In addition, joint R&D ventures appear to be particularly valuable in the primary industries. These industries are regionally fragmented and yet must compete in a fierce international market. Two Canadian examples exist in the forestry industry: Forintek Canada Corporation and the Pulp and Paper Research Institute of Canada.

Relatively few Canadian companies conduct large-scale R&D (10% or more of their annual sales). Unless a host of individual firms dramatically increase their in-house R&D activities, Canada will continue to be extremely vulnerable to foreign competitors who are vigorously developing materials to substitute for our natural resources (ceramics and plastics for metals and new fibres for wood). Consortia R&D enable firms to share research costs and scientific findings. Apparently it is also easier to direct cooperative research efforts and stop specific programs that fail to develop as expected. Such close management of R&D efforts will accelerate the flow of new ideas to production and the marketplace.

Canada should strengthen its scientific management expertise. A successful effort to increase our national level of private sector R&D will rely heavily on the decisions of well-trained managers with science and engineering backgrounds. This point will be raised again in the discussion of Priority 4: Recognizing the Importance of Academic R&D.

A healthy economic climate is crucial for sustained innovation and entrepreneurship. ***However, the mandate for innovation and resurged growth lies with the private sector.*** We cannot be subsidized into technological advancement. We must choose to invest in it so that we will remain internationally competitive.

Initial consultations with industry and university representatives have generated the following categories of issues:

i) Tax Environment

ii) Grant Programs

iii) Government Procurement Policies

iv) The Patent Act

v) Venture Capital

vi) International Trade Agreements and Technology Transfer

Responses and recommendations from the Provincial and Territorial governments will help to identify the key issues to be addressed. This list of issues is intended as a starting-point for discussion and in no way limits the possibility of other measures not yet identified. Nor is this list intended to represent items under active consideration.

B. ISSUES

i) Tax Environment

Currently, the tax system provides significant incentives to R&D. It is an essential means of stimulating investment in technology and innovation. It is recognized that some tax incentives targeted at selective technologies have been shown to directly increase economic activity, thereby increasing government revenues.

While R&D tax provisions are viewed favourably by industry, there are several issues which may need to be resolved, particularly relating to the types of investment eligible for Scientific Research Tax Credits (SRTC's) and the definition of R&D for tax purposes.

Following the moratorium announced on October 10, 1984, only long-term equity investments qualify for the SRTC's while the program is being reviewed. Some industry representatives suggest that the current uncertainty associated with the SRTC's should be resolved in order to restore investor confidence and avoid a slump in the affected industries. They believe that the allowance for debt and preferred shares, up to a specified ceiling, is beneficial to start-up businesses and should be included in the reformed credits, in addition to the current credit for common shares. In addition, it may be desirable to rewrite the spending requirements for the credits to encourage only actual product/process development.