the tradition of trading with Germany and respect for German industrial capabilities provide added incentive for Canadian firms to work with German companies in particular areas of expertise.

## **Canadian Capabilities**

Canada's strong competitive position in infrastructure projects (e.g. transportation, power, communications) has been established for many years.

Export capability in industrial complexes is centered mainly in two fields: 1) extractive industries, e.g. oil, gas, mining; 2) forestry, e.g. pulp and paper mills.

## An Assessment of Canadian Firms by Functional Type

The five main groups of Canadian participants in capital projects include:

- i) Engineering Consultants. In terms of international performance, Canadian consultants have been more successful in pursuing projects abroad than manufacturers and contractors. Although major Canadian engineering consultants rank among the largest in the world, they do not have a large asset base, whereas German consultants and contractors are frequently linked with large business groups that can provide the necessary financial support.
- ii) Project Management-Prime Contractor. Canadian-owned contracting firms have been less active in pursuing overseas work than consultants, primarily because of the greater risks involved. There are some large contracting firms executing capital projects in Canada. A number of them are subsidiaries of foreign (usually U.S.) companies that have been established to participate in major Canadian capital projects in the resource exploitation and petrochemical fields.
- iii) Machinery and Equipment Manufacturers. Although Canadian firms have a much stronger asset position than consultants or contractors, they do not as a rule take the lead in capital projects. A major deterrent is the problem of joint and several liability. Recently, some major Canadian manufacturers have taken a lead role in putting together goods and services for projects.

About 100 large firms export major equipment and components. Of those machinery and equipment manufacturers, some 40 to 50 appear to meet the following criteria for participating in a consortium acting as prime contractor:

- sufficient size, in terms of both number of employees and financial capability;
- competitive product and technological advantage;
- international experience;
- ability to supply major components for a project;
- head office support for pursuit of international business if the firm is a foreignowned subsidiary.

- iv) Mining Companies. Several mining and mineral processing companies in Canada have generated capital projects abroad as investors. In other industry sectors, few foreign projects have been stimulated by Canadian commodity producers, utilities or operators of industrial process plants.
- v) Consortia. There has been limited success to date in forming Canadian consortia to pursue major overseas projects.

## **Recent Canadian Marketing Activity**

Prior to 1979, only sporadic contacts had been made with German companies to seek participation in third country projects. In early 1979, the Consulate General in Düsseldorf initiated a program of intensive calls on German companies active in foreign markets. As a result of that activity, the Consulate General has been approached regarding about 80 projects.

With few exceptions, the requests were in terms of obtaining project financing which, if available at competitive rates, would lead to procurement of equipment in Canada. In response to this requirement, the Consulate General has acted as intermediary between the German firms and the Export Development Corporation (EDC) and potential private partners in Canada.

Although it is inappropriate to identify specific commercial situations and the participating firms when the bid award may not be finalized, the following list illustrates the type of projects explored to date. Participation by the post has ranged from short exploratory meetings to ongoing consultations over a period of months.

- Supply by Canadian firms of a water treatment plant for an integrated rolling mill. The additional possibility existed to supply overhead cranes and finishing heads.
- Supply of equipment and engineering services on a long-distance gas pipeline project.
- Supply of a complete potassium chloride plant to an East Bloc country.
- Supply of a large wood pulp plant to a Latin American country.

## **Canadian Success Stories**

Two recent successes represent the results that can accrue to Canadian firms participating with German partners. The German firm of Salzgitter, with Canadian subcontractors, obtained the contract for the supply of a non-ferrous metal refinery to Albania. The licensing of know-how was initially the commercial attraction, but realistic estimates are that equipment exports could attain \$5 million. Secondly, a consortium led by Hochtief will construct in Iraq a dam that will include delivery of Canadian heavy-duty trucks worth \$12.5 million.