

THE INFORMATION AND COMMUNICATIONS INDUSTRY IN KOREA

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Over the past several years, the waves of globalization and openness have swept all across Korea and the information and communications industry has been no exception. With the launching of the WTO, the information and computer sector is growing increasingly globalized day by day, and Korea is now in a position where it must also gradually open its market to the world. Domestically, the Ministry of Information and Communications (MIC) was created and the agencies related to the information and communications sector were unified with the aim of providing more systematic management of these areas. The Ministry of Information and Communications can now afford to turn away from a service-oriented strategy and concentrate on a synthetic policy dealing with business, industry and technology. In addition, the Government is heavily promoting the development of a National Information Infrastructure of Korea as a long-term project. Thus, it is expected that the information and communications industry will rapidly grow in the future.

The Main Trends in the Industry

The total production of Korea's information and communication industry in 1994 was about \$33.9 billion. This included the following industries: computers and their peripherals, communication facilities, semiconductors, information services and telecommunication services. Among these, the semiconductor industry accounted for a total production of about \$13.1 billion. Although the profits and the production growth rate of the semiconductor industry have declined because of the sharp

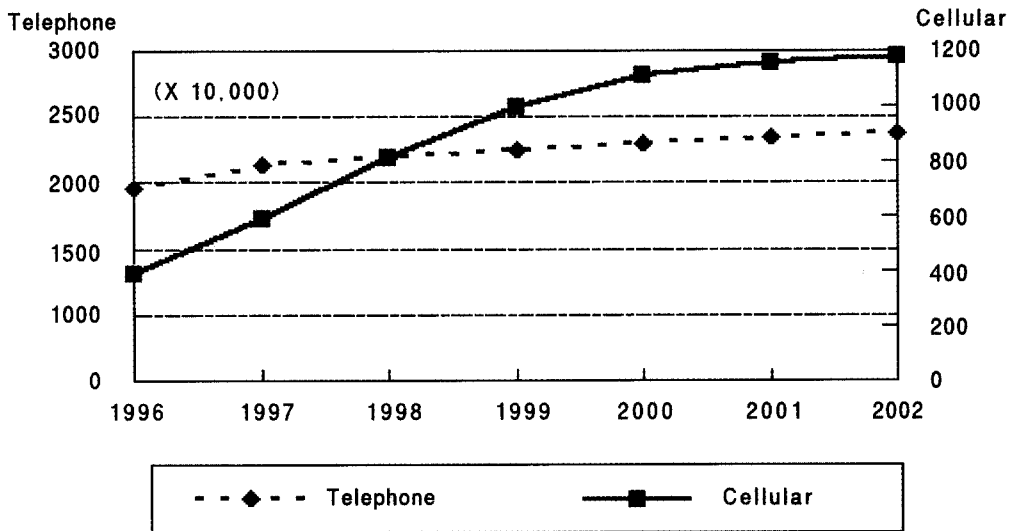
drop in semiconductor prices worldwide, it is still anticipated to constitute the majority part of the Korean information and communication industry. In the field of infrastructure of the telecommunications industry, Korea had 20.8 million telephone lines, 1.8 million cellular phone lines and 11.6 million pager lines as of the end of 1994. The cable TV industry of Korea was started in March of 1995, with 21 companies broadcasting programs at present. The fields of software and systems integration (SI) showed turnovers of \$1.2 billion and \$2.8 billion, respectively in 1994.

The Market Outlook for the Communications Field

Demand in the information and communications field has exploded in 1996 due to a number of factors. In the communication service field, the Government has permitted the entry of about 30 major business units. Also, the second mobile telecommunications company, Sinsegi Communications Ltd., was allowed to participate in the cellular service market. Especially in the newly emerging CDMA digital cellular field, the market for systems and cellular phones is emerging as a major issue. The mobile telecommunications industry is expected to grow up continuously, since the number of users is expected to rise dramatically as shown in <Figure-1>.

In particular, the market for the newly introduced CDMA digital cellular service system and phones and the market for applied service systems needed for the national information infrastructure are becoming increasing areas of interest and competition. The cellular phone market is

<Figure-1> The Estimated Demand for Telephones and Cellular Phones in Korea



"The entire volume of the PC communication industry is expected to pass over \$125 million in 1996"

estimated to be more than \$1.3 billion in this year. In early 1996, perhaps the biggest event in the telecommunications field in Korea was the fierce competition over the selection of a new telephone and telecommunications company to compete with Korea Telecom, with the laurel crown being awarded to the LG Group in the end. During the year 1995 with the worldwide boom of the Internet, the PC communications market grew considerably, but the individual companies are now engaged in intense competition right now. The existing companies such as Chollian and Hitel are still growing at high speed, but new companies such as Nownuri and Unitel are also enlarging their market shares. The entire volume of the PC communication industry is expected to pass over \$125 million in 1996, well up from \$87 million in 1995.

Activity in the field of manufacturing telecommunications system equipment such as switchboards and translators is expected to depend on the success or failure of CDMA technology. It is due to the fact that the success of CDMA technology is linked to exports to overseas markets. If the

CDMA technology turns out as a success, the related manufacturing industry will expand on a large scale. In any case, in the field of the trunked-radio systems (TRS) or wireless data communication systems, the magnitude of the market is still very small because the technology level of Korean companies is low and the market is still in its infant stages.

The Market Outlook for the Information Field

Looking at the Systems Integration (SI) field, the total volume of the market is expected to reach \$5 billion this year. It includes projects in the public sector such as the construction of a new international airport on Yongjong-do island and the EDI project for the Supply Administration. This also includes investment by the private sector to upgrade their information capabilities, which will most likely stay strong for some time. In addition, many companies are adopting CALS

<Table-1> The Investment for the Three Phases of the National Information Infrastructure Plan

	(unit: \$bil)			
Step	1st Step (‘95 - ‘97)	2nd Step (‘98 - 2002)	3rd Step (2003 - 2015)	Total
Investment	0.25	0.6	4.9	5.75

“In particular, the fields of digital cellular phones, multimedia PCs, and systems integration are expected to be prosperous”

“computer-aided logistics system” or “commerce at light speed”) as part of their management strategy for surviving in the future. The construction of CALS systems which manage all the processes of design, manufacturing of goods and distribution to consumers will produce active investment in this area

The plan for the construction of national information infrastructure will require a total \$5.75 billion in three phases as shown in <Table-1>. This breaks down to \$0.23 billion from the public sector, and \$5.52 from the private sector.

In the computer field, the sales of personal computers (PCs) are expected to exceed 2 million units in 1996. This means that the market volume will be about \$2.5 billion, and if monitors, CD-ROM drives and peripherals such as modems are included, it is expected to reach a volume of \$3.8 billion. In the Korean personal computer market, the major companies such as Samsung, Hyundai and Sambo are forecasting 30% increase in sales this year, and they are making active preparations for this. In particular, the demand for multimedia type PCs is expected to be extremely high.

Conclusion

As witnessed in the above information, the information and communications industry in Korea has attractive prospects for rapid growth within the competitive environment of a market which is being opened to overseas companies. This means that the next step for the Korean industry is to prepare to export and advance overseas. This is linked to the strong determination of the Government to bring Korea into the information age by pushing hard for the construction of the National Information Infrastructure of Korea, which is promoting great activity within the industry itself. In particular, the fields of digital cellular phones, multimedia PCs, and systems integration are expected to be prosperous, and a number of companies are planning to participate in the global satellite business. In most fields, overseas companies can extend their business territories into the Korean market with the Korean market being opened to a certain degree, which will undoubtedly provide Korean firms with stiff competition. Nonetheless, the information and communications industry of Korea is an attractive field that can provide rich rewards for the companies who are willing to venture into this new business territory and prove successful. VIP

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