Appendix 1

International Cooperation in Information Technology R&D

Project Description

The project seeks to identify opportunities for international cooperation in precompetitive R&D in Information Technology and help Canadian industry initiate and develop such cooperation.

The project relates to an initiative of the Department of Communications (DOC) in support of the Technology Inflow Program (TIP) of the Department of External Affairs and seeks to enhance Canadian research capabilities in Information technology by identifying and promoting mutually beneficial cooperative precompetitive R&D activities with Japan and Western Europe.

The project specifically seeks to:

- 1) collect information on current R&D activities in Japan and Western Europe, in areas of priority to Canadian industry;
- 2) identify potential partners in specific areas identified as promising for international IT R&D cooperation; and
- 3) facilitate initial contacts and follow-up activities between Canadian organization and their international counterparts.

Background

Information Technology, of which communications is a part, is a broad field touching virtually every facet of human activity. In human terms, information means knowledge; and technology means techniques and tools. Information, acquired by the senses, processed by the mind, and retained in memory, can be represented, conveyed and presented to other humans; processed to create new information; or imbedded in processes and materials to create services, tools and other goods for human use. These natural processes may also be accomplished using artifices of one sort or another such as: transducers (representation and presentation) or by computers (retention and processing). All are a part of information technology.

It is widely recognized that a stage in R&D critical to success yet amenable to cooperation is the precompetitive one where scientists exchange ideas, approaches and experience. Here, informed choices in developing technologies are made. Here, new products and business relationships are forged. International cooperation at this precompetitive R&D stage can lead to significant benefits.