



cutting through complexity™

Pathway to R&D Funding in Canada

R&D Incentives for the Aerospace Industry



Aerospace Industries
Association of Canada

L'Association des Industries
aérospatiales du Canada

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November 6, 2014

Introduction and Objective for Session

Government Funding Opportunities to support industry-led innovation:

- Scientific Research and Experimental Development – \$3.6 billion
- Industrial Research Assistance Program – \$1.1 billion

Other partnership programs as identified through The Funding Portal:

- Sustainable Development Technology Canada
- MITACS

Are you maximizing your access to these funding?

SR&ED Program Overview

Federal tax incentive to encourage companies to increase scientific knowledge and make technological advances in Canada

Annually:

- 28,000 claimants receiving approximately \$3.6 billion per year in tax credits
- 90% of these claimants are CCPC (Canadian Controlled Private Companies)
- 42% of tax credits claimed by CCPC

Administrative process and eligibility requirements:

- Administrated by Canada Revenue Agency
- SR&ED claim with Corporate Income Tax Return
- Up to 18 months after fiscal year end to amend return
- Piggy-back provincial tax credits

SR&ED Program Overview

Recognizing SR&ED:

Conducted primarily in Canada

Related to the business (SME must retain rights to exploit the R&D results)

Work must meet the *scientific* or *technological* eligibility criteria as defined in **ITA subsection 248 (1)** and CRA interpretation policies

Qualified SR&ED expenditures are listed in **ITA subsection 37(1)** and CRA interpretation policies

- Expenditures are deductible and can be pooled
- ITC earned on SR&ED may be fully refundable (SME CCPC)
- Non-refundable tax credits can be carried back or forward
- Tax credit rate varies 15% to 35% (depend on taxable income and capital)

Income Tax Act (ITA) continues to be the basis of tax court rulings

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Technical Eligibility Criteria

AIAC Pacific website

Design, build, manufacture

- Major airframe structures for some of the world's leading aircraft companies
- High-lift devices, assemblies, and major functional components

Precision machining

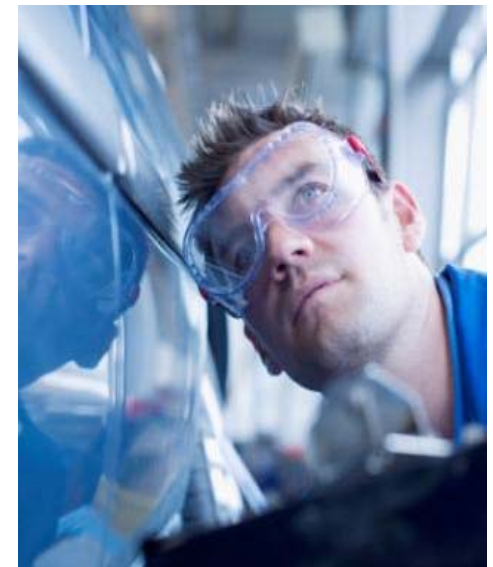
- Medium to large complex structural aircraft components

Specialty programs and services

- Aerospace and defense integrated aircraft support
- Aerial suppression and fire-fighting
- 3D visualization problem solving

Surveillance and intelligence

- Satellite subsystems, robotics, and geospatial services



Where Do You Fit

Form T661 requires you to identify one field of science or technology that relates to the R&D

Electrical Engineering, Electronic Engineering & Information Technology

2.02.01 – Electrical and electronic engineering

2.02.02 – Robotics and automatic control

2.02.03 – Micro-electronics

2.02.04 – Semiconductors

2.02.05 – Automation and control systems

2.02.06 – Communication engineering and systems

2.02.07 – Telecommunications

2.02.08 – Computer hardware and architecture

2.02.09 – Software engineering and technology

Mechanical Engineering

2.03.01 – Mechanical engineering

2.03.02 – Applied mechanics

2.03.03 – Thermodynamics

2.03.04 – Aerospace engineering

2.03.05 – Nuclear related engineering (nuclear physics under 1.03.07)

2.03.06 – Acoustical engineering

2.03.07 – Reliability analysis and non-destructive testing

2.03.08 – Automotive and transportation engineering and manufacturing

2.03.09 – Tooling, machinery and equipment engineering and manufacturing

2.03.10 – Heating, ventilation and Air conditioning engineering and manufacturing

Where Do You Fit

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Materials Engineering

2.05.01 – Materials engineering & metallurgy

2.05.02 – Ceramics

2.05.03 – Coating and films (including packaging and printing)

2.05.04 – Plastics, rubber and composites (including laminates and reinforced plastics)

2.05.05 – Paper and wood & textiles

2.05.06 – Construction materials (organic and inorganic)

Industrial Biotechnology

2.09.01 – Industrial biotechnology

2.09.02 – Bioprocessing technologies

2.09.03 – Biocatalysis & fermentation

2.09.04 – Bioproducts (products that are manufactured using biological material as feedstock)

2.09.05 – Biomaterials (bioplastics, biofuels, bioderived bulk and fine chemicals, bio-derived materials)

Nano-technology

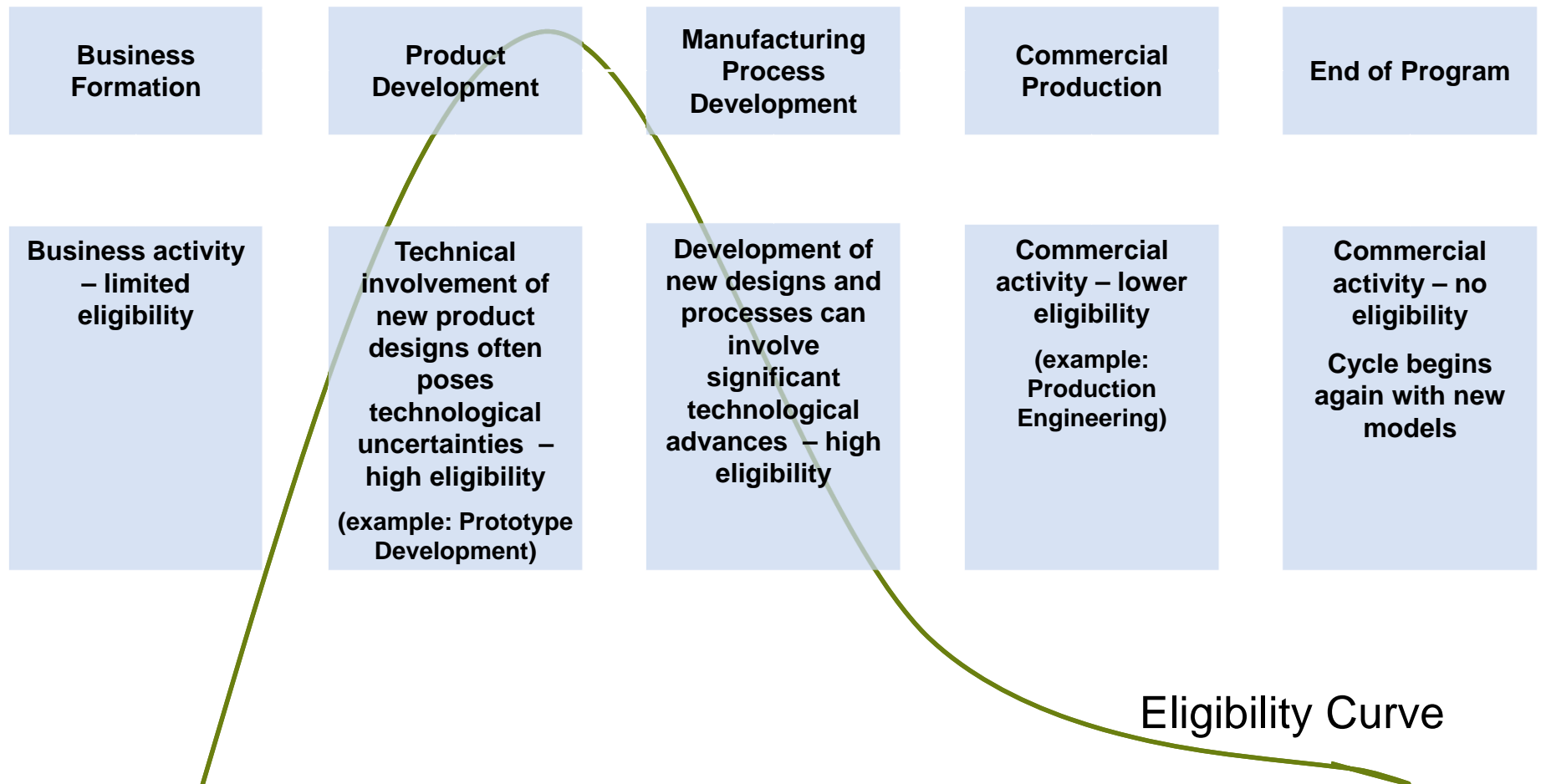
2.10.01 – Nano-materials (production and properties)

2.10.02 – Nano-processes (applications on nano-scale)

New T661 Form (January 2014)

1.	Is there a technological uncertainty / obstacle that cannot be removed by standard practice?	✓
2.	Was a hypothesis formulated specifically aimed at reducing that uncertainty?	✓
3.	Was the experimental development work carried out consistent with a scientific approach?	✓
4.	Did the work generate advancement in technical know-how or scientific knowledge?	✓
5.	How detailed was the record being kept (work activities, testing, prototype, progress data, results)?	\$

R&D Lifecycle



Technological Advancement

“The work must generate information that advances the understanding of scientific relations or technologies”

Technological Feasibility Studies and Trials

- To prove concept

Experimental Production

- Portions of the production cycle that are at risk, as well as all subsequent downstream operations

Pilot Plants

- Development of a non-commercial asset to validate engineering data

Standard Practice – Not Eligible

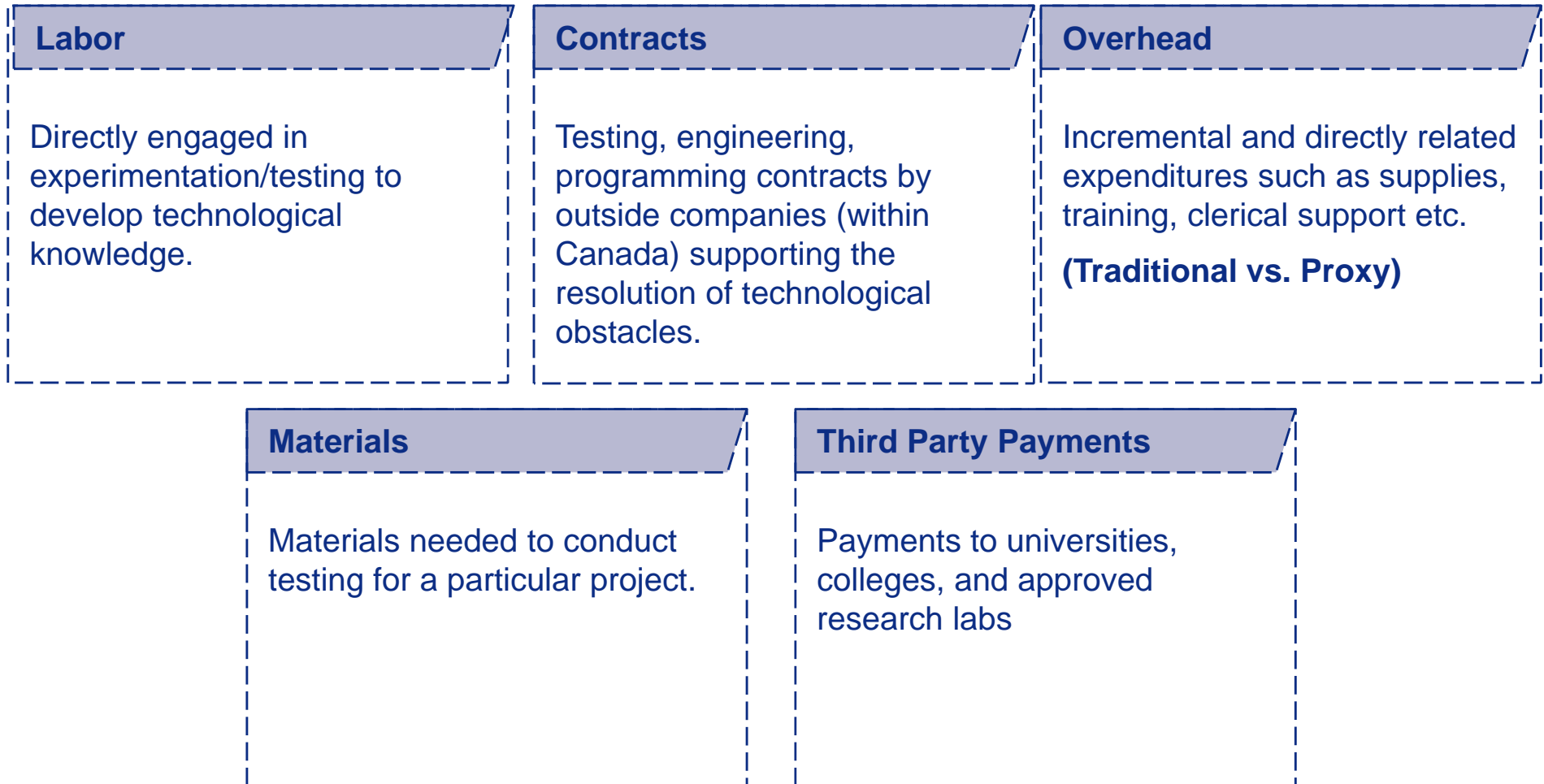
“Adapting a known engineering or technological practice to a new situation where there is a high degree of certainty that the known technology or practice will achieve the desired objective.”

In other words:

- When the outcome is predictable
- Minor modifications, trouble shooting, debugging
- Solution available in public domain
- Duplicating knowledge that is openly available
- No new knowledge
- No experimentation or analysis

Financial Criteria

Qualified SR&ED expenditures



Summary of the legislative changes

Prior to 2013

Starting January 1,
2013

Starting January 1,
2014

Capital expenditures

Allowed

Allowed

Removed

Prescribed proxy amount (overhead)

65%

60%

55%

Contracts and third-party payments

100%

80%

80%

Basic ITC rate

20%

20%

15%

CRA Audit Review Process

CRA Focus – Request for Documentation

- Time records
- Experimentation vs Commercial Application
- Linkages between SR&ED activities claimed, time records and technical documentation

Appeal Process

1. Audit Review based on plant tours, interviews and documentation submitted
2. File Notice of Objection within 90 days after reassessment is issued
3. Option: SR&ED Dispute and Resolution Process – KPMG Law
4. Appeal to Tax Court of Canada



KPMG

The Funding Portal

- **SR&ED Tax Credit Program**
- **Industrial Research Assistance Program (IRAP)**
- **Strategic Aerospace and Defence Initiative (SADI)**
- **Aerospace and Defence Development Fund of Newfoundland**
- **DND/NSERC Research Partnership Grants at NSERC**
- **Voucher for Innovation and Productivity, Ontario Centre of Excellence (OCE)**
- **Quebec Economic Development Program**
- **Eastern Ontario Development Program**
- **Connect Canada Internship**
- **Industrial agreement programs in QC**
- **Digital Technology Adoption Pilot Program (DTAPP), National Research Council of Canada**
- **Commercialization Support for Business Program, MB**
- **Tax credit for pre-competitive private partnership research projects, QC**
- **Build in Canada Innovation Program (Safety and security; Military Components), PWGS Canada**
- **Ontario Innovation Tax Credit**
- **Wavefront Global Market Entry Programs (Canada)**
- **Business Growth and Competitiveness Youth Internship Program, FedNor**
- **Business Development Program, ACOA**
- **Western Innovation (WINN) Initiative at Western Economic Diversification**
- **Ontario Interactive Digital Media Tax Credit**
- **Manufacturing and Processing Investment Tax Credit, SK**
- **Southwestern and Eastern Ontario Development Funds, ON**

Government Assistance

Government assistance is defined in subsection 127(9) of the Act to include:

assistance from a government, municipality or other public authority whether as a grant, subsidy, forgivable loan, deduction from tax, investment allowance or as any other form of assistance other than as a deduction under subsection (5) or (6);

Funding structure – questions to ask yourself...

- **Were the amounts received pursuant to ordinary business arrangements?**
- **Was there intent to donate?**
- **Were the amounts received from outside of Canada?**
- **How will this impact my SR&ED claim?**



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