## INFORMATION TECHNOLOGIES

In 1995, Canada's information technologies (IT) industry (including telecommunications, software, hardware, processing and professional services) had revenues of over \$54 billion. The sector conducts 35 per cent of Canada's total research and development (R&D) activity and directly employs more than 310 000 people. Total exports of IT products and services rose from \$7.5 billion in 1988 to \$19.5 billion in 1995. Since Canadian exports to Japan are a modest 1 per cent of total IT exports, the opportunity for growth is substantial.

The telecommunications equipment and services subsector is one of Canada's fastest-growing sectors, with combined revenues of more than \$32 billion in 1995. The domestic market is small, and Canadian telecommunications companies export about 40 per cent of their products. Sales abroad have increased substantially, especially in new technologies such as asynchronous transfer mode (ATM), computer telephony integration and personal communication devices.

There are an estimated 13 000 software product companies in Canada, with more than half showing annual sales of under \$200,000. The majority of small to medium-sized companies have particular strength in niche products. Approximately 80 per cent of the medium to large Canadian software companies are actively exporting, and the top 100 companies generated 62 per cent of their total revenues from export markets. The industry growth rate is estimated to be 13 per cent per annum (source: IDC).

## Market Opportunities and Trends

## Software

The business environment in Japan for informatics is very strong. Japan is the world's second-largest software market, and computer usage is approaching that of North America. In 1994, the product processing and professional services market in Japan employed 490 000 people and posted sales of 6 trillion yen. Although growth in Japanese software sales in general slowed from 1992 until early 1994 as a result of the economic downturn and the introduction of open systems, imports continued to perform strongly. About US\$4.8 billion worth of software products were sold in Japan in and licensing 1994, with imports representing just under US\$2.3 billion or 45 per cent of the market.

The emergence of Windows 3.1J (Japanese) and now Windows 95 in the Japanese language is accelerating the entry of imported packaged software into this market, which is currently dominated by U.S. packaged software (which in 1994 accounted for almost 90 per cent of the total import market of 250 billion yen).

Japanese domestic software shipments jumped 34.6 per cent year-over-year, to 547.4 billion yen in 1995. Packaged software shipments jumped to 342.1 billion yen (35.7 per cent) and bundled software to 30.7 billion yen (45 per cent). Custom software moved up 28.7 per cent to 143.4 billion yen, putting to question the theory that growth in custom software sales in Japan is flat. Sales and support services jumped 42.1 per cent to 31.2 billion yen. (source: Japan Personal Computer Software Association).