

## AN OVERVIEW - CONSULTING ENGINEERING SECTOR

### 1. Structure and Performance:

The industry comprises professional engineers in private practice undertaking feasibility studies, planning and design development, detailed field services during construction and project management, primarily pertaining to capital projects. It consists of some 1,300 firms, which employed 39,500 people in 1982. The large firms have staffs ranging from 500 to 4,000, offer both consulting and project management services on a national basis and are extremely active in export work. The medium sized firms, employing from 200 to 800 people, offer mainly consulting services, with some also offering project management. In general these firms operate on a regional basis and are only moderately active internationally. The small firms have staffs ranging up to 75-100 people, mainly offer consulting services at the local level, and generally have little, if any, export experience. There are also specialized firms of small and medium size offering consulting services and, in some cases, project management. They are generally active internationally, some to a much larger extent than others.

Small businesses, with revenues of less than a \$1 million, account for 90% of firms but less than 20% of total revenues generated, while 14 firms with revenues greater than \$10 million (accounting for a little over 1% of firms) generate 50% of the total income and 70% of export fees.

The distribution of firms across the country reflects fairly closely the country's natural resource, industrial and population patterns. The industry is almost entirely Canadian owned.

There was no real growth in the domestic market over the period 1974/79. In 1980 the market picked up and peaked in 1981/82. During the subsequent recession, the industry experienced a reduction in revenues of 15% by 1984. Prior to 1982, growth in the international market was strong, but no growth was recorded over the period 1982-84. However, in spite of this stagnant market in recent years and a heightened intensity of competition among a greater number of world participants, the Canadian industry's export business declined only slightly. The result of this experience on both domestic and international markets is that profitability and employment levels are down. In some cases debt loads have risen in order to sustain operations. At the same time, however, lower revenues have reduced the borrowing capacity of firms.

The domestic market in some areas has improved but no major growth is anticipated over the next few years since the sector is highly sensitive to levels of capital investment which are forecast to be modest over the short to medium term. Growing competition in the export market will make it more difficult for interested firms to enter the field for the first time.

### 2. Strengths and Weaknesses

#### (a) Structural

The structural trend is toward more specialized firms and to larger firms. In addition, the recession has created a special situation where laid off engineers have established individual consulting practices. Further, continued adoption of policies favouring local procurement has increased the establishment of branch offices by larger firms in various provinces. Mergers and acquisitions have also been utilized to strengthen provincial representation.

The consulting engineering sector is highly developed in the Canadian economy and also in relation to other countries. Furthermore, it is considered competitive with major global competitors from among the OECD countries. Nonetheless, an inhibiting factor in the complete development of the sector