

# AUDIT OF THE INNOVATION SUPERCLUSTER INITIATIVE

**REPORT** 

## AUDIT AND EVALUATION BRANCH SEPTEMBER 2022

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### LIST OF ACRONYMS USED IN REPORT

**ADM** Assistant Deputy Minister

**AEB** Audit and Evaluation Branch

**CA** Contribution Agreement

**CMIS** Corporate Management Information System

**CVO** Claims Verification Officer

**DG** Director General

ISI Innovation Superclusters Initiative

**KPI** Key Performance Indicator

**NGEN** Next Generation Manufacturing

PAR Project Activity Report

PIC Protein Industries Canada

PIP Performance Information Profile

**PMF** Performance Measurement Framework

**RMF** Risk Management Framework

## 1.0 EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

The Global Innovation Clusters program, previously known as Innovation Superclusters Initiative (ISI), is delivered by Innovation, Science and Economic Development (ISED) and was launched on May 24, 2017. The main stakeholders for the program include project consortia participants (e.g., members/non-members participating in the five clusters projects), federal and provincial government departments and agencies (e.g., National Research Council and Regional Development Agencies), partner organizations involved in delivering programming (e.g., universities, non-for-profit organizations, municipalities, etc.), and other actors benefiting directly or indirectly from cluster activities (e.g., industry or economic development associations).

In Budget 2016, under the Inclusive Innovation Agenda, the Government of Canada committed \$800 million in funding over four years (beginning 2017-18) to support the development of a small number of business-led innovation clusters that have the greatest potential to promote economic growth. Under the Innovation and Skills Plan, Budget 2017 increased the funding to \$950 million, covering the period of FY 2018-19 to FY 2022-23, with an added priority to accelerate the development of business-led clusters that focus on innovative industries and ecosystems. As key initiative of the Innovation and Skills Plan, the program was created to offer contributions to not-for-profit entities representing industry-led consortia, or "clusters".

In February 2018, the government announced five clusters representing current and future competitive advantages for Canada. These five entities, ensure the involvement of the private and postsecondary sectors, as well as other ecosystem players, to increase collaboration and business research and development, improve the innovation ecosystems, and boost productivity, competitiveness and economic growth.

#### Figure 1: The Clusters **Next Generation** Ocean Digital Technology Scale Al **Protein Industries** Manufacturing Digitizes and optimizes Enhances manufacturina Increases the value of Brinas sectors (i.e.: retail, Unlocks the potential of marine operations, capabilities (i.e.: Canadian crops and transportation, data through better sustainable approaches to advanced robotics and 3D helps to capture infrastructure, etc.) datasets, augmented resources, and increases printing and increases capital markets for together to build reality applications and safety for those operating in participation in global intelligent supply chains. Canada's aaribusiness. cloud computing. marine environments. markets. British Prairies Quebec Atlantic Ontario Columbia Canada

As of March 31st, 2022, the program had launched over 415 projects, with over 1,840 project partners, and approximately \$1.94 billion co-invested with industry. Funding flows into Canada's clusters through co-investment by government and industry, with an expectation that industry investment will be at least equal to the contribution disbursed by the government.

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The Global Innovation Clusters program is investing up to approximately \$1 billion in Canada's five clusters over five years through the following non-repayable contributions, to be matched at least equally by industry:

- Digital Technology up to \$173 million
- Protein Industries up to \$173 million
- Advanced Manufacturing up to \$250 million
- Scale AI up to \$230 million
- Ocean up to \$153 million

This includes \$950 million announced in Budget 2017 and an additional \$60 million announced in Budget 2021 to continue support of innovative Canadian projects and firms as part of economic recovery, of which the Digital Technology, Protein Industries and Advanced Manufacturing clusters have each been allocated an additional \$20 million.

#### 1.2 AUDIT BACKGROUND

The objective of the audit was to provide assurance that the Global Innovation Clusters is operating efficiently and effectively.

The audit scope focused on processes, activities, and controls from January 1st, 2020, to March 31st, 2022, including:

- Effectiveness of program monitoring and reporting mechanisms;
- Design and effectiveness of the program's risk management framework;
- Information management and data collection protocols; and
- Payment processing (advance and reconciliation processes) and compliance with applicable legislative and policy requirements.

#### 1.3 METHODOLOGY

The audit was conducted in accordance with the Internal Auditing Standards for the Government of Canada. Based on the risk assessment, audit criteria and sub-criteria, linked to the overall audit objective, were developed (see Appendix A).

The methodology used for this audit included various procedures to address the engagement's objective. These included interviews, review of documentation, walkthroughs of systems and processes, and file testing, including a sample of monitoring and claims.

Samples from key program activities were selected to assess controls over monitoring and reporting, financial and risk management, and documented approval processes. This included reviewing elements related to claims administration, information management, as well as decision-making, governance and program progress and performance processes.

#### 1.4 OVERVIEW OF AUDIT RESULTS

#### Strengths

The program has established various oversight and reporting mechanisms to monitor and oversee clusters. These mechanisms allow for effective and prompt issue resolution and continuous assessment of cluster performance. The program's performance measurement framework (PMF) incorporates both overall program and cluster specific indicators, allowing each cluster to demonstrate its commitments on a more detailed scale.

Each cluster has a comprehensive risk management framework developed by the program which assesses their respective risk profiles. The design of the framework allows for the clusters' risks to be identified and assessed, and for mitigation strategies to be implemented to address prescribed risks.

The program's advance and reconciliation processes support the clusters in achieving their strategic objectives and to ensure that timely reporting of funds and disbursements is maintained. Approvals are sought and documented in accordance with the Financial Administration Act. Funding processes and monitoring activities are in place and working as intended to ensure alignment with the overall expectations in Treasury Board Policy and the Directive on Transfer Payments, and cluster contribution agreement requirements. Additionally, a defined claims verification process is in place and supported by effective controls for approvals and disbursement of funds. Tools, templates and other guidance are documented and accessible to clusters in order to provide clarity over roles and responsibilities and deliverables.

Lastly, the clusters support and encourage the use of both official languages, in accordance with the Official Languages Act, and board parity in terms of gender ratio is in accordance with the contribution agreement requirements.

#### Recommendations

Some recommendations were identified by the audit in the areas of risk management and monitoring tools. It was determined that the program would benefit in reviewing its risk management processes to ensure that the risk methodology used to identify, assess and respond to new and emerging risks remain reliable and relevant.

Additionally, as part of the risk management process, the program should retain all relevant supporting documentation that validate and justify the likelihood and impact of risks, as well as the overall risk ratings prescribed within each cluster's project risk management framework.

Finally, reporting and monitoring tools used to monitor contribution agreement reporting requirements and/or requirements related to the performance objectives of the program should be reviewed to ensure the completeness and accuracy of data.

#### 1.5 AUDIT OPINION AND CONCLUSIONS

Overall, as a relatively new program, the Global Innovation Clusters has established a strong foundation to support the renewal of the program through its management control framework. This framework integrates governance, risk management, performance measurement and effective controls over financial management and program monitoring and reporting. This foundation can be further solidified by strengthening risk management, including information management practices, and enhancing the reporting and monitoring of the contribution agreement requirements.

#### 1.6 MANAGEMENT RESPONSE

Management has agreed with the findings included in this report and will take action to address all recommendations by Q1 of FY 2023-24.

#### 1.7 STATEMENT OF CONFORMANCE

This audit was conducted in accordance with the Internal Auditing Standards for the Government of Canada. This was ensured through the result of the Audit and Evaluation Branch's quality assurance and improvement program.

Kimberley Accardi Chief Audit Executive Innovation, Science and Economic Development Canada

## 2.0 BACKGROUND

#### 2.1 OVERVIEW

#### **Entity Background**

The Global Innovation Clusters program, previously known as Innovation Superclusters Initiative (ISI), is an Innovation, Science and Economic Development program delivered by Innovation Canada and launched on May 24, 2017. The program is a co-investment initiative aiming to foster the growth and development of Canada's innovation ecosystems by speeding economic growth in highly innovative industries, supporting a strong collaborative business approach, and placing Canadian organizations for global leadership.

A competitive process was held to select these consortia. As a result, five clusters were selected and each entered into a contribution agreement (CA) with ISED. Each entity, known as clusters, are independent not-for-profit organizations and are responsible for managing operations and activities, defining strategic priorities, and choosing and funding projects in a fair and consistent manner. The clusters are also responsible for undertaking projects and redistributing ISED funds to ultimate recipients.

The program supports the clusters funding through non-repayable contributions. The five clusters ensure the involvement of the private and post-secondary sectors, as well as other ecosystem players to increase collaboration and business research and development, improve the innovation ecosystems, and boost productivity, competitiveness and economic growth.

The program has the following objectives:

- Create world-leading innovation ecosystems and enhance the attributes of regional innovation ecosystems;
- Increase collaboration between private, academic and public sector organizations to strengthen resources, capabilities and knowledge;
- Increase competitiveness, productivity and economic growth by creation of new jobs and Canadian businesses; and,
- Enhance technologies and commercialize products, processes and services that address important industrial challenges for Canada's sectors of economic strength.

#### **Program Funding**

Funding flows into Canada's clusters by means of co-investment by government and industry with a requirement of dollar-for-dollar matching. ISED funding is advanced to clusters toward eligible operating and administration costs as well as project costs.

Operating and administration related funding for the five clusters commenced disbursement during the first year of the CAs (FY 2018-2019) while project-related funding commenced disbursement in the second year. (FY 2019-2020). As of April 2021, the maximum advance amount for each entity is approved at the beginning of the fiscal year and disbursed in

installments to the clusters when required. To ensure sound stewardship over ISED funds, clusters are required to provide detailed reconciliation reports to the program outlining how funding was used on a bi-annual basis.

In 2018, the program allocated \$918 million in federal funding between the clusters:

- Next Generation Manufacturing (NGen) cluster: \$230 million
- Scale AI cluster: \$230 million
- Digital Technology cluster: \$153 million
- Protein Industries Canada cluster (PIC): \$153 million
- Ocean cluster: \$153 million

The Standards Council of Canada was provided \$14.4 million to support the development of international standards for Canadian technologies developed as a result of the initiative. The remaining \$17.5 million was allocated to the program team within ISED to build capacity, provide oversight and ongoing support to the clusters.

An additional \$60 million was announced in Budget 2021 (increasing the total funding to \$978 million); where \$20 million was allocated to three of the clusters, Digital Technology, Protein Industries, and Next Generation Manufacturing cluster, respectively.

As of March 31, 2022, the program had advanced approximately \$563.6 million out of \$978 million (58% of total funding) to clusters.

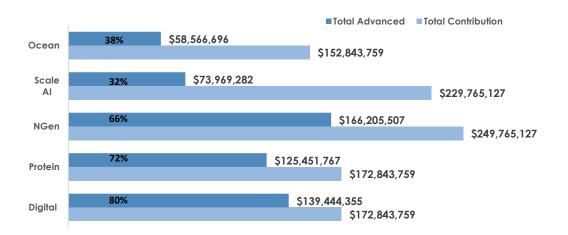


Figure 2: Cluster Advanced Amounts as of March 31, 2022

#### Program Administration and Governance

The clusters are required to be not-for-profit entities, and since the announcement of the five clusters in 2018, they have put in place governance structures and operational processes to meet conditions required in their respective contribution agreements. Each cluster has its own industry-led board of directors responsible for its strategic direction and governing policies. They are also responsible for undertaking projects and redistributing ISED funds to ultimate recipients. Projects are administered through the cluster's own independent processes with unique project selection guides and project eligibility criteria stipulated by the contribution agreement to select projects that best align with their cluster strategy.

The program oversees and supports the clusters in meeting the agreed upon terms and conditions. The program is managed by three teams responsible for administrative and financial processes; performance, data management, communications and engagement; and strategic policy, planning and partnerships. The teams work together to support and monitor the clusters. The program tracks the progress of the clusters with the help of bi-weekly and monthly calls, observing cluster board meetings, and other reporting activities, such as updates to membership lists, annual reports and corporate plans, as prescribed in the contribution agreement.

#### **Program Activities**

Each cluster is guided by an entity-specific cluster strategy that describes the activities they intend to pursue to build their innovation ecosystems. Clusters undertake projects and/or redistribute funding to ultimate recipients (e.g., Canadian firms, post-secondary and research institutions, non-profits, etc.). Each cluster conducts its own independent processes with unique project selection guides, selecting projects that best align with their cluster strategy.

## 3.0 ABOUT THE AUDIT

#### 3.1 AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

In accordance with the approved Innovation, Science and Economic Development (ISED) 2021-2022 Risk-Based Internal Audit Plan, the Audit and Evaluation Branch (AEB) undertook an audit of the Global Innovation Clusters.

#### **Audit Objective**

The objective of the audit was to assess the design and operating efficiency and effectiveness of the program's management control framework related to monitoring and reporting, risk management, and program processes and controls.

#### **Audit Scope**

The audit scope will include an assessment of processes, activities, and controls from January 1st, 2020, to March 31st, 2022.

More specifically, this includes:

- Effectiveness of program monitoring and reporting mechanisms;
- Design and effectiveness of the program's risk management framework;
- Information management and data collection protocols; and
- Payment processing (advance and reconciliation processes) and compliance with applicable legislative and policy requirements.

#### Methodology

The audit was conducted in accordance with the Internal Auditing Standards for the Government of Canada. Based on the risk assessment, audit criteria and sub-criteria, linked to the overall audit objective, were developed (see Appendix A).

The methodology used for this audit included various procedures to address the engagement's objective. These included interviews, review of documentation, walkthroughs of systems and processes, and file testing, including a sample of monitoring and claims.

Samples from key program activities were selected to assess controls over monitoring and reporting, financial and risk management, and documented approval processes. This included reviewing elements related to claims administration, information management, as well as decision-making, governance and program progress and performance processes.

A debrief meeting was held with the Director General on May 11th, 2022, in addition to other discussions with the program's senior management, to validate the findings that form the basis of this report. This meeting also provided the auditee an opportunity to offer any additional information and clarification regarding the findings.

## 4.0 FINDINGS AND RECOMMENDATIONS

#### 4.1 INTRODUCTION

This section presents detailed findings from the audit of the Global Innovation Clusters. The findings are based on evidence and analysis from both the initial risk assessment and the detailed audit work.

#### 4.2 RISK MANAGEMENT

For each distinct cluster, the Global Innovation Clusters has developed a comprehensive risk management framework, which includes risk principles and procedures to determine the risk appetite and risk profiles for each cluster. There is an opportunity to improve risk management practices, where the risk framework could further strengthen risk identification and the risk mitigation strategies to enhance its relevancy, and strengthen its alignment with program expectations.

The program conducts an annual risk management assessment which is documented in a Project Risk Management Framework (PRMF) for each of the five clusters. The objective of the framework is to ensure sound stewardship and implementation of the program, monitor ongoing risk, and continually assess risks that might affect the program's funding agreement with the clusters. The PRMF acts as an ever-green assessment guide to identify and respond to risks related to the recipients by incorporating the key elements for identification of risk, assessment and/or ranking, risk mitigation and follow up procedures.

#### Risk Identification

The program's risk management process is used to assess the level of risk for each cluster and determines whether changes to the frequency of reconciliations, controls or other support/guidance is needed. Risk factors are reassessed at least annually and may result in updates to the RMF. In order to monitor the risk environment, there are checkpoints throughout the year that identify and assess if there are any additional risks to be included in the framework.

There are a number of factors used to identify potential risks, such as meetings with the clusters, advance disbursements and/or review of cluster claims during the reconciliation process, and key documents provided by clusters as requested by the program. Although the risk reassessment of each cluster occurs every year, an earlier re-assessment can be undertaken by the program if and/or when changes to a given risk environment occurs leading to a potential increase/decrease in the overall risk rating.

#### Risk Assessment

To ensure that new and emerging risks are updated as the program evolves, the annual risk assessments measure two types of risks:

- Compliance Risk: The risk that the clusters may not achieve their stated objectives and the objectives of the program.
- Financial risk: The risk that funding may not be used for the intended purposes, and/or may not be reported accurately.

The risk factors used to assess compliance and financial risks included indicators that are based on requirements established at the beginning of the program. These indicators included whether past cluster requirements were established at the outset of the program (i.e., Financial Management Frameworks for each cluster, creation of cluster 5-year strategy, etc.).

#### Risk Mitigation

As per the program's processes, the RMFs outline mitigations to be taken for any risks that are considered medium or high. These include: increase in monitoring and reporting frequency as well as, regular monitoring of governance by the inclusion of one ISED observer on each cluster Board of Directors, monthly and bi-weekly calls with clusters on strategic priorities and qualitative and quantitative analysis to capture the direct impact of projects.

Due to the similarities of the risk factors, the audit noted that most of the PRMFs mitigations put in place were common and applicable to all clusters.

The program updates its operational procedures in response to the clusters assessed risk profiles. In the 2019-20 PRMF, it was noted that a cluster's financial risk was deemed higher risk. As a result, the program increased the frequency of its reconciliations from biannual to quarterly. After a period of increased monitoring, the cluster demonstrated that it had mitigated the financial risk, and thus the program reinstated the frequency of its reconciliations to biannual in 2021-22. This demonstrates the program's proactive oversight and monitoring of risk factors.

#### Recommendation #1 (Medium Risk)

The program should periodically review its risk management processes to ensure that the risk methodology used to identify, assess and respond to risks is accurate, reliable and relevant. Appropriate supporting documentation that validates and justifies the likelihood and impact of risks, as well as the overall risk ratings prescribed within each RMF should be retained.

#### 4.3 INTERNAL MONITORING AND REPORTING MECHANISMS

The program has established various oversight and reporting mechanisms to stay abreast of the clusters operations and identify and address issues related to performance reporting.

#### Adequacy of Oversight Mechanisms

While the clusters are responsible for program delivery, the program plays a critical monitoring and oversight role to ensure that funds are being spent in accordance with the contribution agreements. The program is primarily managed by three teams responsible for administrative and financial processes, performance and data management, and assessing compliance with the funding agreement.

Oversight on cluster activities is performed through various meetings such as:

- Cluster board of director meetings, where a Government of Canada ADM acts as an observer;
- Bi-weekly cluster check-ins and updates;
- ADM/DG monthly meetings with cluster CEOs;
- DM and cluster chair meetings; and
- Working group meetings; amongst others.

Additionally, the program's internal structure allows for liaisons between the internal teams and the clusters, and enables horizontal and vertical dialogue pertaining to policies, program operations and risks at the program level. Risks and issues are identified in the internal teams, based on their areas of responsibilities and are escalated and supported by the policy team, which liaises directly with representatives of the clusters.

In terms of oversight on funded projects, as per the contribution agreement, the clusters are responsible for project selection and establishment of an independent project selection committee. The project selection guidance documents were reviewed by the program to ensure each cluster's project selection process aligns with the contribution agreement and demonstrates how eligible projects will contribute to the achievement of program and departmental objectives. The program is informed of projects to be funded by the clusters through their annual corporate plans, which are submitted and reviewed by the program as per the contribution agreement.

#### Documentation of Oversight Mechanisms

Overall oversight activities are conducted through meetings held by the team with cluster representatives. While there is no reporting requirements for these meetings, the audit obtained and tested a sample of records of decisions and meeting minutes of the various oversight mechanisms within scope as they are used as an oversight tool for the program. It was found that oversight meetings were well documented, and records were maintained for meetings where key decisions were made.

The cluster board of directors meetings, where the ADM sits as an observer, are determined by each cluster's respective by-laws. NGen, Digital and Ocean clusters are required to have one board meeting annually, however, a special meeting can be requested at any point in time. PIC and Scale AI clusters are required to have at minimum 2 board meetings. It was found that all meetings occurred within their required frequencies with an observer present. Other cluster and program meetings such as, the DM and cluster chair meetings and ADM/DG-CEO meetings, also

occurred as required, with supporting documentation to corroborate occurrence and attendance.

Additionally, the program incorporates bi-weekly cluster meetings as informal calls and checkins to build relationship and rapport with the clusters. Information and updates from these checkins are summarised and communicated to the internal terms through the use of internal bi-weekly emails.

#### Performance Measurement

The program has implemented a Performance Measurement Framework (PMF) to measure the clusters achievements. The framework identifies the long term, immediate and short-term outcomes of the program as well as Key Performance Indicators (KPIs) to track achievement of these outcomes. The program also monitors the clusters achievements through:

- A multi-year economic impact study of the cluster projects (which includes annual interviews and surveys with project partners, as well as economic modelling);
- Letters of Agreement with Statistics Canada to provide economic data on cluster members, project participants; and
- Program success stories (which includes interviews with project partners).
- Annual reports

To monitor alignment of projects funded with the program objectives, project activity reports are submitted to the program by the clusters. The reports provide details on projects run by the ultimate recipients and the expected benefits to be obtained.

#### 4.4 DATA AND INFORMATION FOR OVERSIGHT

Processes have been established to assess the accuracy and completeness of data received from the clusters. There is an opportunity to improve the program mechanisms, used to report on the cluster's performance at the project level, to ensure completeness, accuracy and consistency of the structure of information provided.

The contribution agreements are used as the primary tool by the program to ensure compliance from the clusters with the program's objective. Each contribution agreement stipulates several reporting requirements and documents to be provided by the clusters to support oversight. Examples of these reporting requirements include an annual report, annual corporate plan, five-year cluster strategy, financial management framework, data strategy, IP strategy and membership list updates.

To ensure that these reporting requirements are met by the clusters and that the information provided is accurate and complete, the following mechanisms are used by the program:

- Master Reporting Checklists;
- Project Activity Reports; and
- Data Governance Working Group with clusters.

In addition to the above reporting mechanisms, the program must also ensure that there is sufficient oversight over eligible costs being claimed and demonstrate alignment with clusters' Financial Management Framework. The claims reconciliation process and third-party recipient audits conducted by external experts are mechanisms used to ensure appropriate claims are being made, and to recover non-eligible costs claimed by clusters.

#### Master Reporting Checklists

The Master Reporting Checklist is a tracking tool used by the program to record whether requirements stated in the contribution agreement are being met. It identifies reporting requirements and expected due dates and ensures that documents received from the clusters are complete. The checklist is updated yearly and closed once requirements are met. The checklist includes elements such as date of receipt of reports received, approval and review signatures from program management, and follow ups or notes to file, if applicable.

The audit team sampled and reviewed ten checklists, including two for each of the five clusters covering fiscal years 2020-21 and 2021-22. It was found that some of the checklists tested lacked information as prescribed by the process in place, such as date of receipt of documents, date of board approval (where required), date and signature of leads demonstrating review and approval of key contribution agreement reporting requirements. While these checklists are not critical for ensuring compliance with the contribution agreement, the program could be relying on inconsistent or inaccurate information to support oversight.

#### Project Activity Reports

Project Activity Reports are used to monitor the projects undertaken by the cluster's ultimate recipients. These reports allow the program to collect relevant data and project level information on projects administered by the ultimate recipients and includes information such as project cost, participant and/or partner information and expected benefits. Reports are prepared at project initiation and closing.

A sample of twenty-nine Project Activity Reports (PARs) were selected and tested by the audit team for completeness, and accuracy of information provided. From this sample, 17 PARs represented completed projects (also know as Close-out PARs). However, it was noted that some of the PARs selected for sampling were not consistently completed or contained limited supporting information on how the individual projects funded was aligned with program objectives. Without complete PARs, the program may be at risk of validating and being unable to attest to particular indicators in the performance measurement framework.

#### Recommendation #2 (Medium Risk)

The program should ensure that the tools used to monitor contribution agreement reporting requirements are reviewed for completeness and accuracy of data.

#### 4.5 ADVANCE AND RECONCILIATION PROCESS

There is a defined advance and reconciliation process which is applied consistently and is supported by documentation supporting key decisions and approvals.

Delivery of the program objectives is administered by non-repayable contributions to the clusters over multiple periods. This is done by providing an advance payment based on the clusters entitled amounts per the funding agreement. Subsequently, reconciliations of funds received and spent are completed by the clusters and submitted to the program for additional review. The program determines whether expenditures for the relevant period are eligible under the contribution agreement and monitors key program metrics.

#### Advances

Prior to April 2021, clusters were provided with funding through advances, for the fiscal year based on cashflow requirements as described in the contribution agreement and a periodic cash flow forecast. Advances occurred on a semi-annual basis, except for one of the clusters, which was advanced quarterly in response to risk mitigations put in place due to an increase in the cluster's risk rating. This was reverted back to semi-annual once remediations were put in place and after the risk re-assessment resulted in a low risk.

As of April 2021, the program modified its advance process where the clusters' annual corporate plans are used to determine the amount of funding the cluster plans on requesting from the program in the fiscal year, with the contingency that the requested amount does not exceed their fiscal profiles (as determined in their respective contribution agreements). Under this new process, advances are typically provided in four installments (¼ of the annual approved amount), where less frequent payments could be made dependent on cashflow needs and at the request of the cluster. Advances are tied directly to the cluster's cashflow requirements, and to access an advance clusters must submit an attestation that at least 90% of previous advance payments received from the program have been expended.

#### Reconciliations

As per the requirements of the contribution agreement, each cluster accounts for the use of previous advances by submitting a claim to reconcile the funding received from the program. This reconciliation is completed and submitted to the program for review on a semi-annual basis to ensure that expenses incurred with program funding are aligned with eligibility requirements per the signed contribution agreement.

Substantiated information, such as completed reconciliation forms and invoices, are required to be submitted 30 days following the end of the second and fourth quarter of every fiscal year and must include all eligible costs reconciled during the six-month period regardless of an advance being paid during the same timeframe.

A total of thirteen (13) advances and ten (10) reconciliations were sampled for audit testing. These sampled advances and reconciliation forms were found to be compliant with controls in place for verifying and reconciling claims submissions.

#### Oversight of Funds

The program monitors advance and reconciliation data via several tools, including the submitted claim forms, the claim verification tracker, and Corporate Management Information System (CMIS). As per the program's reconciliation process map, the claim verification tracker is updated and reviewed with each completed advance and reconciliation while ensuring it is aligned with other monitoring tools. The tracker is reviewed by the claim's verification officer and the claims manager to supplement high-level discussion with the Director General when considering matters affecting advance and reconciliation approval.

Cash reserve or advanced funding on hand at each year end is discussed with the clusters. A final reconciliation of the deferential between total advance over the total amount reconciled will take place once the program reaches the end of its lifecycle and any cash remaining on hand would be returned to ISED in accordance with the funding agreements. Under the new advance process, the Global Innovation Clusters advances new funding before reconciling prior advances. The new advance process expediated clusters' access to necessary funding to meet near term cash flow needs, ensured the program was advancing based on the most relevant information (board approved) and, ultimately, better positioned the clusters to achieve strategic objectives.

#### 4.6 CLAIMS ADMINISTRATION AND APPROVALS

The program has documented procedures in place to support sections 32, 34 and 33 of the Financial Administration Act (FAA). The advance and reconciliation processes are in compliance with the Financial Administration Act (FAA).

The nature and operating delivery of program initiatives requires sections 32, 34 and 33 of the *Financial Administration Act (FAA)* to be performed for funding advances. Consistent across all government, the program is subject to comply with sections 32, 34, and 33 of the FAA.

- Section 32: A delegation of authority is required to identify the appropriate fund and approve commitment to fund expenditure for the contract or other arrangement in question.
- Section 34: A delegation of authority is required to vouch and/or certify the receipt of goods supplied or services rendered.
- Section 33: A delegation of authority is required to certify payment for the goods received and/or services rendered.

The audit verified through testing that the Section 32 FAA was documented for each contribution agreement and, where increases to funding amounts were required, amendments to the original contribution agreements for the scope of the audit were signed by the appropriate authorities.

The audit team also verified the timing and whether delegated authorities approved the Section 34 FAA. It was found that all the advance and reconciliation claim forms issued to the clusters were approved by the Director General, who exercised their delegated authority.

The audit noted that the Section 33 FAA for the release of funds to clusters was approved by the Corporate Management Sector after ensuring that Section 34 and 32 FAA were signed by the appropriate authorities prior to the release of funds.

#### 4.7 TOOLS AND SUPPORT FOR PROGRAM LIFECYCLE

Tools, templates and other supports are documented and accessible to clusters to provide clarity on roles and responsibilities, program management, and project delivery.

Roles, and responsibilities are clearly defined and documented between the program and each cluster. Oversight and ongoing support is provided by the program to each cluster through biweekly meetings and monthly touchpoints, which provide value through the discussion of compliance activities, unresolved issues, and cluster strategy. Adequate clarifications are provided to the clusters through guidance documents and templates which guide the reporting performed by the clusters, their roles and required duties.

The program mitigates potential reporting issues through the provision of guidance documents, assigning staff as direct cluster liaisons, consulting clusters on reporting templates, and setting up of Q&A sessions for clarification purposes. Templates and guidance documents such as foreign cost justification template, PAR template, corporate plan guidance, master costing guidance document and annual report guidance, are distributed to provide further clarification and structure to the program reporting requirements.

#### 4.8 INFORMATION MANAGEMENT

Clusters create and adhere to data strategies in alignment with the requirements documented in the contribution agreements, while the program effectively leverages existing systems to support program activities. Claims are supported by key decision and approval documents maintained in centralized electronic files.

To support its activities, the program uses a number of information systems, including GC Docs for document storage, Blackberry Workspace to exchange documents for advance and reconciliations with clusters, SOPHIA for the housing and transfer of data for project related information, and CMIS, which is the departmental grants and contributions system, to log financial commitments, claims payments and repayment schedules.

The program maintains electronic files for each cluster, which are structured according to claim numbers. The files include dedicated folders for the advance and reconciliation requests, including approval forms, and notification letters. These files are maintained centrally on GC Docs. All claims tested were electronically accessible and followed the standard file structure, with key decision documents for each phase generally saved within the designated files. This central electronic storage of information across project files and program activities supported

key decision-making documents to be readily accessible. Access controls are documented for each of the various information management systems. These provide details on access roles and responsibilities, provisions and guidelines for access termination.

Furthermore, each cluster has developed and documented a data strategy outlining its approach to data management. The strategy includes coverage over the following data elements: governance, compliance with rules and regulations, security, integrity and confidentiality, accountability, leverage and re-use, literacy.

#### 4.9 USE OF OFFICIAL LANGUAGES AND REPRESENTATION

The clusters reporting requirements are in accordance with the Official Languages Act. Board parity in terms of gender ratio is in accordance with the contribution agreement requirement (50%).

The purpose of the Official Language Act is to ensure that Canadians have access to services in the official language of their choice. This was incorporated in the clusters' contribution agreements, which stipulates that the clusters must provide material communications to the public in both official languages, this includes all publicly available information and reporting requirements (annual corporate plans, annual reports and five-year strategy). Publicly available information and reports for the clusters (such as strategic plans, annual reports and annual corporate plans) are available on the cluster's respective websites in both official languages.

The clusters are to elect their preferred language of correspondence with ISED from both official languages. On that basis, the program has ensured to respect the decisions made by clusters and have effectively communicated with them in the preferred language of choice.. At the time of the audit, all Clusters had chosen to communicate in English. At the time of the audit, all Clusters had chosen to communicate in English.

As per the contribution agreements in place, each cluster's board of directors must comprise of no less than 50 percent women and must include representatives of the ecosystem and significant representation of Canada's multicultural diversity, including visible minorities and Indigenous peoples. It was found that all clusters meet board parity in terms of composition of females to male in accordance with the contribution agreement. Per the cluster's annual reports for Fiscal Year 2020-21, each of the five clusters have 50% of its board members female, in addition to members of leadership teams and key staff.

In order to ensure clusters compliance with the gender ratio and ensure balance is maintained, the program tracks this requirement through cluster annual reports and board meetings. Should changes impacting a cluster's board composition occur, it is addressed by a letter consisting of a plan established by the cluster to re-attain gender balance and approved by the program.

#### 4.10 MANAGEMENT RESPONSE AND ACTION PLAN

The findings and recommendations of this audit were presented to the Director General, and members of the senior management team. Management has agreed with the findings included in this report and will take action to address all recommendations by Q1 of FY 2023-24.

## 5.0 OVERALL CONCLUSION

Overall, as a relatively new program, the Global Innovation Clusters has established a strong foundation to support the renewal of the program, through its management control framework. This framework integrates governance, risk management, performance measurement and effective controls over financial management and program monitoring and reporting. This foundation can be further solidified by strengthening risk management, including information management practices, and enhancing the reporting and monitoring of the contribution agreement requirements.

### APPENDIX A: AUDIT CRITERIA

Audit of the Global Innovation Clusters			
Audit Criteria	Sub-Criteria		
Risk Management     1. A risk management framework has been established and is integrated with the oversight and administration of the program.	1.1 A risk management framework is in place and supports the identification, assessment, and mitigation of program risks.		
Oversight – Monitoring and Reporting			
<ol> <li>Program monitoring and reporting processes are established and operating effectively to measure the performance of program</li> </ol>	Internal monitoring and reporting processes are in place to review and assess the clusters' progress against program objectives and compliance to program terms and conditions, including governance requirements.		
objectives, and compliance to the program requirements.	2.2 The program receives complete, accurate, and timely data and information from the clusters to monitor and oversee the program and ensure contribution agreement requirements are being met.		
Program Processes and Controls			
3. Effective processes and controls are in place to support the administration of the program's objectives and	3.1 The design and operating effectiveness of the advance and reconciliation process supports oversight activities and ensures alignment with program requirements.		
achieve expected outcomes.	3.2 Payments made to the clusters are in compliance with Sections 32, 34 and 33 of the Financial Administration Act.		
	3.3 Tools and ongoing support are documented and accessible to clusters to provide clarity on program management, delivery throughout its lifecycle, and roles and responsibilities.		
	3.4 Information management controls are in place to ensure that data collected is managed, retained and safeguarded from internal and external threats.		
	3.5 The design and delivery of the program respects the obligations of the Government of Canada; as set out in the Official Languages Act and related Treasury Board policies, and efforts are made to support participation of underrepresented groups.		