

Schedule 5 - NCC/CSIN PROJECT SELECTION STRATEGY 2022-2023

Scope

This document lays out the strategy for selecting Ultimate Recipient projects funded by the CSIN program. The document is valid for the first year of CSIN funding (2022-23). It may be updated for subsequent years.

All project selection decisions are formally made by the NCC board. The NCC will constitute an independent **selection committee** to make recommendations to the board.

Selection Committee

As outlined in the NCC's CSIN proposal to ISED, the selection committee will consist of 12 external experts and will be led by the NCC CEO or a person designated by the CEO to serve as the lead. The 12 expert reviewers are drawn from industry (5), not-for-profit organizations (2), and post-secondary institutions (5). The NCC will strive for balance in the composition of the selection committee in terms of cybersecurity/privacy expertise, geographical area, gender, language, and type of organization.

The selection committee is responsible, as a whole, for reviewing and ranking) regarding each submitted proposal in all three categories of CSIN projects (research, training, or commercialization). The selection committee can decide to constitute sub-committees from among its members, for example, for each project category.

External Reviewers

In those rare cases where the selection committee decides that input from an **external expert reviewer** is necessary, it can invite such a reviewer to evaluate that specific proposal.

Reviewer Agreement

All reviewers (selection committee members as well as any external reviewers) will be required to sign the **reviewer agreement** which lays out policies regarding confidentiality and conflicts-of-interest. The conflict-of-interest and confidentiality policies in the reviewer agreement will follow the policy used by Federal research organizations (https://science.gc.ca/site/science/en/interagency-research-funding/policies-and-guidelines/conflict-interest-and-confidentiality).

These policies are designed to ensure that each individual Eligible Project proposal to NCC will be evaluated by a set of reviewers who will not benefit directly or indirectly from the funding decision on that proposal.

Types of projects

CSIN funding will be used to support projects in three categories: research, training, or commercialization. We identify two classes of projects:

1.	spearhead projects which are forward-looking research or training projects that consist only of post-secondary educational institutions (PSE) and/or, when appropriate, not-for-profit (NFP)			
	organizations as Ultimate Recipients			

2. **standard** projects which are research, training, or commercialization projects that have at least one industry partner.

CSIN funding during the first year will be divided roughly equally among the three categories: research, training and commercialization.

Sharing ratios

Sharing ratio (SR) refers to the maximum fraction of the total eligible costs that can be requested as CSIN contributions. Sharing ratios differ based on the type of project and the type of PI/organization.

Each type of project as a whole must meet the following **maximum permissible sharing ratios** listed in Table 1. Ultimate Recipients within a project will agree among themselves how to divide the allowable CSIN funding. The sharing agreed among Ultimate Recipients in project proposal must be (a) consistent with the caps imposed on each type of institutional partner, and (b) clearly stated in the proposal. For private-sector (for-profit) organizations, the sharing ratio is capped at 50 percent (50%). For academic and not-for-profit organizations, the sharing ratio can be up to one hundred percent (100%).

Table 1 Maximum allowable Project-overall sharing ratio

Type of Project	Maximum Permissible Sharing	Notes
	Ratio covered by NCC funding	
Research (Standard)	Up to 47% of the of the project	See note 2 below
	total eligible costs	
Training (Standard)	Up to 47% of the of the project	See note 2 below
	total eligible costs	
Commercialization (Standard)	Up to 30% of the of the project	See note 2 below
	total eligible costs	

Spearhead Projects: projects which are forward-looking research or training projects that consist only of post-secondary educational institutions (PSE) and/or, when appropriate, not-for-profit (NFP) organizations as Ultimate Recipients. In this call, NCC will fund a limited number of spearhead projects for up to 10% of the total budget of the call. The project themes include Critical Infrastructure Protection, Network Security, Software Security, Human-Centric Cybersecurity, and Privacy Protection.

Research (Spearhead)	Up to 100%, see note 2 below	Normally up to a maximum of		
		\$30k/year/PI: There must be at		
		least two institutional partners		
		in a Spearhead Research project		
		and by the final year of the		
		project, a private sector partner		
		is engaged to magnify impact.		
		The maximum duration of a		
		Spearhead Research project is		
		three years. One PI can have at		
		most one Spearhead Research		

		project at any given time. Each proposal must clearly identify at least one of the five NCC research themes with which it is aligned.
Training (Spearhead)	UP to 100%, see note 2 below	Normally up to a maximum of \$300k/year/Ultimate-Recipient: The maximum duration of a Spearhead Training project is three years. Ultimate Recipient organizations can have at most one Spearhead Training project at any given time.

Sharing ratio means the proportion of costs covered by NCC funds.

Important Note: These maximum permissible sharing ratios are designed so that the NCC as a whole can meet the overall sharing ratio of 0.5 stipulated in the Contribution Agreement between the NCC and ISED. While the limits in Table 1 indicate the maximum permissible proportion of Eligible Costs that can be requested as CSIN contribution, note that

- 1. The NCC may decide to cap the sharing ratio for a given call depending on overall sharing ratio status of the NCC at a lower value than the maximum permissible sharing ratio. If this occurs, all projects of the same type accepted during a given call will be granted funding with the same maximum actual sharing ratio.
- 2. Individual projects can request a lower sharing ratio than the maximum actual sharing ratio. In fact, the requested sharing ratio will be an important selection criterion (I.e., the lower the better!)

Selection Criteria

General criteria

The NCC will consider the following criteria for all projects.

- a. economic, innovation, and social benefits;
- b. technological advancement generated for the cyber security ecosystem across Canada;
- c. technical feasibility;
- d. potential for commercialization in Canada of Eligible Project Intellectual Property;
- e. opportunities for collaboration;
- f. projects are conducted by a diverse mix of organizations within the cyber security ecosystem across Canada;
- g. regional representation;
- h. contributions to the goals of the NCC outlined in the Network Strategy;
- i. principles of Equity, Diversity and Inclusion;
- j. how it strengthens and promotes the sustainability of the NCC; and
- k. the financial capacity of the Ultimate Recipient to successfully carry out the project; in particular, while projects requesting lower sharing ratios will be given greater preference, Ultimate Recipients should clearly outline how they would complement CSIN funding.

Criteria for project categories

In addition, the NCC will consider additional criteria for specific project categories as follows:

Research

1. Expected number of IP filings and number of other IP (i.e., any IP not formally filed) generated as a result of the project.

Training

1. Number of post-secondary students expected to participate in the project's training activities (courses, programs, co-op, and/or Work-Integrated-Learning (WIL) programs)

- 2. Number of professionals expected to participate in the project's training, reskilling and upskilling activities
- 3. Expected percentage of students and workers from underrepresented groups taking part in the project's training activities
- 4. Expected number of firms participating in the project's training activities, indicating an increase in qualified and skilled cyber security professionals (both new entrants to the workforce and reskilled/up-skilled existing workers) as a direct result of the project.
- 5. Expected percentage of cybersecurity jobs filled by persons from underrepresented groups as a result of the project.

Commercialization

- 1. Expected number of IP filings and number of other IP (i.e., any IP not formally filed) generated as a result of the project.
- 2. Number of Technology Readiness Levels (TRLs) through which the project will advance its technology during the duration of the funding (a minimum of a 2-TRL advance is required for commercialization projects).
- 3. Expected value of sales of new or improved cyber security products and services commercialized (or introduced) as a result of the project.
- 4. Expected number of cybersecurity jobs created as a result of the project.
- 5. A compelling description of the market, competitors, and potential customers addressed by the proposed commercialization and the financial and other resources available to the proposing organizations to ensure its success.

Shovel-ready projects

During Year 1 (2022-23), the first calls for proposals for projects (known as the "shovel-ready projects") will be a closed call. **Shovel-ready Projects** are those projects that have already been submitted to NCC in response call for proposals issued on June 4, 2021. Proposals will be invited from potential Ultimate Recipients as follows. For training and commercialization project proposals, everyone who submitted a proposal in response to the calls issued on June 4, 2021. will be invited to update their application for the closed, shovel-ready call. These proposals were summarized in NCC's CSIN application to ISED in 2021.

For research projects, in Summer 2021 the five NCC thematic networks were invited to propose example research themes, which were included in the application to ISED. In addition, several external partners expressed interest. Everyone who expressed an interest (prior to the application to ISED) in research projects will be invited to the closed, shovel-ready call.

Every shovel-ready proposal will go through a rigorous review by the selection committee.

This Project Selection Strategy document will be published along with the calls for proposals.

Funding targets and deadlines

Our goal is to divide this amount roughly equally among the three categories of projects (research, training, and commercialization).

The first call for proposals is expected to take place in early 2023. Additional calls may be issued during the rest of the fiscal year as necessary.

The funding target for the projects selected as a result of the shovel-ready call is \$27 million (over four years), expected to be divided equally among the three categories.

Security policy

The NCC will (a) require each submitted Eligible Project proposal to include an assessment of the security risks associated with an Eligible Project proposal and its potential Ultimate Recipients using the National Security Guidelines for Research Partnerships' Risk Assessment Form (https://science.gc.ca/site/science/en/safeguarding-your-research/guidelines-and-tools-implement-research-security/national-security-guidelines-research-partnership/national-security-guidelines-research-partnerships-risk-assessment-form) (b) identify clearly inadequate statements as part of the screening of proposals by the NCC Secretariat and return them to the Ultimate Recipients to be updated, (c) pass on the security risk statement to the selection committee and reviewers evaluating the proposal, and (d) in case either the Secretariat or the selection committee flags a proposal for further security review, seek the help of external federal agencies for the review.

(*NCC Secretariat refers to the operational and administrative staff of the NCC reporting to the NCC's executive lead.)

The NCC reserves the right to decline the proposed participation of any partner or Ultimate Recipient on the grounds of national security reasons.

Appeals

Ultimate Recipients who have concerns about the project selection **process**, as applied to their specific application, can submit a written appeal within thirty (30) days from the date the project selection decision was communicated to them. The grounds for such an appeal must be clearly articulated and the remedy sought but must be included in the appeal, in addition to any evidence available to support the claim. The Secretariat will identify a three-member *ad hoc* appeals committee to adjudicate the appeal that will be chaired by the CEO (or delegate) and two members external to the NCC. The Selection Committee Chair will be invited to participate and to address any process related questions from the *ad hoc* Appeal Committee. The decision of the committee will be considered final and unappealable. In the case of a favourable decision on the appeal an appropriate remediation will be defined to ensure fairness in the process.