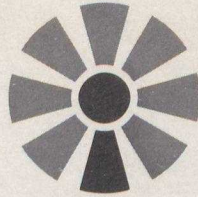


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2 DEPARTMENT OF INDUSTRY
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PAIT

**PROGRAM FOR
ADVANCEMENT OF
INDUSTRIAL
TECHNOLOGY**

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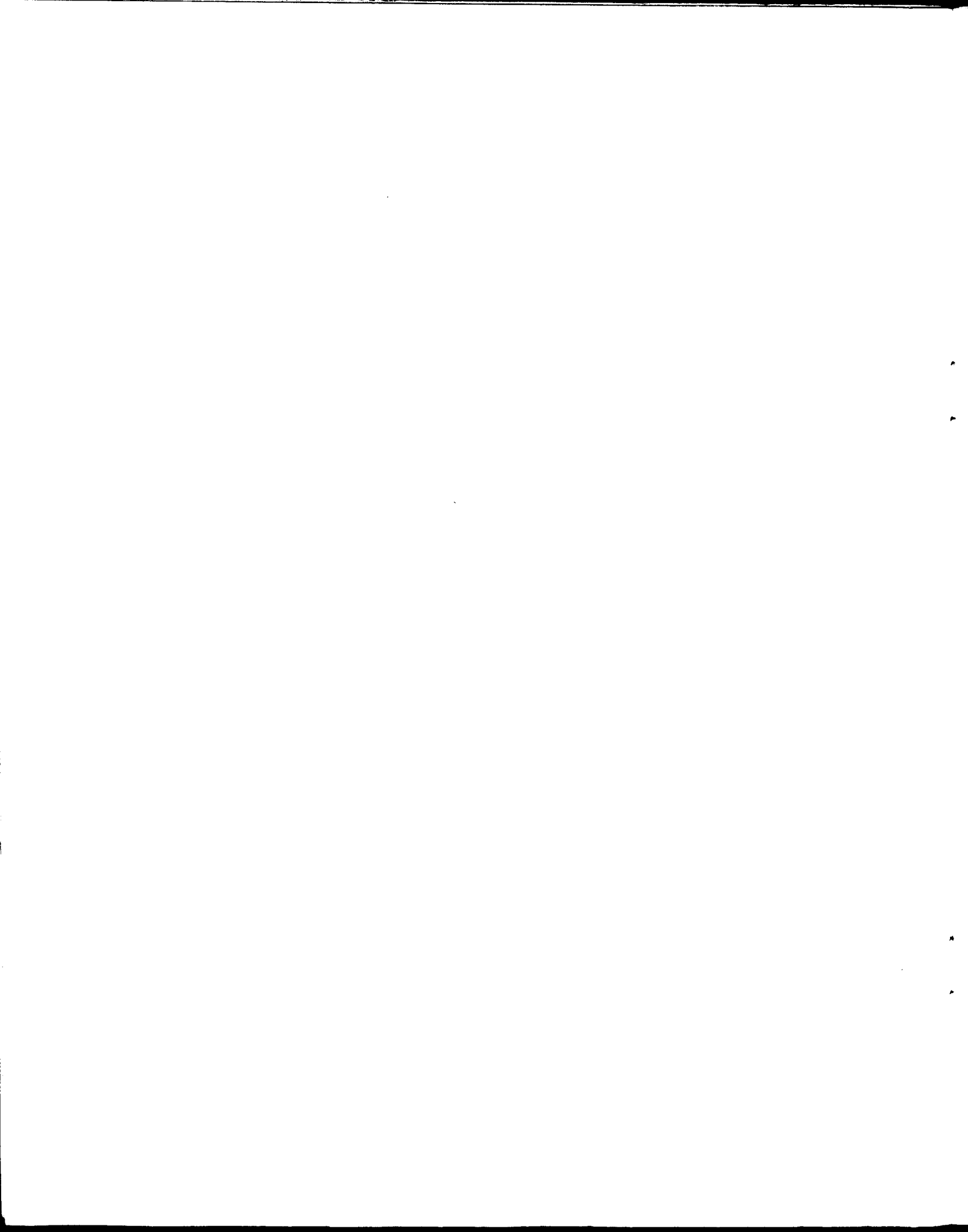
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MINISTER
OF
INDUSTRY



MINISTRE
DE
L'INDUSTRIE

OTTAWA
October 1, 1965

FOREWORD

Invention and innovation are important driving forces in a modern industrial economy and economic progress stems in large measure from increased productivity based on new technology. Hence, one of the prime requirements for growth in the manufacturing sector is a high level of technical competence. Indeed, the prevailing climate of rapid technological change and increasing international competition dictates that Canadian industry should greatly expand its research and development effort.

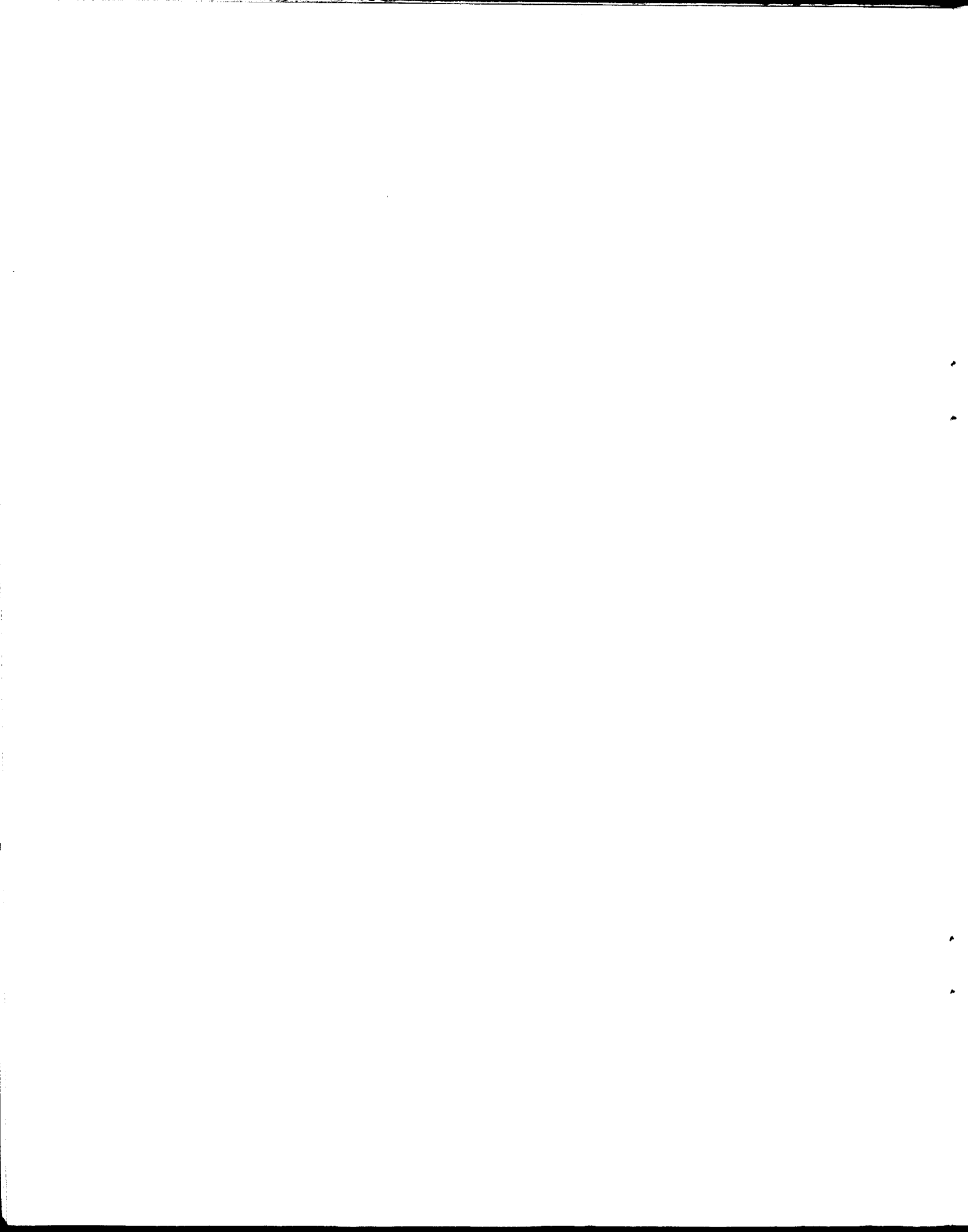
The Program for the Advancement of Industrial Technology (PAIT) is designed to stimulate the exploitation by Canadian industry of scientific advances by underwriting the development of new or improved products or processes. PAIT is envisaged as a catalyst which will help to upgrade the standard of our industrial technology and ensure that our manufactured products will remain technically competitive in both domestic and export markets. The program is expected to provide challenging opportunities for Canadian firms and individuals to exercise their creative talents and commercial enterprise.

I believe that the field of science and technology is one where industry and government can effectively co-operate in the national interest. I am also confident that this program will fill an important gap in our national scientific endeavour and will afford Canadian industry a degree of government support comparable with that enjoyed by many of its foreign competitors. However, the success of this program will depend ultimately upon the response of industry and its willingness to undertake technical innovation.

If your firm is interested in participating in this program, you are urged to communicate with the Department of Industry which stands ready to assist manufacturers in taking advantage of this opportunity. I can assure you that each application will receive careful consideration.

A handwritten signature in black ink, appearing to read "C. M. Drury".

C. M. Drury,
Minister of Industry.



PROGRAM PRINCIPLES

The basic principle of this program is to help Canadian industry to upgrade its technology and to expand its innovation activity by underwriting specific development projects which involve a significant technical advance and which offer good prospects for commercial exploitation. Support will be concentrated mainly on the development of products and processes which serve to increase productivity or otherwise contribute directly to economic growth. Wherever possible, advantage will be taken of Canada's natural resources, skills and environment, to establish a unique capability or technical leadership.

Financial assistance under the program will be available to companies incorporated in Canada for development projects to be carried out and exploited in Canada. However, it is not the purpose of the program to finance the establishment of a business or the acquisition of general purpose capital facilities or to cover the costs of setting up production. Consideration will be given to applications from individual companies, or groups of companies proposing to support jointly a development project. Companies will be expected to have the capabilities and facilities to undertake the development work and also to provide for the manufacturing and marketing of the resulting product. However, companies may sub-contract portions of the development work to other companies, research institutes, universities, or consultants, where this is desirable.

Initiative for proposing development projects will rest with industry, as will the responsibility for the subsequent direction and execution of the development work. Preferably, the project should represent an extension in the magnitude or scope of the development effort of the company concerned. To justify support, projects should normally involve a substantial technical effort, i.e. a minimum annual effort of one professional man-year.

Cost of an approved development project will be shared by the Department and the company concerned. Expenses incurred prior to the submission of a proposal may not be included when determining the company's share of the project costs. If the resulting product or process is put into commercial use, the company will be obliged to repay the Department's contribution with interest. If the results are not used commercially, the Department's contribution will not be repayable.

In order to ensure rapid and effective exploitation of the results of development projects, title to patents, designs, technical data, and materials resulting from a project will vest in and remain the property of the company. However, companies will be required to give an undertaking that, if the project is successful, they will exploit the results in Canada within a reasonable period of time.

PROJECT ELIGIBILITY

The Department of Industry will approve applications for PAIT support against several criteria. Some of these criteria concern the quality of the project itself, while others are intended to establish that the company has the requisite capabilities and resources to undertake the development work and its subsequent exploitation. The criteria are as follows:

Project Criteria

Technical Feasibility

- The project should be based on sound scientific principles, and the performance objective should be attainable in the time proposed.
- The project should result in a substantial technical advance sufficient to ensure that the product or process will be technically competitive by the time the marketing stage is reached.
- The main technical problems associated with the project should have been identified and the technical risks reduced to the practical minimum by the development plan proposed.
- The qualifications and experience of the technical personnel who will be directly involved in the project should be adequate to perform the technical tasks outlined in the development plans.

Commercial Feasibility

- There should be a market analysis to define the total market in terms of need, probable customers, distribution problems, price requirements and competition.
- Where price is a critical factor, there should be an adequate production cost analysis.
- There should be an estimate of the probable returns in relation to the expected outlay required for the development and its commercial exploitation.

Company Criteria

Organization

- The company should have the management skills necessary to undertake the development project and to exploit the results commercially. A competent project leader should be appointed and key technical personnel should be assigned to the project.
- The company should have the production and marketing skills to produce, promote, and distribute the end item or plans to acquire such capability.

Facilities

- Existing facilities and equipment should be suitable for the proposed development, or plans to acquire them should be firm.
- Existing facilities should be suitable for follow-on production, or the means of acquiring such facilities established.

Financial Status

- The company's financial status should, along with the support provided by the PAIT Program, enable it to carry out the project on a sound financial basis.
- There should be an acceptable accounting system and the overhead structure applied to the project should be consistent with normal company practices and good accounting principles.

FINANCIAL ARRANGEMENTS

Cost Sharing

As a rule the Department will contribute up to 50 per cent of the total cost of the development project (excluding general purpose capital facilities) without profit or fee. The Department will pay its share of the costs by making monthly progress payments as costs are incurred by the company.

Repayment

If the results of the development project are put into commercial use, the company shall be obliged to repay the Department's contribution together with interest based on the government borrowing rate. Interest will be computed from the respective date on which payments were made by the Department to the company and will be compounded annually.

The repayment agreement (to be negotiated prior to the first commercial sale or use of the product or process) shall provide for payments based on a rate related to the commercial utilization of the product or process. Such rate or rates shall be calculated, having regard to the market expectations, so as to provide for repayment in full of the Department's contribution together with interest within a period not exceeding 10 years from the date of the first commercial sale or first commercial use by the company.

If the development is not a technical success, or the results of the development are not produced and sold, or the process is not used commercially, the company shall not be required to repay the Department's contribution. However, in this event the Department has the right to take title to the results of the project.

Tax Treatment

Under Section 72 of the Income Tax Act, a taxpayer in computing his taxable income may deduct all expenditures of a current nature and all expenditures of a capital nature made in Canada (by the acquisition of property other than land) for scientific research. Section 72A of the Act permits an additional pre-tax deduction of 50% of the increase in such expenditures in Canada over those in the last taxation year of the company ending before April 11, 1962. Development expenditures are included in the definition of scientific research for tax purposes as stated in Section XXIX of Regulations under the Act.

For taxation purposes, the company may deduct both its own share and the Department's share of costs incurred under Section 72. However, only the company's share of costs is eligible to qualify for the additional allowance under Section 72A.

CONTRACTUAL ARRANGEMENTS

Assistance Agreement

The provision of PAIT financial assistance for approved development projects will be covered by a Standard Agreement Form which is available from the Department on request. The Assistance Agreement will incorporate the agreed "Statement of Work" and the "General Terms for Shared Cost Development Assistance".

Commercial Secrecy

Recognizing that research and development plans and activities have a vital bearing on a company's competitive position and information thereon is proprietary, the Department will treat any information provided by the company in the strictest confidence. Such information will not be revealed to any person outside the government service without written permission from the company concerned, or to any person in the government service who does not have a need for such information in the performance of his duties. For this purpose all documents containing proprietary information should be marked "COMMERCIAL CONFIDENTIAL".

METHOD OF APPLICATION

The following outline is intended as a general guide to the information which should be provided in the application for PAIT assistance. Prior to submission of their application, firms are strongly urged to consult with Departmental representatives who will be able to provide additional information and advise on the preparation of the application.

Three copies of each application will be required and should be forwarded to:

PAIT
Department of Industry,
OTTAWA 4, Ontario.

The **Application** should consist of:

- Cover Sheet
- Summary
- Description of the Development Project
- Statement of Work
- Outline of Company Qualifications

The **Cover Sheet** should contain:

- the project title
- the date of the application
- the name, address and telephone number of the company
- the name and position of the company officer submitting the application
- a statement that the company accepts the General Terms of the PAIT Assistance Agreement
- a table of contents

The **Summary** should be not more than two pages long and should contain:

- the project title
- a concise description of the product or process to be developed, its advantages and an outline of the method of approach
- a brief statement of the commercial requirement and the market potential
- a time schedule (start, major milestones, finish)
- the total cost of the project and the PAIT assistance required
- other federal government R&D contracts or assistance received by the firm.

A Description of the Development Project should contain:

(See Project Criteria)

- a description of the end product or process
- the selected solution to the technical problems involved
- the advantages and disadvantages of alternate solutions together with the reasons for choosing the selected solution
- the method of approach, test equipment and hardware requirements, key personnel assignments, procedures and schedules
- a Project Cost Estimate in a form similar to that suggested in Appendix I (attached)
- a market analysis which establishes that there is a good probability of recovering the total development costs
- plans for sub-contracting work and use of consultants

The Statement of Work which summarizes:

- the purpose of the project, including performance targets
- the major tasks to be performed and the method of approach
- the start, major milestone, and finish dates
- progress report arrangements

Note: The Statement of Work forms the basis of the Assistance Agreement

An Outline of Company Qualifications should establish that:

(See Company Criteria)

- the company is capable of undertaking the development by virtue of its organization; personnel; management; marketing and technical know-how; and prior work in the field
- the company has, or can acquire, development, production and marketing facilities to exploit the results
- the company has the financial resources to share the project costs and to exploit the results

PAIT PROJECT COST ESTIMATE
(Suggested Format)

5. SUB-CONTRACTS — (Include Consultants)

Name and address of Sub-Contractor	Type of Work	Type of Contract	Time Period	Value \$
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TOTAL SUB-CONTRACTS

6. OTHER COSTS — (Provide Details)

Estimated
Cost \$

TOTAL OTHER COSTS

7. GENERAL AND ADMINISTRATIVE OVERHEAD

Overhead Elements	G & A Rate (%)	Total Base For Project \$	G & A Cost \$
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TOTAL G & A OVERHEAD

8. TOTAL COST — (1 to 7 inclusive)

9. ESTIMATED EXPENDITURE BY FISCAL YEAR ENDING MARCH 31

1965 - 66	\$
1966 - 67	\$
1967 - etc.	\$

P417
Industry

ROGER DUHAMEL, F.R.S.C.
Queen's Printer and Controller of Stationery
Ottawa, 1965