sector and ¥582.1 billion (30.9% of the total) from the export sector. This almost equal division of demand among the three sectors has remained constant for the past several years. Within each market sector, however, significant structural changes are taking place.

First, demand from NTT. In the past, a so-called NTT family of manufacturers all but monopolized the business of supplying NTT. NEC Corp., Fujitsu, Hitachi and Oki Electric Industry Co. monopolized the supply of telephone exchange switchboards, while Iwatsu Electric Co. and Nitsuko supplied all of NTT's ordinary telephones. Since its privatization in April 1985, however, NTT has opened its doors to all communications equipment makers offering high quality at low cost. Today, such leading communications equipment makers as Matsushita Communication Industrial Co., Toshiba Corp. and Mitsubishi Electric Corp. are making spirited efforts to sell to NTT.

The deregulation of telecommunications in April 1985 also radically changed the composition of the domestic communication market. Take, for example, telephones for home use. Prior to April 1985, NTT completely monopolized the mar-

ket. Now, however, any maker can sell telephones. Indeed, more than 50 makers crowded into the market, competing furiously to supply colorful and stylishly designed sets. Yet consumers proved to be less easily influenced by eye-catching designs and tints than the newcomers had hoped, and sales flagged. Today, natural selection has reduced the number of makers to about 10, and that of marketing companies to 20 or 30.

Today, the attention of communications equipment makers is focused on the digital PBX (private branch exchange). Japanese companies the likes of Matsushita Communication Industrial, Sharp Corp. and Sanyo Electric Co. have entered the digital PBX market one after another, while such foreign makers as IBM-affiliated Rolm, AT&T and Northern Telecom Ltd. of Canada are stepping up their Japanese sales offensives.

The size of the digital PBX market is still estimated at only ¥50 billion a year. But the PBX is a pivotal device for connecting telephones and facsimile machines within a company, and PBX makers expect the market to grow nearly 10 times over in coming years. Moreover, in many cases orders come in a package with orders for facsimiles and other office automation equipment. No wonder manufacturer's are eyeing this market so hungrily.

The PBX market used to be monopolized by the NTT family of NEC, Fujitsu, Hitachi and Oki Electric. However, now their shares are contracting. Toshiba has established a tie-up with AT&T, Mitsubishi Electric and Omron Tateisi Electronics Co. have gone in together with Rolm, and Oki Electric has become the agent of Northern Telecom. Both Japanese and foreign companies are engaged in cutthroat competition for a slice of the market.

Major structural change is also sweeping the export market. Japanese manufacturers are stepping up production overseas because of worsening trade friction between Japan and the United States and the sharp appreciation of the yen against key export currencies.

NEC, Japan's biggest electrical equipment company, has five plants in the United States, where it manufactures



Photo: Sharp Corp.

Consumers can choose from a wide range of communications equipment after deregulation.

switchboards, wireless apparatus, optical fiber communications systems and cellular telephones. It is also manufacturing switchboards in Brazil, Malaysia and Australia. NEC is also building a British plant in the suburbs of Birmingham that will turn out VCRs and eventually expand to cellular telephones and facsimile machines.

In April this year, Fujitsu established Fujitsu GTE Business Systems jointly with GTE, an integrated communications company headquartered in Connecticut in the United States. Fujitsu hopes to combine its production technology with the software technology and marketing strength of GTE to make the joint venture a foothold for developing, manufacturing and marketing digital PBX in the United States.

On July 1, Hitachi established a wholly owned subsidiary, Hitachi Telecom, in Norcross, Georgia. The subsidiary's American workers will utilize the outstanding software development ability of American technicians to manufacture and market digital PBX. The plant has already started local procurement of printed circuit substrates, ICs and outer frames. Hitachi plans to eventually raise its local production ratio to 50%. ●

(By Masahiro Shinoda, business news correspondent, the *Nihon Keizai Shimbun*)