Pulp: Canada's major competitors in the pulp market are the United States and Sweden. Canada's exports drop slightly in 1998 despite an increase of 124 percent in imports by Hong Kong in 1998 over 1997.

Newsprint: Canada maintained a 20.6 percent share of the import market. South Korea is the top supplier, followed by Canada, Indonesia and the United States.

Paper and Paperboard: The United States, South Korea, Japan, Indonesia and Taiwan are the major suppliers in this market while Canada's share is 2 percent.

Waste Paper: The Netherlands, PRC, Germany, Japan and the United States are the major suppliers. Canada has less than 1 percent import share. As a result of increased awareness of environmental problems, many Hong Kong manufacturers and their Chinese partners have begun to investigate recycling waste paper to make newsprint, kraft paper products or even lunch boxes and containers of various designs. Since the cost of local collection remains too high, these firms will continue to rely on waste paper imported from overseas.

Hong Kong companies remain keen on importing pulp, newsprint, kraft paper and paperboard, as well as value-added paper such as solid bleached boxboard, cigarette paper, tissue paper and fine paper. They are concerned about the consistency of supply and price fluctuation. Further, the Hong Kong SAR government is a major user of paper products such as wood-free printing paper, and is increasingly interested in sourcing recycled paper for printing its own documents.

## Constraints

The pulp and paper market in Hong Kong is highly competitive, with keen competition coming from several regions: Southeast Asia for its supply of tropical hardwood, plywood and MDF at competitive prices; New Zealand for its prompt delivery and consistent quality of softwood lumber and plywood; and European countries for their abundant supply of beech hardwood.

With the expansion of production lines in Indonesia, Malaysia and the PRC, there will be an increasing intra-regional supply of cheaper newsprint, pulp, and other paper products. New anti-dumping duties on Canadian newsprint imposed by the Chinese government will also affect re-exports from Hong Kong to Mainland China.

### **Action Plan**

With the paramount objective of maintaining our market share for Canadian forestry products in Hong Kong in 1999-2000, we will:

- promote various applications of softwood with special emphasis on construction and furniture manufacturing;
- identify and introduce to the Hong Kong market Canadian suppliers of environmentally friendly forest products, including panel-based products for use in construction and manufacturing; and
- collect market intelligence and information on business activities and opportunities, and disseminate it to Canadian companies.

# Information Technologies and **Telecommunications**

## **Mainland China**

Significant developments in China's information technologies and telecommunications (IT&T) sectors are reinventing Chinese society. Government policy and planning can hardly keep pace with changes in the market. This pace is particularly evident in markets that have a direct impact on consumers, such as telecommunications services (e.g., mobile telephones, cable television, Internet) and personal computers.

Chinese government and private-sector organizations are taking advantage of fierce international competition to accelerate technology transfer and acquire technology and equipment. Project financing, inconsistencies in regulations and policies, unresolved intellectual property rights issues, business risks such as currency devaluation and economic downturn, and an increase in strong domestic competition constitute major challenges to doing business in the Chinese market.

Direct local representation or a qualified and reputable agent/distributor are critical to a

successful business strategy. Frequent visits and an investment of time are also required to establish business relationships in China, making the cost of doing business very high. Only companies that are committed to a long-term presence in this market should contemplate exporting to China.

Opportunities in advanced technology fall under two broad categories:

- 1. Telecommunications
- 2. Computers and Software

### I. Telecommunications

#### **Business Environment**

China is the world's third-largest telecom market, and enjoys the fastest growth. Every year, China's network increases more than the equivalent of the entire Canadian network. By the end of 1998, subscribers surged from 85 to 110 million, including 25 million mobile phone users, for a national penetration rate of 10.64 percent, with 27.7 percent in urban areas. In 1999, total switching is estimated to increase by 23 million lines to exceed 150 million. The government's objective for the year 2000 is to have 170 million lines, with a national penetration rate of 13 percent, and reaching between 35 to 40 percent in urban areas. By 2020, teledensity is expected to top 40 percent.

The Chinese telecommunications services market is dominated by China Telecom (95 percent market share), the former monopoly, and China Unicom, formed in 1994 in an effort to introduce competition. The government has recently announced that competition will be further enhanced by dividing China Telecom into four sectoral independent entities - fixed line, mobile, paging and satellite. The government has also approved in principle the creation of another national carrier based on the cable TV and railway telecommunications infrastructure.

Although there is a clear intention to favour the development of the local industry, demand for telecommunications equipment is beyond China's production capabilities. This has resulted in significant opportunities for foreign players. However, the fact that all of the world's major telecom equipment companies are present in China, combined with the emergence of increasingly capable domes-



tic companies, has made the telecommunications market in China extremely competitive. The rapid pace of development has led to the creation of the Ministry of Information Industry (MII) as the regulatory body in the telecommunications market. There has been an increased effort to separate government functions from operations and manufacturing. The government still completely controls the public network, with China Telecom, the former monopoly, servicing over 95 percent of the market.

Data Communications and the Internet: In China, there are now over 200 Internet service providers servicing 2.1 million Internet users. By 2000, China is expected to have 6 to 9 million Internet users, increasing at an annual rate of 300 percent. China's packet switched data network (ChinaPAC) has a capacity of over 230 000 ports and currently has 90 000 users. The public digital data network (ChinaDDN) has an estimated 160 000 users and a total capacity of 310 000 ports. Data communications investment will average annual growth of 16 percent from 1999 to 2003.



China's telecommunications market has been and will continue to be one of the most dynamic in the world. In 1998, investment in the telecommunications sector increased by 39 percent and China will continue to invest about US\$20 billion in 1999. Last year, China's telecom sector generated revenue of over US\$27 billion, a 25 percent increase over 1997.

## Market Opportunities

Opportunities for exports in the switching market remain in the development of mobile switching systems (GSM cellular networks). Domestic suppliers have most of the market share in switching. China's transmission infrastructure combines fibreoptics, microwave and satellite technologies. All areas offer opportunities for companies with competitive and state-of-the-art technology. In data communications, opportunities exist in ATM (Asynchronous Transfer Mode) and frame relay. Major expansion projects for national infrastructure networks began in 1998, and will continue into