1. BACKGROUND AND TRENDS

1.1 Canadian Context

The industrial products and services sector comprises companies involved in the production of a wide range of machinery and equipment (M&E) for resource-based, resource processing, manufacturing and service industries, as well as for power generation, electrical and major appliance industries. The sector includes over 4200 companies employing more than 137 000 people with annual factory shipments of over $20.4 billion.

To remain financially competitive in markets characterized by a wide range of industrial needs and a large number of suppliers, many M&E manufacturers have become increasingly specialized. Many have concentrated on certain types and sizes of machinery, as well as on custom-engineered equipment.

In numerous cases, specialization has been achieved through rationalization undertaken between Canadian subsidiaries and their U.S. parents. The Canadian industry is mainly represented by a number of small and medium-sized companies with an average of 33 employees; however, the majority of large companies in this sector are subsidiaries of foreign firms, with headquarters mostly in the United States. Table 1 indicates some of the largest companies present in Canada in different subsectors. Only 20 per cent of these companies are Canadian-owned.

Even with the internationalization of trade, most of Canada's business transactions are still done with U.S. companies. However, Canadian imports from the U.S. have been decreasing through the years as a result of tough competition imposed by Japan and the European Community. The U.S. share has decreased from 83 per cent in 1978 to 71 per cent in 1987. Nevertheless, exports to the U.S. still represent more than 75 per cent of total Canadian exports (Figure 1). (The European Community represented only 6.5 per cent of Canadian exports in 1987.) With the Canada-U.S. Free Trade Agreement (FTA) on tariffs and trade and the proximity of the U.S. market, this trend is not likely to change.

For the industrial sector and each of its subsectors, Canada imports more than it exports. As shown in Table 2, the trade position of the industrial sector has been deteriorating. Over the past 10 years the Canadian trade deficit in the industrial sector has been increasing at an average annual rate of 9.2 per cent, as also from 1978 to 1987 (see Figure 2).

One of the most important factors underlying Canada's major trade deficit in the industrial sector is the lack of research and development (R&D). For example, American and European companies in this sector have been investing between 2.5 per cent and 4 per cent of their revenues in R&D during the last few years, while Canadian companies have been investing less than 1 per cent in R&D in the industrial sector. These numbers follow general Canadian trends. Canada has been investing less than half the percentage of that which the U.S. and the European Community Member States have been investing in the past 25 years. The weakness of Canadian companies' investment in R&D is certainly a factor that explains the technological gap between Canadian manufacturers and the major producers of the world (U.S., Japan and EC) in almost all the analysed subsectors.

Although investment in technology is, in general, limited, there are Canadian companies that have been successful on the export market. In fact, Canadian companies that produce industrial goods are exporting up to 30 per cent of their production. Companies that offer the best potential are those that have developed strong, technology-oriented "niche" markets on an internationally competitive basis. The fact remains, however, that this