Reports of the Auditor General of Canada
to the Parliament of Canada

Digital Validation of Identity to Access Services

Independent Auditor's Report | 2024

Office of the
Auditor General
of Canada

Bureau du
vérificateur général
du Canada

Performance audit reports

This report presents the results of a performance audit conducted by the Office of the Auditor General of Canada (OAG) under the authority of the *Auditor General Act*.

A performance audit is an independent, objective, and systematic assessment of how well government is managing its activities, responsibilities, and resources. Audit topics are selected on the basis of their significance. While the OAG may comment on policy implementation in a performance audit, it does not comment on the merits of a policy.

Performance audits are planned, performed, and reported in accordance with professional auditing standards and OAG policies. They are conducted by qualified auditors who

- establish audit objectives and criteria for the assessment of performance
- gather the evidence necessary to assess performance against the criteria
- report both positive and negative findings
- conclude against the established audit objectives
- make recommendations for improvement when there are significant differences between criteria and assessed performance

Performance audits contribute to a public service that is ethical and effective and a government that is accountable to Parliament and Canadians.

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At a Glance

💬 Overall message

The Treasury Board of Canada Secretariat has made little progress in leading the federal government's work towards developing a national approach for validating a person's identity digitally to access services from all levels of government and elsewhere in the public and private sectors. The secretariat delayed this work because of a lack of funding to move it forward. However, funding was secured to procure a much-needed component of a national approach—a federal sign-in system that would provide 1 entry point for validating a person's identity no matter what federal government service they are accessing. The secretariat prioritized working with Employment and Social Development Canada and Shared Services Canada to procure a new system that would replace almost 90 separate sign-in portals managed by individual federal departments.

A national approach must, however, go beyond a new federal sign-in system and requires several other important components such as collaboration between all levels of government and key partners supported by legislation, regulations, standards, and technology. Some provinces have already begun implementing their own approaches to validating a person's identity digitally for accessing online services. This means that digital access to services across the country is evolving without a national approach to ensure the security, reliability, and interoperability of systems involved in validating digital identity. A national approach is important to ensure seamless and secure access to online services in the public and private sectors for Canadians across the country.

As we concluded our audit, it was unclear whether the development of a national approach for validating a person's identity digitally would proceed and whether the transition to a new federal sign-in system would be funded without presenting an unmanageable financial burden on departments. Our 2023 audit report on modernizing information technology systems found that most departments and agencies do not have sufficient funding to meet their modernization needs. Funding has been secured for procuring a new federal single sign-in system, but the Treasury Board of Canada Secretariat, Employment and Social Development Canada, and Shared Services Canada do not yet know what it will cost for departments to make that transition or how those costs will be funded.

Key facts and findings

- The Treasury Board of Canada Secretariat did not receive funding to develop a national approach. However, Budget 2024 provided $25.1 million over 5 years to Employment and Social Development Canada to establish a modern, single sign-in portal for federal government services.
- Between 2010 and 2022, Canada's global ranking in the United Nations E-Government Development Index fell from 3rd to 32nd. Among the Group of Seven (G7) countries, Canada's ranking fell from 2nd to 6th, which indicates that Canada is not progressing as rapidly in e-government development as other G7 countries.

See **Recommendations and Responses** at the end of this report.

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Overview

Digital validation of identity to access services

9.1   This audit looked at what the federal government is doing to develop a national approach to the digital validation of identity for Canadians to access services across the country, from all levels of government and elsewhere in the public and private sectors. We refer to this as "**digital identity**"[1] throughout the report.

9.2   In December 2019, Innovation, Science and Economic Development Canada received a mandate to advance Canada's Digital Charter. As part of this mandate, Innovation, Science and Economic Development Canada began working with national and international partners to develop digital identity standards, with a business focus. In December 2021, the Treasury Board of Canada Secretariat received a mandate to lead the work of the federal government in "working towards a common and secure approach for a trusted digital identity platform" to support seamless and secure access to online services for Canadians across the country. In November 2023, Employment and Social Development Canada received a mandate to work with the Treasury Board of Canada Secretariat to create this platform.

9.3   In February 2023, the Treasury Board of Canada Secretariat formed a working group to develop a national approach to digital identity. A national approach to digital identity should describe what federal, provincial, territorial, and municipal governments as well as international and industry partners need to do to ensure that digital identity validation systems in the public and private sectors can interoperate safely, securely, and reliably to support seamless and secure access to online services for Canadians across the country. The approach would need to protect the privacy of Canadians and be enabled by supporting legislation, regulations, standards, technology, and collaboration between interested parties.

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1   **Digital identity**—Electronically stored information (also called "credentials") that you can use to prove your identity digitally so that you can access services online. Information includes passports, driver's licences, health cards, professional certifications, and diplomas.

For example, a worker requiring Employment Insurance benefits could apply by selecting the required information from their digital wallet, such as a driver's licence and a record of employment, and sharing that information with the appropriate service provider. The data would be protected in accordance with the *Privacy Act*. The worker could do this securely anytime, from anywhere, using any device they choose.

Source: Adapted from the Canada.ca website

9.4   Specifically, our audit looked at whether the federal government was planning a way to provide Canadians with a seamless and secure approach to digitally validate their identities so they can access online services across the public and private sectors.

Who we audited

9.5   We audited 4 entities:

- **Treasury Board of Canada Secretariat.** The secretariat is responsible for leading the work of the federal government towards a common and secure approach for a trusted digital identity platform to support seamless and secure access to online services for Canadians across the country.

- **Shared Services Canada.** The department is the contract authority for the procurement of the federal single sign-in system for accessing federal government services.

- **Employment and Social Development Canada.** The department is responsible for working with the Treasury Board of Canada Secretariat and Shared Services Canada to procure and implement a federal single sign-in system and is responsible for managing the implementation of the system across the federal government.

- **Innovation, Science and Economic Development Canada.** The department transferred responsibility for its digital credentials initiatives to the Treasury Board of Canada Secretariat in August 2022 and is responsible for supporting the work of the secretariat where digital credentials for business are concerned.

Why it matters

9.6   Canadians increasingly rely on digital technology to connect with each other, to work, and to access services. They expect to be able to digitally validate their identity to access government services and other services across the economy, trusting that their privacy is safe and that their personal information is handled responsibly.

9.7   More details about the audit objective, scope, approach, and criteria are in **About the Audit** at the end of this report.

Conclusion

9.8   We concluded that the Treasury Board of Canada Secretariat, with the support of Shared Services Canada, Employment and Social Development Canada, and Innovation, Science and Economic Development Canada and in consultation with other departments, did not plan a national approach to digital identity. This was because the secretariat lacked funding to pursue this initiative. The secretariat has

prioritized the purchase of a modern federal single sign-in system to replace almost 90 separate sign-in systems across government. The new single sign-in system is intended to be able to validate the identity of Canadians when they access online federal services.

Findings and Recommendations

A national approach to digital validation of identity was delayed by lack of funding

Facts and findings

9.9   In December 2021, the Treasury Board of Canada Secretariat received a mandate to lead the work towards a common and secure digital identity platform. In early 2023, the secretariat requested funding to

- develop a national approach to digital identity

- implement a modern, single sign-in system to digitally validate the identity of Canadians accessing online services from the federal government

- establish a program office to lead and oversee this work

The secretariat did not receive funding in Budget 2023 or Budget 2024 for the national approach or for establishing a digital identity program office. However, Budget 2024 provided $25.1 million to Employment and Social Development Canada to establish a modern, single sign-in system for federal government services.

9.10   In February 2023, the Treasury Board of Canada Secretariat formed a working group to develop a national approach to digital identity through consultation with interested parties with the federal, provincial, and territorial governments as well as with industry. Members of the working group included Employment and Social Development Canada and Innovation, Science and Economic Development Canada. The working group met with a number of federal parties in February and March 2023 and then stopped meeting. The working group did not develop a national approach. The secretariat told us that without funding, it was unable to devote resources to conducting the widespread consultations and engagement needed to develop the national approach and therefore delayed that work until it can secure funding. The Treasury Board of Canada Secretariat estimates indicate that it could take years to establish a national approach.

9.11   After the period under audit, the Treasury Board of Canada Secretariat and Employment and Social Development Canada signed a memorandum of understanding giving Employment and Social Development Canada the responsibility for leading the federal government's work on a national approach to digital identity.

9.12   Putting in place a national approach to digital identity in Canada requires federal leadership to coordinate, facilitate, and oversee what will be a complex, multi-year effort involving many interested parties and interrelated activities. A national approach is important to ensure that individuals have the option to use their digital identity to access government and other services across Canada and at international borders now and in the future.

9.13   Federal departments, provinces, and territories are moving forward with their own identity and access management programs at different rates. Residents of Alberta and British Columbia can access certain provincial online services by signing in with a verified provincial account. They can also sign into these accounts to validate their identity in order to access federal online services from the Canada Revenue Agency and Service Canada. The federal government will need to make sure that its new federal single sign-in system can interoperate with the various systems being developed by provinces and territories. Senior federal government officials told us they recognize that implementing the new single sign-in system prior to the development of the national approach to digital identity poses a risk to achieving interoperability between systems across jurisdictions. They also acknowledged that the longer it takes, the more technically difficult and costly it will be.

9.14   Internationally, countries are at varying stages of implementing digital identity. Exhibit 9.1 compares Canada with other Group of Seven (G7) countries on legislation related to digital identity and a single sign-in system. Outside the G7, Australia launched a digital services system (myGov) in 2013 to provide its citizens with secure online access to Australian government services, including the services of 1 Australian state. The project took 4 years with a total cost of AU$86.7 million (approximately CAN$77.7 million). The Australian National Audit Office's 2017 audit report found that myGov had an effective implementation, exceeded the expected uptake, and improved service delivery. The audit also found that the project almost tripled in cost from the initial estimate of AU$29.7 million (approximately CAN$26.4 million). Australia recently passed legislation for digital identification that will take effect on 1 December 2024.

Exhibit 9.1—Comparison of Group of Seven (G7) countries in establishing digital identity legislation and a single sign-in system

G7 country	Legislation related to digital identity	Single sign-in system
Canada	No	No
France	Yes	Yes
Germany	Yes	Yes
Italy	Yes	Yes
Japan	Yes	Yes
United Kingdom	In progress	Yes
United States	No	Yes

Source: Based on information from the UN E-Government Survey © 2022 by United Nations, and information from government websites available at the time of the audit

9.15 In 2010, Canada ranked 3rd globally in the United Nations **E-Government Development Index**,[2] which includes digital identity as a component. In 2022, Canada's ranking fell to 32nd. This also reflects a drop in Canada's index ranking among G7 countries from 2nd in 2010 to 6th in 2022. This indicates that Canada is not progressing as rapidly in e-government development as other G7 countries.

Recommendation

9.16 Employment and Social Development Canada should lead the work of the federal government to plan and develop a national approach to digitally validating identity to support seamless and secure access to online services for Canadians across jurisdictions. In doing so, the department should

- consult with relevant parties to determine the resources it needs, including appropriate funding

- determine how to secure the funding and then proceed to do so

- ensure that the federal government single sign-in system will interoperate with other systems across jurisdictions

Employment and Social Development Canada's response. *Agreed.*

See **Recommendations and Responses** at the end of this report for detailed responses.

2 **E-Government Development Index (EGDI)**—A benchmark used by the United Nations to determine a numerical ranking of e-government development of United Nations member states. Every 2 years, the United Nations publishes EGDI rankings as part of its E-Government Survey. At the time of our audit, the most recently published survey and rankings were from 2022.

Cost of implementing and operating the new federal single sign-in system was not yet known

Facts and findings

9.17   Given the lack of funding for a national approach to digital identity, the Treasury Board of Canada Secretariat had prioritized working with Employment and Social Development Canada and Shared Services Canada to procure a modern, single sign-in system for the federal government. The new system aims to replace almost 90 separate sign-in portals managed by individual federal departments. The system is intended to digitally validate the identity of Canadians when they sign in to access federal government services online. The secretariat considered the procurement of a new sign-in system to be an immediate priority for 2 key reasons:

- First, there were security vulnerabilities in existing sign-in systems (which have been temporarily addressed). In July 2020, a cyber attack targeted the Canada Revenue Agency and Employment and Social Development Canada. In a report released on 15 February 2024, the Office of the Privacy Commissioner of Canada concluded that the Canada Revenue Agency and Employment and Social Development Canada had underestimated the level of identity validation required for their online services. According to the report, the breach had "compromised the sensitive financial, banking, and employment information of tens of thousands of Canadians, leading to numerous cases of fraud and identity theft."

- Second, Employment and Social Development Canada requires a modern, secure sign-in system to support the planned 2025 release of Employment Insurance on the new Benefits Delivery Modernization system.

9.18   Budget 2024 provided Employment and Social Development Canada with $25.1 million over 5 years, starting in the 2024–25 fiscal year, to establish a modern, single sign-in system for federal government services. On 25 April 2024, Shared Services Canada issued a request for proposal to procure the system. The closing date for bids was 3 June 2024.

9.19   Shared Services Canada has a cost-recovery model in place with departments to use the existing services of GCKey and Interac® sign-in for their departmental portals and plans to recover costs from departments when they transition to using the new federal single sign-in system as well. The Treasury Board of Canada Secretariat and Employment and Social Development Canada expect the old and new systems to operate concurrently for up to 3 years as departments transition to the new system.

9.20   While there is a plan to recover costs from departments for using the new system, Employment and Social Development Canada, the Treasury Board of Canada Secretariat, and Shared Services Canada had not yet fully determined the transitional and ongoing costs for departments and how those costs would be funded. We recognize that Shared Services Canada needs to procure the new system before they can determine the cost to departments for concurrent use of the systems and any increase to departments in ongoing usage costs between the old and new systems. It is important to ensure that this modernization does not impose an unmanageable financial burden on departments. As highlighted in our Report 7—Modernizing Information Technology Systems, tabled in October 2023, most departments and agencies do not have sufficient funding to meet their modernization needs.

Recommendation

9.21   Employment and Social Development Canada, with the support of the Treasury Board of Canada Secretariat and Shared Services Canada, should

- determine what it will cost for departments to transition to and use the new federal single sign-in system

- in consultation with these departments, evaluate whether these costs should be funded through revised or new funding mechanisms designed to help departments and agencies modernize their information systems as recommended in our 2023 Report 7—Modernizing Information Technology Systems

Employment and Social Development Canada's response. *Agreed.*

See **Recommendations and Responses** at the end of this report for detailed responses.

About the Audit

This independent assurance report was prepared by the Office of the Auditor General of Canada on the planning of a national approach to digital identity in its early stages. Our responsibility was to provide objective information, advice, and assurance to assist Parliament in its scrutiny of the government's management of resources and programs. We were also responsible for concluding on whether the entities complied in all significant respects with the applicable criteria.

All work in this audit was performed to a reasonable level of assurance in accordance with the Canadian Standard on Assurance Engagements (CSAE) 3001—Direct Engagements, set out by the Chartered Professional Accountants of Canada (CPA Canada) in the CPA Canada Handbook—Assurance.

The Office of the Auditor General of Canada applies the Canadian Standard on Quality Management 1—Quality Management for Firms That Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements. This standard requires our office to design, implement, and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

In conducting the audit work, we complied with the independence and other ethical requirements of the relevant rules of professional conduct applicable to the practice of public accounting in Canada, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

In accordance with our regular audit process, we obtained the following from entity management:

- confirmation of management's responsibility for the subject under audit

- acknowledgement of the suitability of the criteria used in the audit

- confirmation that all known information that has been requested, or that could affect the findings or audit conclusion, has been provided

- confirmation that the audit report is factually accurate

Audit objective

The objective of this audit was to determine whether the Treasury Board of Canada Secretariat, with the support of Shared Services Canada, Employment and Social Development Canada, and Innovation, Science and Economic Development Canada and in consultation with other departments, was effectively planning a national approach to digital identity that would provide Canadians with digital validation of their identity to seamlessly and securely access government and other services.

Scope and approach

The audit focused on what the Treasury Board of Canada Secretariat was doing to plan a national approach to digital identity for Canadians to access government and other services, including taking over responsibility for related initiatives from Innovation, Science and Economic Development Canada. We sought to understand the status of this work and how the secretariat's priorities had evolved to focus on procuring a single sign-in system with the support of Employment and Social Development Canada and Shared Services Canada.

Our audit work included

- reviewing plans, strategies, communications, analyses, policies, and guidelines
- interviewing officials from the Treasury Board of Canada Secretariat, Employment and Social Development Canada, Innovation, Science and Economic Development Canada, and Shared Services Canada
- consulting the Office of the Privacy Commissioner of Canada about its work and perspective on digital identity

The audit did not examine

- digital identity for government employees or for businesses
- supporting technologies for digital identity systems—for example, blockchain
- procurement processes

The audit did not follow up on findings and recommendations from the 2023 Reports of the Auditor General of Canada to the Parliament of Canada, Report 7—Modernizing Information Technology Systems.

Criteria

We used the following criteria to conclude against our audit objective.

Criteria	Sources
The Treasury Board of Canada Secretariat, in consultation with departments, has developed a strategy to develop a digital identity ecosystem and enable a national approach to digital identity, including how the secretariat will address the following key areas of risk to help ensure successful implementation: • governance • roles and responsibilities • funding • timeline and roadmap • stakeholder engagement • information technology • cybersecurity • equitable access and accessibility • legislative and regulatory framework • trust and interoperability • change management and communication • results measurement and reporting	• *Privacy Act* • *Accessible Canada Act* • Policy on Service and Digital, Treasury Board • Directive on the Management of Projects and Programmes, Treasury Board • Government of Canada Digital Standards: Playbook, Treasury Board of Canada Secretariat • Policy on Government Security, Treasury Board, 2019 • Directive on Security Management, Treasury Board • Policy on Privacy Protection, Treasury Board, 2022 • Directive on Identity Management, Treasury Board, 2019 • Digital Operations Strategic Plan: 2018–2022, Treasury Board of Canada Secretariat • Digital Operations Strategic Plan: 2021–2024, Treasury Board of Canada Secretariat • Policy on the Planning and Management of Investments, Treasury Board • Policy on Results, Treasury Board • Guide to Costing, Treasury Board of Canada Secretariat • Government of Canada Strategic Plan for Information Management and Information Technology 2017 to 2021, Treasury Board of Canada Secretariat • Government of Canada's Digital Ambition • Canada's Digital Charter, Innovation, Science and Economic Development Canada • COBIT 2019 Framework (Governance and Management Objectives), ISACA • Mandate letters • Departmental plans • Best Practices in Change Management, Prosci • Recommendation of the Council on the Governance of Digital Identity, Organisation for Economic Co-operation and Development

Period covered by the audit

The audit covered the period from 1 January 2017 to 31 May 2024. This is the period to which the audit conclusion applies.

Date of the report

We obtained sufficient and appropriate audit evidence on which to base our conclusion on 26 September 2024, in Ottawa, Canada.

Audit team

This audit was completed by a multidisciplinary team from across the Office of the Auditor General of Canada led by Jean Goulet, Principal. The principal has overall responsibility for audit quality, including conducting the audit in accordance with professional standards, applicable legal and regulatory requirements, and the office's policies and system of quality management.

Recommendations and Responses

Responses appear as they were received by the Office of the Auditor General of Canada.

In the following table, the paragraph number preceding the recommendation indicates the location of the recommendation in the report.

Recommendation	Response
9.16 Employment and Social Development Canada should lead the work of the federal government to plan and develop a national approach to digitally validating identity to support seamless and secure access to online services for Canadians across jurisdictions. In doing so, the department should • consult with relevant parties to determine the resources it needs, including appropriate funding • determine how to secure the funding and then proceed to do so • ensure that the federal government single sign-in system will interoperate with other systems across jurisdictions	**Employment and Social Development Canada's response.** Agreed. Employment and Social Development Canada (ESDC), through the Canadian Digital Service (CDS) has the mandate for implementing a enterprise Digital Credentials Program including a single sign-in service to obtain Government of Canada (GC) services. ESDC/CDS is prioritizing work on a federal single sign-in service, while undertaking research and continuing to work with other departments and Canadian jurisdictions to better inform a national approach and promote interoperability. ESDC/CDS will work collaboratively across the Country to implement a national approach to standards to digitally validate identity which will enable eventual cross-jurisdictional interoperability, ESDC/CDS and the Treasury Board of Canada Secretariat will continue to consult and engage with relevant parties at cross jurisdictional tables to determine what potential policy and legislative amendments that would be required to implement such an approach. ESDC/CDS also commits to working with central agency partners to explore appropriate funding/resourcing.

Recommendation	Response
9.21 Employment and Social Development Canada, with the support of the Treasury Board of Canada Secretariat and Shared Services Canada, should • determine what it will cost for departments to transition to and use the new federal single sign-in system • in consultation with these departments, evaluate whether these costs should be funded through revised or new funding mechanisms designed to help departments and agencies modernize their information systems as recommended in our 2023 Report 7—Modernizing Information Technology Systems	**Employment and Social Development Canada's response.** Agreed. The new federal single sign in platform is based on a commercially available platform and migration support was incorporated into the procurement To provide accurate cost analysis, Employment and Social Development Canada (ESDC) / the Canadian Digital Service (CDS) will work with departments through pilots and onboarding early adopters to analyze the needs and costs associated with onboarding departments and business lines of various sizes and levels of complexity. In addition, to ensure a realistic understanding of the long-term costs of operating this enterprise service, ESDC/CDS will monitor and analyze actual costs over an extended period. ESDC/CDS will work with Shared Services Canada and the Treasury Board of Canada Secretariat to engage central agencies to explore appropriate funding models. This will take into consideration the recommendation 7.52 of the Fall 2023 audit "Modernizing Information Technology Systems," specifically as it relates to funding models which "will include centralized control and management of modernization investment funding."