

- 8) general comments;
- 9) supplementary company information.

The questionnaires were mailed in the spring and early summer of 1987. Potential respondents were given a questionnaire, a letter explaining the study purpose and a project description. Company representatives were asked to provide responses within a two week period. A telephone follow-up contact was made to all of the sampled companies and organizations in order to stimulate the return of the questionnaires within a reasonable time period.

5.2. Survey Response and Results

A total of 76 companies provided usable replies which could be incorporated into the ITRD database. The company names and addresses as well as their research topics and areas of activity are included as Appendices 3, 4 and 5 of this report. A further 25 expressed interest and asked to be kept on file for future reference.

The majority of responding companies were classified as small to medium size on the basis of sales and scale of operations. In addition, as expected, many of the companies had limited resources dedicated to the pursuit of long term R&D and placed relatively heavy reliance on government programs for assistance in research and international marketing activities. This is in contrast to many of their European, Japanese and U.S. counterparts who tend to be larger in size and to operate within one or more long term strategic research initiatives.

A notable exception for Canada was Northern Telecom whose capital and cash flow are substantial and assured sufficiently to not require direct assistance from government.

Most of the firms surveyed indicated they were presently involved in an ongoing R&D program (53 of 76) while the remainder expressed their interest in identifying new opportunities. The expenditures allocated to R&D varied considerably according to the size of the firms, ranging from a few thousand dollars per annum to over C\$20 million for large firms such as CAE, Microtel, Litton, SR Telecom or Systemhouse. Likewise the size of the staff allocated to R&D functions varied between 2 or 3 to as many as 1,000.

A number of examples of on-going research projects were identified which reflected to a great extent the more general topics and subtopics identified previously. A selection of these projects is presented in Exhibit 3.