



2024

Call for Proposals Guide

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Introduction to the National Cybersecurity Consortium

The National Cybersecurity Consortium (NCC) helps build a future where Canadian organizations are global leaders in cybersecurity, so Canadians benefit from the prosperity, growth, and safety that comes from advancing and creating innovative cybersecurity products and services. The NCC is committed to building partnerships between academic, not-for-profit, and private sectors to further cybersecurity initiatives across Canada.

Objective of the 2024 Call for Proposals

With funding from the Government of Canada through the [Cyber Security Innovation Network \(CSIN\) program](#), the NCC is mobilizing new funds through the 2024 Call for Proposals to support initiatives that:

- Support research and development (R&D) projects with Technology Readiness Levels (TRL) 1-9 to design and implement innovative cybersecurity technologies, advance state-of-the-art products, and conduct research;
- Support commercialization of new technology with TRL 7-9, products, and services that address cybersecurity challenges in critical infrastructure protection, human-centric cybersecurity, network security, software security, and privacy protection; and
- Provide opportunities for training, upskilling, and reskilling of students and professionals from various disciplines.

Eligible Project Types

The NCC is seeking to fund projects under three major streams:

1. Research and Development (R&D);
2. Commercialization; and
3. Training.

1. Research and Development Projects

The NCC will look to provide support to research and development projects (TRL 1-6) that are focused on the design and implementation of innovative cybersecurity technologies, working to advance the state-of-the-art, or looking to conduct studies within the Canadian cybersecurity ecosystem relating to:

- **Critical Infrastructure Protection** to develop solutions that enable proactive monitoring and real-time detection and mitigation to restore critical infrastructure from damage and interruptions inflicted by cyberattacks.
- **Network Security** to develop tools, techniques, and procedures to safeguard computer networks and hosts from both internal and external exploits.
- **Software Security** to develop tools, methods, and practices to reveal and cure vulnerabilities before software is released to end-users.
- **Human-Centric Cybersecurity** to understand how human factors influence and impact security and privacy requirements to develop new humancentric cybersecurity solutions.
- **Privacy Protection** to develop protective technologies across many different environments that safeguard individuals and data from privacy violations.

Research and Development proposals are not limited to technical or scientific projects but could address non-technical issues of concern to cybersecurity/privacy. These may not sit within a particular TRL but will be considered on their own merit and assessed based on the potential impact of its goals. Research and Development proposals can additionally fall into

one of two classes: Spearhead or Standard (for more detail on these classes of projects, see the [Terminology List](#)).

2. Commercialization Projects – Technology, Product or Service

The NCC will look to provide support to assist in the successful commercialization of new Canadian technology (Technology Readiness Levels 7-9), products, and services that address cybersecurity challenges in critical infrastructure protection, human-centric cybersecurity, network security, software security and/or privacy.

3. Training: Skills and Talent Development Projects

To develop robust and varied opportunities for students or professionals to upskill and reskill across various disciplines, the NCC seeks to provide funding for projects focused on:

- Training HQP – Research Based;
- Training Capacity
 - Undergraduate programs
 - Graduate programs
 - Professional development opportunities;
- Training leading to certification;
- Upskilling;
- Reskilling;
- Cybersecurity Awareness
 - Within organizations
 - Public Awareness; and
- Targeted training to enhance equity, diversity, and inclusion (EDI) engagement and expertise in cybersecurity and privacy.

Grant Competition Information

The following 2024 Call for Proposals specific information will help guide those who are interested in learning more about the grant competition and opportunity.

Grant Amounts and Matching Contributions

The NCC estimates awarding approximately \$18M to support \$60M+ worth of activities in the 2024 Call for Proposals. The anticipated distribution of NCC funds is 20% to the commercialization stream and 40% each to the R&D and training streams. However, the NCC is committed to funding meritorious and feasible projects first and foremost so it will only fund projects that meet the program's objectives.

Funding Stream	Maximum Request of NCC Funding (CDN \$)	Recommended* Matching Contribution+
R&D Standard	\$2 Million	50%
R&D Spearhead	\$500 000	Matching not required
Commercialization	\$1 Million	70%
Training Standard	\$1 Million	50%

*Applicants are strongly encouraged to meet the recommended level of matching contribution for their proposals. This is a part of the [Evaluation Review Criteria](#) . Projects with high merit in other Evaluation Review Criteria may be funded with lower matching contribution ratios at the discretion of the NCC.

+ It is recommended that matching contributions are comprised of 50% cash as defined below. The relative composition of matching funds (cash versus in-kind) is part of the [Evaluation Review Criteria](#) . Projects with high merit in other Evaluation Review Criteria may be funded with lower cash contribution ratios at the discretion of the NCC.

Project Duration

The maximum permitted project duration is 48 months (~4 years), subject to the availability of funding.

Eligibility

Refer to the NCC's Funding Program Guide to review eligible organizations, sources for matching contributions and project expenses.

Grant Competition Timeline - 2024

Pre-Launch Information sessions	<p>Each webinar session is scheduled for 1 hour, beginning at 1pm ET:</p> <ul style="list-style-type: none"> • January 17 (EN) General Information • January 18 (FR) General Information • January 23 (EN) Commercialization • January 24 (FR) Commercialization • January 25 (EN) Spearhead • January 26 (FR) Spearhead
Call Launch with LOI Application available	January 31
Q&A Sessions	<p>Each webinar session is scheduled for 1.5 hours, beginning at 1:30pm ET:</p> <p>February 21 (EN)</p> <p>February 22 (FR)</p>
LOI Deadline	February 29
Project Proposal Launch (by invitation)	March 15
Project Proposal Period Closes	April 26
Evaluation Review Period	May 13 - June 28
Administrative Application Period (by invitation)	July 1 – July 28
Administrative Application Review	August 1 – 31
Public Announcement of Awarded projects	October 16

Submissions will not be considered if received after the stated deadline or outside of the identified submission channel(s).

[Sign up](#) for our newsletter to stay up to date on NCC funding calls and webinars.

Grant Competition Process

The NCC grant competition process consists of three stages:

- Letter of Intent (LOI);¹
- Project Proposal; and
- Administrative Details Submission.

Stage 1: Letter of Intent (LOI)

For interested applicants, an LOI must be submitted to provide an overview of the proposed project, projected project costs, and potential or confirmed sources of matching contributions.

The NCC will review the LOIs for eligibility, completeness, and for opportunities where collaborations among applicants and across projects could occur. One of the primary objectives of the NCC is to encourage collaboration between Canadian post-secondary institutions, the private sector, and other partners to accelerate cybersecurity innovation through the development of products, services, and training programs; therefore, collaborative projects where multiple stakeholders are involved is an important consideration. Commercialization and spearhead R&D projects may have a narrower scope.

LOI submissions that meet the conditions stated above will be invited to submit a Project Proposal.

Note: All eligible Organizations can submit an LOI for consideration. However, should the LOI be accepted, the Project Lead will be invited to submit a Project Proposal at which time the Lead Organization will be required to be a member, in good standing, with the NCC. For additional information, please refer to the [Membership section](#) or visit our website: <https://ncc-cnc.ca/membership/>

Stage 2: Project Proposal

Project Proposals will address project specifics to demonstrate merit, feasibility, leverage of funding, and impact to the Canadian cybersecurity ecosystem. We encourage applicants to use the Evaluation Review Criteria noted below to guide their proposals.

An external panel of subject matter experts (the Evaluation Committee) will review submitted Stage 2 Proposals and score them against the Evaluation Review Criteria. Scores will be consolidated and discussed at consensus meetings where the Evaluation Committee will generate a list of Proposals recommended to proceed to Stage 3. Note that the consensus meetings will consider both the quantitative assessment from the Evaluation Committee members and the qualitative aspects raised during the consensus meetings.

Stage 3: Administrative Details Submission

All Project Leads and Lead Organizations will receive written notice regarding the outcome of their Proposal from the NCC at the conclusion of Stage 2.

Depending on project and organization type, should the Proposal be successful at Stage 2, the NCC will require additional information. The purpose of Stage 3 is to complete due diligence on the Project Proposal by reviewing the submission for any risks and discrepancies, and to validate supporting documentation. The NCC and our federal funder reserve the right to withdraw an application under consideration should there be any concerns with the application materials and/or requested information and documentation during this period.

The NCC may request any or all of the following documentation to complete the Stage 3 Administrative Review:

- Lead Organization's current cybersecurity structure;
- [National Security Guidelines for Research Partnerships Risk Assessment](#)
- Confirmation of Project costs, including letters of commitment;
- Key performance indicators and evaluation strategies;
- Commercialization strategy;
- Cybersecurity plan;
- Intellectual property agreements;
- Project plans supporting EDIA principles;
- Incorporation documents and information on ownership (names and percentage of Ownership);
- Constituting / incorporating documents and list of directors and/or members of the Board;
- Financial statements (current and up to five years previous);
- Supplier quotes;
- Copies of relevant permits and licenses;
- HST rebate information (i.e., rebate rate);
- Other documentation, as required.

The NCC reserves the right to request any or all documentation it may require to complete its assessment. The sufficiency and completeness of any requested documentation will be a factor in the final evaluation of the application, and in the sole discretion of the NCC. The NCC may request additional documentation to address feedback received at Stage 2 from the Evaluation Committee.

Award

Project Lead(s) and their Organization(s) will be notified of their Project Proposal funding status. The NCC will enter into an Ultimate Recipient Agreement with the awarded Ultimate Recipient. If the project is successful in receiving an NCC grant, the Lead Organization (hereon in referred to as the "Ultimate Recipient") will be required to pay an additional 3.5%

incremental membership fee based on the amount of awarded grant funds. For Project Proposals to proceed beyond Stage 3, any Partner Organizations identified must **be members in good standing of the NCC**. For additional information, please refer to [Membership section](#) or visit our website: <https://ncc-cnc.ca/membership/>

Evaluation Review Criteria

The following evaluation scorecard will be provided to external reviewers for scoring and discussions purposes of the Project Proposals in Stage 2. Applicants are encouraged to use these criteria to guide their Project Proposals responses. Depending on the type of proposal, these criteria may carry different weights and will be normalized through the consensus meetings at the end of Stage 2.

Evaluation Scorecard

Merit			
This scoring section focuses on the Merit of the submitted Project Proposal.			
<i>Review the submission in the Project Proposal section titled "Project Information" when determining the score in the various Merit sub-categories.</i>			
	Poor (1)	Fair (3)	Excellent (5)
Merit: Project Value Notes: this scoring focuses on the significance or value of the project, the known gaps the project will address, and the outcomes that the project will achieve.	The proposed project has minimal value, the need/gap described is not significant, nor is the project innovative to contribute to the advancement of Canada's cybersecurity ecosystem.	The proposed project has value as it will address a need/gap, and/or is innovative and will contribute to advancing Canada's cybersecurity ecosystem.	The proposed project has significant value as it will address a large need/gap, and/or is highly innovative and will contribute to advancing Canada's cybersecurity ecosystem.
Merit: Depth and Breadth of Canadian Collaboration	Project organizational representation is limited geographically and	Project organizational representation is moderately captured geographically and in	Project organizational representation is highly diverse in terms of depth and breadth, both geographically

Notes: this scoring focuses on project organizational representation from different geographical regions of Canada and from various types of organizations	in terms of the types of organizations included.	terms of the types of organizations included.	and in terms of the types of organizations included.
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Feasibility

This scoring section focuses on the Feasibility of the submitted Project Proposal.

Review the submission in the sections titled "Project Information, Project Plan, Project Realization, and Project Costs" when determining the score in the various Feasibility sub-categories.

	Poor (1)	Fair (3)	Excellent (5)
Feasibility: Team composition and expertise Notes: this scoring focuses on assessing appropriate team expertise and experience.	The project team has insufficient expertise, experience, capacity, and resources needed to complete the proposed work. The individuals involved have no track record or experience in managing an organization and/or taking products to market.	The project team has sufficient expertise, experience, capacity, and resources needed to complete the proposed work. Some key team members are confirmed. There is a basic plan in place to complete the team.	Project has a highly capable team with proven expertise and experience (in commercialization, if applicable), which has the capacity and/or resources needed to successfully complete the proposed work.
Feasibility: Proposed timeline, activities, and milestones	The project submission does not identify a minimal set of key milestones and related indicators of success	The project submission identifies key milestones and related indicators of success to the project in a limited way. Suggested time to	The project submission identifies all milestones and related indicators of success to the project. Suggested time to achieve

<p>Notes: this scoring focuses on the appropriateness of the project planning to achieve project completion.</p>	<p>to project. Suggested time to achieve milestone and overall project timeline is not realistic. There are concerns about the successful execution of the project.</p>	<p>achieve milestone and overall project timeline require further clarification to be feasible to ensure successful execution of project.</p>	<p>milestone and overall project timeline is feasible. No concerns with successful execution of project.</p>
<p>Feasibility: Proposed Budget</p> <p>Notes:</p> <p>This scoring focuses on the appropriateness of the project costs and budgeting to achieve the project plan and outcomes.</p> <p>Matching contributions reflect appropriateness of the matching contributions and the commitment of participating organizations in the project. These leveraged funds will be scored accordingly in the evaluation of the proposed budget.</p>	<p>Proposed project costs are inadequate and not reasonable. Project leveraging is minimal. In the case of non-commercial projects, leveraging is heavily reliant on or solely non-cash contributions.</p> <p>The Project Lead/Partner Organizations have limited means to finance ongoing operations, the identified matching contributions are not appropriate and are heavily dependent on contingent events and/or project success.</p>	<p>Proposed project costs are somewhat adequate and reasonable. Project is sufficiently leveraged and, in the case of non-commercial projects, has leveraged both cash and non-cash contributions.</p> <p>The Project Lead/Partner Organizations have the means to finance ongoing operations with appropriate matching contributions, are not dependent on contingent events and/or project success and would have the resources to fund commercialization.</p>	<p>Proposed project costs are completely adequate and reasonable. Project is extremely well leveraged. In the case of non-commercial projects, has leveraged significant cash contributions.</p> <p>The Project Lead/Partner Organizations have the means to finance ongoing operations with appropriate matching contributions and would not be dependent on contingent events and/or project success in any way. And would have significant financial resources to fund commercialization.</p>
<p>Intellectual Property</p> <p>This scoring focuses on the " <i>Intellectual Property (IP) Plan</i>" section of the submitted Project Proposal.</p>			

	Poor (1)	Fair (3)	Excellent (5)
Intellectual Property (IP) Notes: this feedback section focuses on IP Planning.	The submitted proposal inadequately considers the IP Planning for the project.	The submitted proposal considers the IP Planning for the project; however, some key IP issues are not addressed and/or there is no plan in place to address them.	The submitted proposal considers the IP Planning for the project. It is largely well thought out with a thorough and clear mechanism in place to move forward.
Project Sustainability This scoring focuses on the "Project Sustainability" section of the submitted Project Proposal. If this is an R&D Spearhead project, refer also to the Project Plan.			
	Poor (1)	Fair (3)	Excellent (5)
Project Sustainability Notes: this feedback section focuses on understanding the future state of the project and the planning for this project after this NCC funding cycle ends and the overall progressive impact the project may have on the Canadian cybersecurity ecosystem.	The submitted proposal does not demonstrate how the project would be sustainable, the project duration is completely dependent on NCC funding. The project does not have the ability to have strong economic, innovation, and social benefits, including technological advancement. As applicable, it does not have potential for commercialization in Canada. -- For R&D Spearhead: The	The submitted proposal generally demonstrates how the project could be sustained outside the NCC funding cycle. The project somewhat demonstrates the ability to have strong economic, innovation, and social benefits, including technological advancement. As applicable, it has potential for commercialization in Canada. -- For R&D Spearhead: The submitted proposal does generally demonstrate a plan	The submitted proposal clearly demonstrates how the project would be sustainable beyond the NCC funding cycle. The project demonstrates the ability to have strong economic, innovation, and social benefits, including technological advancement. As applicable, it has potential for commercialization in Canada. -- For R&D Spearhead: The submitted proposal demonstrates a clear and viable plan forward for developing the project, with likely or realized support by

	submitted proposal does not demonstrate a clear plan forward for developing the project alongside any current and future project partners.	forward for developing the project, but much additional work is needed to have commitment by potential project partners.	potential future project partners.
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Additional Feedback

Provide any additional constructive feedback about this submitted application that will support the Project Proposal Review.	[write in]
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Reporting Policies and Other Information

To support the successful completion of NCC-funded projects, regular financial and progress reporting will be required. Through ongoing monitoring and evaluation, the NCC will use the reporting outcomes to inform future initiatives and support continuous improvement in the design and delivery of our programs.

The following reporting will be required as part of NCC project funding; however, this is provided here as a guide and is subject to change:

Financial Reporting

- Financial Reporting will be completed and submitted quarterly. This reporting will include Reconciliation/Reimbursement and, as applicable, Advance Requests.
- Reimbursement/Advance template(s) will be provided in advance of the reporting schedule to be completed, signed off by a Senior Finance Officer at the Ultimate Recipient Organization and returned. All invoices / receipts will be retained by the Ultimate Recipient Organization to be submitted upon request.

Progress Reporting

The project progress reporting provides oversight to determine that the project is on time, in scope, and within budget. Formal reporting is required to be submitted on a quarterly basis with brief updates requested for the first three quarterly report periods and a more robust and fulsome report required annually. Informal touchpoints may be arranged with Project Leads/Ultimate Recipients to assist and assess any risks or delays to the project. The final project report will be required to be submitted before the final disbursement is released.

Note: The NCC may hold back up to 10% of a grant pending submission, review, and completion of all documentation.

Additional Data Collection

Key performance indicators relating to engagement and representation of underrepresented groups as designated groups under the *Employment Equity Act* will be

collected to monitor program impact. Information related to intellectual property, data management plans, and other compliance metrics will also be collected.

Membership

As the NCC is a member-driven organization, the potential Ultimate Recipient (Lead Organization) will need to be a member in good standing of the NCC to receive funds from the NCC.

It is expected that the base membership will be paid in full by the close of the Project Proposal period. If the project is successful in receiving an NCC grant, the Ultimate Recipient will be required to pay an additional 3.5% incremental membership fee based on the amount of awarded grant funds. Note: membership fees are not an eligible expense of the NCC or CSIN project funding.

For Project Proposals that proceed beyond Stage 3, any Partner Organizations identified must also become members in good standing of the NCC. Partner Organizations will be expected to pay the base membership fee appropriate for their size and category of organization.

For additional information on NCC membership, including detail on membership benefits, visit our website: <https://ncc-cnc.ca/membership/>

Appendix A: Terminology

Included below are important terms and definitions that are used throughout the NCC's Grant Competition Process.

Authorized Signatory

An Authorized Signatory is an individual authorized to sign and submit on behalf of the Ultimate Recipient confirming the Letters of Intent, Project Proposal, and award agreements. The Authorized Signatory is also authorized to submit award finalization forms, and project progress reports.

Lead Organization/Ultimate Recipient

The Lead Organization is the organization affiliated with the Project Lead. The NCC enters into an agreement with the Lead Organization, who becomes an "Ultimate Recipient" upon signing the funding agreement and is responsible for meeting the terms and conditions of the agreement.

Letters of Commitment

Letters of Commitment are statements of commitment or partnership letters, written on organizational letterhead, and signed by an Authorized Signatory. These letters are required to include a clear statement of the scope of the commitment or partnership, the contribution in dollar format (CDN \$), the type of contribution (cash or in-kind), and the duration of the commitment. These letters must be signed by an individual at the organization that is authorized to make and/or confirm financial commitments on behalf of their organization (Authorized Signatory). Letters of Commitment for matching contributions are strongly encouraged to be included in the Proposal for Stage 2 and will be required for Stage 3, Administrative Details Submission.

Matching Contributions

The NCC is committed to furthering the government's investment into projects by requiring matching contributions. Matching contributions may be either monetary (cash or actual costs including employee salaries) or non-monetary ("in-kind").

- Cash - any monies that would have to be spent for the project if this was not being provided from another source.
- In-Kind - means cash-equivalent goods or services that replace an incremental expense that would be paid with the awarded funds.

Matching contribution requirements for this call are noted in the ["Objective of Call 2024"](#) section above.

Partner Organization(s)

The affiliated organization of a Project Team member that is contributing either intellectually and/or financially to the project's completion. For Project Proposals to proceed beyond Stage 3, any Partner Organizations identified must be members in good standing of the NCC.

Project Lead

The Project Lead is the individual who heads the project, contributing core intellectual and/or research design efforts. The Project Lead identified on a project must have a full-time/tenure-track appointment with the Lead Organization they are affiliated with. The Project Lead will be submitting the application components and will be the point of contact for the project regarding reporting. A Co-Lead can be named for the project. Supporting curriculum vitae will be included in a Stage 2 submission for these named individuals.

Project Team Member(s)

Project Team Members are individuals who contribute core intellectual and/or research design efforts to the project. These names will be included in Stage 1 with supporting curriculum vitae included in a Stage 2 submission. These individuals can be updated through each Stage of the application process and additional members can be added through the lifetime of projects.

Spearhead projects

Spearhead projects are research and development projects that originate from post-secondary educational institutions (PSE) and/or not-for-profit (NFP) organizations but do not

have matching contributions identified. Matching contributions recommendations are under the heading 'Grant Amounts and Matching Contributions'.

Spearhead projects should be novel in nature and explore riskier early-stage ideas. However, they are NOT curiosity-driven projects. A spearhead project should have defined goals and milestones but should be sufficiently flexible to adapt as new insights emerge. Thus, the approaches to the goals may change but the goals should not. Changes to goals and milestones will need to be reported in advance of such alternations as specified in the reporting requirements of the Program Guide.

Note: Although no matching contributions are required for a spearhead project, a plan must be provided to describe how a broader set of collaborators will be engaged over the lifespan of the project. These must be measurable (e.g., a private sector partner will be onboarded by Y2/Q3 to provide expertise and/or funding; or three not-for-profit organizations will be approached to work on an initiative to expand to areas beyond the applicant's local jurisdiction). The purpose is to expand the projects participants and broaden its potential impact beyond the lab. In addition, it is anticipated that this could allow for a subsequent application to the NCC in the Standard category to continue to move the idea forward.

Standard projects

Standard projects are research, training, or commercialization projects that are larger in scope and have clearly defined goals and milestones.

For Standard projects matching contributions do not have to have been fully secured at Stage 1 or 2 of the grant competition process but must be in place and documented with commitment letters, by the time the Stage 3 submission is made. Matching contributions can be drawn from the public sector including post-secondaries (see Program Guide for detailed allowable matching), the private sector, philanthropic sources, provincial/territorial and municipal government sources, and/or not-for-profit organizations.

Technology Readiness Levels

The table below describes the Technology Readiness Level (TRL) scale as defined by the [Innovative Solutions Canada](#).

Technology Readiness Level	Description
TRL 1—Basic principles of concept are observed and reported	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Activities might include paper studies of a technology's basic properties.
TRL 2—Technology concept and/or application formulated	Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative, and there may be no proof or detailed analysis to support the assumptions. Activities are limited to analytic studies.
TRL 3—Analytical and experimental critical function and/or proof of concept	Active research and development is initiated. This includes analytical studies and/or laboratory studies. Activities might include components that are not yet integrated or representative.
TRL 4—Component and/or validation in laboratory environment	Basic technological components are integrated to establish that they work together. Activities include integration of "ad hoc" hardware in the laboratory.
TRL 5—Component and/or validation in simulated environment	The basic technological components are integrated for testing in a simulated environment. Activities include laboratory integration of components.

<p>TRL 6—System/subsystem model or prototype demonstration in a simulated environment</p>	<p>A model or prototype that represents a near desired configuration. Activities include testing in a simulated operational environment or laboratory.</p> <p>Levels 7 through 9 represent the pre commercialization gap for innovations.</p>
<p>TRL 7—Prototype ready for demonstration in an appropriate operational environment</p>	<p>Prototype at planned operational level and is ready for demonstration in an operational environment. Activities include prototype field testing.</p>
<p>TRL 8—Actual technology completed and qualified through tests and demonstrations</p>	<p>Technology has been proven to work in its final form and under expected conditions. Activities include developmental testing and evaluation of whether it will meet operational requirements.</p>
<p>TRL 9—Actual technology proven through successful deployment in an operational setting</p>	<p>Actual application of the technology in its final form and under real-life conditions, such as those encountered in operational tests and evaluations. Activities include using the innovation under operational conditions.</p>