

Written Submission for the
Government of Canada's Consultations on the
Review of SR&ED and
Creation of a Patent Box Regime



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Quantum Industry Canada (QIC)

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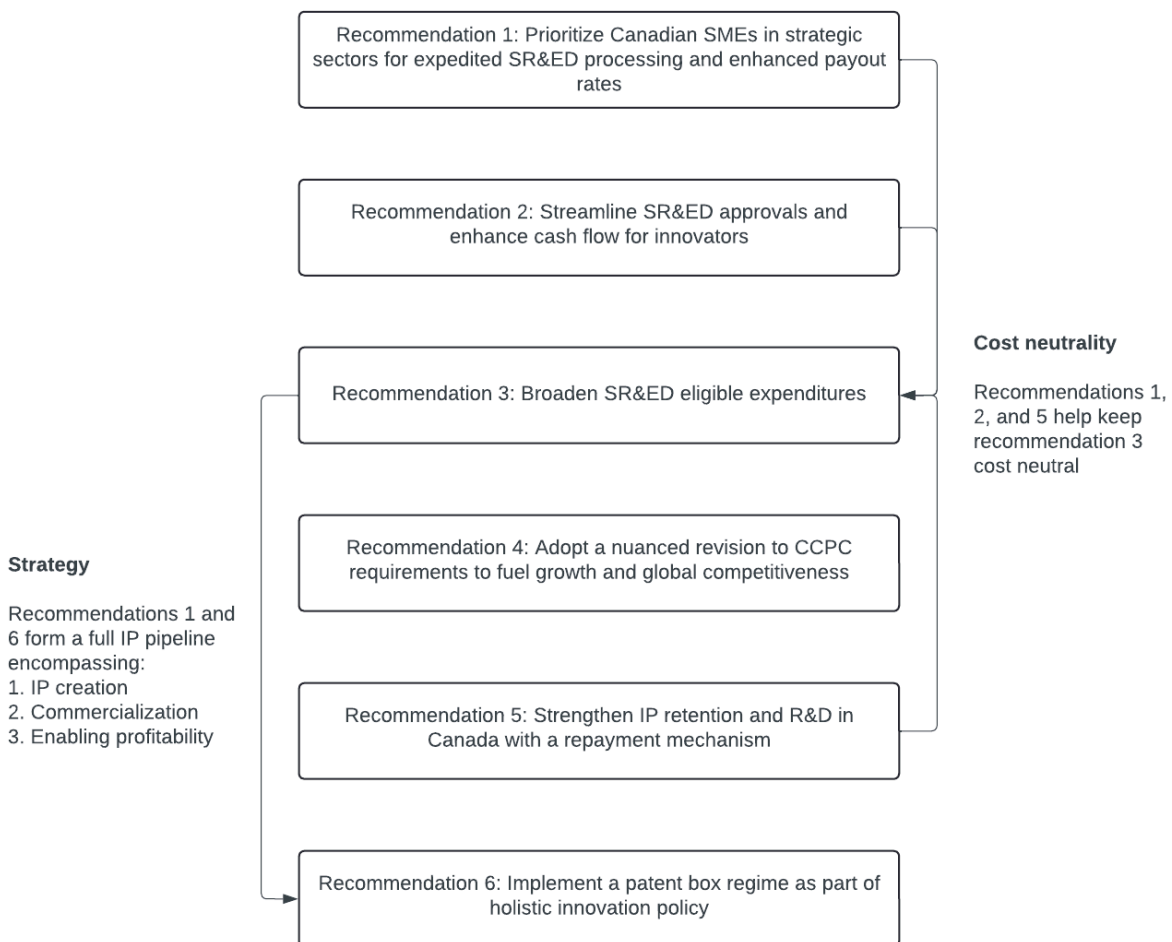
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Introduction

Quantum Industry Canada (QIC), a consortium founded in 2019 by industry leaders, serves as the collective voice of Canada's quantum sector. Representing 50 organizations across Canada ranging from dynamic startups to global leaders, QIC is dedicated to converting our country's quantum strengths and capabilities into business success and economic prosperity.

Canada's quantum sector, while nascent, will have a high impact on our country's national interest and is poised to deliver outsized benefits to the nation's economy and security. Strategic support through thoughtful revisions to programs like SR&ED – arguably the most significant innovation policy tool in Canada – and the potential adoption of a forward-thinking patent box regime are essential to fuel this burgeoning field and ensure the Canadian industry is globally competitive.

As a trailblazer in quantum innovation, Canada boasts a thriving ecosystem that is swiftly transitioning from research to commercialization, heralding a new era of economic growth and national security. Currently positioned as a global quantum leader and projected to contribute up to 3% of Canada's GDP by 2045, the Canadian quantum industry's potential to create over 200,000 jobs (according to a 2020 National Research Council of Canada study) underscores the urgent need for innovation policy tools like SR&ED and the patent box regimes that are not merely modern policy instruments but essential catalysts for a sector that is inherently R&D intensive and driven by invaluable intangible assets.

While we commend the [Council of Canadian Innovators \(CCI\) for their insightful policy report on SR&ED reform](#), which outlines substantial improvements to the current system, QIC's submission seeks to build upon these recommendations and share important considerations for mainly earlier-stage companies in a high-impact, R&D intensive emerging sector. Our aim is to highlight additional cost-neutral measures that could significantly bolster and accelerate the development of the Canadian quantum industry. By addressing the distinct needs of this emerging, critical technology area, our recommendations are designed to ensure that the quantum sector's contributions to Canada's prosperity and security are fully realized. We suspect that the recommendations we have put forward would also benefit other emerging deep-tech sectors.

We extend our gratitude to the Government of Canada for considering our recommendations. As committed partners in enhancing Canada's quantum sector and overall economy, we look forward to working closely with the Government to strengthen our nation's position as a leader in this transformative field.

Sincerely,



Lisa Lambert
Chief Executive Officer

Recommendation 1: Prioritize Canadian SMEs in strategic sectors for expedited SR&ED processing and enhanced payout rates

We recommend that the SR&ED program implement a prioritization framework that expedites processing and maximizes payout rates for SMEs operating within sectors of critical importance to Canada's economy and national security. This prioritization framework should target a specific set of critical technologies, including quantum, [as Australian programs do based on the country's List of Critical Technologies in the National Interest](#), and other pre-approved projects that will have a high impact on advancing Canada's technological leadership and security posture.

This prioritization framework could include:

- **Fast-track processing:** SMEs advancing critical technologies should benefit from streamlined SR&ED application and review processes, ensuring rapid approval and disbursement of credits. This expedited pathway would minimize administrative delays, allowing innovative firms in strategic sectors to swiftly reinvest in R&D activities.
- **Enhanced payout rates:** To further incentivize innovation in these critical sectors, eligible SMEs should receive SR&ED credits at the highest possible rates. This enhanced support for strategic SMEs reflects the outsized impact these companies have on Canada's economic resilience, national security, and competitive edge in global markets. Given the number of eligible companies for this proposed prioritization framework represent only a small proportion of those receiving SR&ED, costs for this could be offset by reducing the rate for larger, highly profitable companies.
- **Pre-approval mechanism:** Establish a pre-approval system for projects (could be inspired by elements of the National Research Council of Canada Industrial Research Assistance Program project structure) within these strategic sectors to qualify for fast-track processing and enhanced rates. This system would provide companies with greater certainty and planning capability for their R&D investments. It is important to include safeguards to prevent misuse and ensure that this expedited stream is not exploited. If needed, any adjustments to credits issued could be made during an annual review period. This approach ensures that support is efficiently directed towards initiatives with the highest potential for positive impact in advancing the development of Canada's critical technologies.

Implementing this recommendation would signal Canada's commitment to nurturing innovation in areas of national importance. By providing targeted support to SMEs in strategic sectors, Canada can accelerate the development and adoption of cutting-edge critical technologies, bolster its economy, and enhance national security, ensuring a prosperous future in the rapidly evolving global landscape.

Recommendation 2: Streamline SR&ED approvals and enhance cash flow for innovators

To foster a more supportive environment for innovation and reduce administrative burdens on Canadian firms, particularly SMEs, we recommend the SR&ED program adopt a default approval approach for claims submissions, complemented by closer alignment of reimbursements with actual expenses. This approach would mirror aspects of the income tax system, where submissions with the required documentation are automatically approved, subject to a proportion of claims being audited each year for compliance.

We recommend a streamlined approach that includes:

- **Default approval process:** Shift to a system where SR&ED claims containing all necessary documentation are automatically approved. This change would eliminate the need for detailed technical reviews by CRA staff who may not have the specific expertise to evaluate the technical merits of each claim, thereby reducing the subjective nature of the approval process and administrative overheads while speeding up the time to funding.
- **Audits for compliance:** Implement a system of random audits to ensure compliance and integrity of the SR&ED program. This approach maintains oversight while respecting the professional judgment and technical expertise of Canadian innovators, encouraging a culture of trust and accountability.
- **Enhanced reimbursement mechanism:** Adjust the reimbursement model to more closely reflect actual R&D expenses, providing companies with more immediate financial relief and better cash flow management. Consider options for quarterly or even monthly claims to support ongoing R&D efforts, especially for cash-constrained startups and SMEs.

Adopting these recommendations would significantly enhance the predictability and accessibility of the SR&ED program for Canadian innovators, encouraging more companies to undertake ambitious R&D projects. By reducing administrative overhead delays and providing more timely financial support, Canada can stimulate a more dynamic and competitive innovation ecosystem, driving economic growth and technological advancement.

Additionally, this streamlined process aims to address the issue of high consultancy fees for SR&ED advisors, which can consume up to 30% or more of the value of SR&ED credits, and reduce the need for SMEs to rely on external consultants. By simplifying the application process and making it more accessible, companies can more easily navigate the SR&ED program independently and retain a greater share of their credits for reinvestment into R&D and commercialization activities.

Recommendation 3: Broaden SR&ED eligible expenditures

We propose broadening the SR&ED program eligibility to include expenditures crucial for the growth of R&D-intensive critical technology sectors like quantum.

This expansion should encompass:

- **R&D equipment:** The purchase and depreciation of specialized laboratory equipment essential for quantum research and development should be eligible for SR&ED credits. This adjustment addresses the high costs and rapid depreciation of specialized equipment in fast-moving sectors like quantum, lowering financial barriers (particularly for SMEs), encouraging further investment, and spurring innovation.
- **Patent and IP protection costs:** Given the immense value of intellectual property (IP) in tech and deep-tech sectors like quantum, and in light of increasing emphasis on research security, expenses related to patent filings and IP protection, including data security and secure research environments, should be recognized as SR&ED eligible. More specifically, eligible patent and IP protection costs should include prior art searches, patentability assessments, drafting and filing patent applications, and patent protection fees – whether those fees are incurred by internal or external IP professionals. This change is vital to promote IP retention in Canada and to maintain and advance Canada's position among world leaders in the development of critical technologies like quantum that impact the country's national interest.
- **Commercialization and continuous improvement activities:** Extending eligibility to cover commercialization and continuous improvement activities will support the entire development lifecycle of critical technologies like quantum. This includes market analysis, product validation, product-market fit, and scalability activities that are essential for market adoption, as well as activities aimed at refining technologies post-commercialization to maintain global competitiveness.

Adopting these recommendations would enhance the SR&ED program, offering comprehensive support to companies throughout the innovation process. This approach not only benefits the quantum sector but also strengthens the broader Canadian innovation ecosystem, ensuring that Canada remains at the forefront of global technological advancement and economic growth.

Recommendation 4: Adopt a nuanced revision to CCPC requirements to fuel growth and global competitiveness

To drive innovation and growth in Canada's capital and R&D-intensive sectors, a nuanced revision of the Canadian-Controlled Private Corporation (CCPC) eligibility criteria for the SR&ED program is essential. The existing CCPC requirements may inadvertently discourage Canadian SMEs from pursuing vital foreign investments, potentially constraining their innovation and growth. This is especially detrimental in sectors that demand substantial capital investment and

are at the forefront of developing long-horizon technologies, considering the current limitations of Canada's venture capital ecosystem in supporting startup and scaleup initiatives effectively.

We propose adjustments to the CCPC criteria to address the unique challenges of strategic capital-intensive sectors engaged in significant R&D efforts. Our recommendations include:

- **Acknowledging unintended consequences:** Recognizing that stringent adherence to CCPC status for SR&ED eligibility could restrict Canadian SMEs in critical technology sectors, such as quantum, from accessing necessary foreign investments, thereby limiting their innovation and growth potential, as well as limiting IP generation and retention within Canada.
- **Facilitating access to global capital:** Modifying SR&ED eligibility criteria to offer SMEs more flexibility in accepting foreign investments without forfeiting their SR&ED benefits. This change would empower Canadian companies in critical technology sectors to explore a wider array of funding opportunities essential for the development and commercialization of advanced technologies.
- **Prioritizing R&D activities in Canada:** Revising the criteria to underscore the importance of conducting and advancing a majority of a company's R&D activities within Canada, focusing on the substantial benefits to Canadian business innovation and the economy, rather than solely based on the company's ownership structure.
- **Support operational flexibility:** Allowing SMEs to strategically source capital based on their operational needs and the potential to boost R&D efforts in Canada, a crucial consideration for startups in strategic sectors, such as quantum, where timely access to capital significantly influences success.

Adopting these recommendations would more accurately align the SR&ED program with the current global investment climate and the distinct requirements of Canada's burgeoning critical technology sectors. By fostering an environment that encourages both domestic and international investment, Canada can ensure the prosperity and promote the development of strategic capabilities in R&D-intensive critical industries, resulting in enhanced national security, and the affirmation of Canada's status as a global innovation leader.

Recommendation 5: Strengthen IP retention and R&D in Canada with a repayment mechanism

To bolster the retention of IP and support the continued growth of R&D within Canada, we recommend the introduction of a "poison pill" repayment mechanism within the SR&ED program. This measure would require companies benefiting from SR&ED, but later relocating their IP or a majority of their R&D outside of Canada, to repay relevant funds received. This recommendation aims to foster the retention and development of IP in Canada while ensuring that foreign investment can serve as a catalyst for Canadian innovation and growth without undermining the country's intellectual assets.

Key aspects of this recommendation include:

- **Repayment obligation:** Should a company transfer its IP abroad or the majority of its R&D efforts that benefitted from SR&ED, it would be obligated to repay relevant SR&ED funds received. The repayment amount could either be in alignment with repayment policies in other programs like NRC IRAP, or reflect a multiple of the assistance provided, or incorporate an annual interest rate.
- **Funds reinvestment:** Repaid funds would be reinvested into the SR&ED program, ensuring that the program remains cost-neutral (including off-setting the recommendations above) and continues to support domestic innovation.

This measure aims to incentivize companies to keep their R&D and IP development activities within Canada, thereby fostering economic growth and technological progress, and enhancing national security when it comes to quantum. Implementing this recommendation would not only promote the retention of valuable R&D, IP, and jobs in Canada but also reinforce the SR&ED program's role in fostering a robust and competitive domestic innovation ecosystem. By ensuring that the benefits of government support for R&D are retained within the country, Canada can secure its position as a leader in critical technology sectors, including quantum technology, and drive long-term economic prosperity and security.

Recommendation 6: Implement a patent box regime as part of holistic innovation policy

To enhance Canada's innovation landscape and maximize the potential of IP as a driver of innovation and economic growth, we recommend the thoughtful introduction of a patent box regime integrated within a broader innovation policy toolkit. Ultimately, the aim of the patent box regime should be to incentivize the development and retention of IP generated within Canada without tying it to the commercialization of a product, particularly benefiting sectors poised for significant economic impact, such as quantum technology. However, for a patent box regime to be truly impactful, it must be designed as part of a comprehensive approach to innovation policy that supports IP development from inception through to the leveraging of IP assets.

Our recommendations include:

- **Integration with broader policy reforms to address a key gap in Canada's innovation support system:** A patent box regime should not stand alone but be part of a suite of innovation policy reforms. This includes strengthening support for IP development in the crucial pre-revenue phase, addressing a significant gap in Canada's current innovation support system. Enhancements to the SR&ED program and the NRC IRAP are necessary to ensure that early-stage IP development is adequately supported.
- **Support for emerging entities:** Ensure the regime's benefits are accessible not only to profitable companies but also to pre-revenue startups and SMEs through mechanisms like cash rebates or credits, fostering a more inclusive innovation ecosystem.

- **Support for Canadian-controlled spin-offs:** Enable Canadian-controlled spin-off companies utilizing patents developed by Canadian non-profits or public entities, such as universities and research hubs, to benefit from the patent box regime. This ensures that the fruits of Canadian research and development contribute directly to Canada's economic prosperity and global competitiveness.
- **Control measures to prevent abuse:** Implement safeguards within the patent box regime to prevent exploitation, for example by linking eligibility to the SR&ED program. Acknowledging this is a complex space, whatever safeguards are put in place need to be mindful of collateral damage that could undermine the aim of the patent box regime.

By adopting a patent box regime within this broader context, Canada can more effectively leverage its IP to drive innovation, economic growth, and competitiveness on the global stage. This approach acknowledges the lifecycle of IP development and ensures that Canadian innovations reach their full potential in the marketplace.