Government of Canada | Gouvernement du Canada

Directive on Automated Decision-Making

1. Effective date

1.1   This directive takes effect on April 1, 2019, with compliance required by no later than April 1, 2020.

1.2   This directive applies to all automated decision systems developed or procured after April 1, 2020.

    1.2.1   Existing automated decision systems developed or procured prior to June 24, 2025, will have until June 24, 2026 to comply with the new or updated requirements.

    1.2.2   Agents of Parliament will have until June 24, 2026, to comply with the requirements.

1.3   This directive will be reviewed every two years, and as determined by the Chief Information Officer of Canada.

2. Authorities

2.1   This directive is issued pursuant to the same authority indicated in section 2 of the *Policy on Service and Digital*.

3. Definitions

3.1   Definitions to be used in the interpretation of this directive are listed in Appendix A.

4. Objectives and expected results

4.1   The objective of this directive is to ensure that automated decision systems are used in a manner that reduces risks to clients, departments and Canadian society, and leads to more efficient, accurate, consistent and interpretable decisions made pursuant to Canadian law.

4.2   The expected results of this directive as it applies to automated decision systems are as follows:

4.2.1   Decisions made by departments are data-driven and responsible, and comply with procedural fairness and due process requirements.

4.2.2   Impacts to administrative decisions are assessed and negative outcomes are reduced.

4.2.3   Data and information on the use of automated decision systems in departments are made available to the public, while protecting privacy, security and intellectual property.

5. Scope

5.1   This directive applies to any automated decision system in production used to make an administrative decision or a related assessment about a client.

5.2   This directive excludes automated decision systems used solely for research and experimentation purposes, and those operating in test environments.

6. Requirements

The assistant deputy minister responsible for the program using the automated decision system, or any other senior official named by the deputy head, is responsible for:

6.1 Algorithmic impact assessment

6.1.1   Completing, approving and publishing the final results of an <u>algorithmic impact assessment</u> in an accessible format on the <u>Open Government Portal</u> prior to the production of any automated decision system.

6.1.2   Applying the relevant requirements prescribed in Appendix C as determined by the algorithmic impact assessment.

6.1.3   Reviewing, approving, and updating the published algorithmic impact assessment on a scheduled basis, including when the functionality or scope of the automated decision system changes.

6.2 Transparency

Providing notice before decisions

6.2.1   Providing notice through all service delivery channels in use that the decision will be made or assisted by an automated decision system, as prescribed in Appendix C.

6.2.2   Providing notices prominently and in plain language.

      6.2.2.1   Providing notices pursuant to the <u>Canada.ca Content Style Guide</u>.

Providing explanations after decisions

6.2.3   Providing a meaningful explanation to clients of how and why the decision was made, as prescribed in Appendix C.

Access to components

6.2.4   Determining the appropriate licence for software components, including consideration of open source software.

6.2.5   Obtaining and safeguarding all released versions of software components used for automated decision systems.

6.2.6   If using a proprietary licence, ensuring that:

      6.2.6.1   The department responsible for the automated decision system retains the right to access, test and monitor the automated decision system, including all released versions of proprietary software components, in case it is necessary for a specific audit, investigation, inspection, examination, enforcement action, or judicial proceeding, subject to safeguards against unauthorized disclosure.

6.2.6.2   As part of this access, the department responsible for the automated decision system retains the right to authorize external parties to review, test, monitor, and audit these components as necessary.

Documenting decisions

6.2.7   Documenting the decisions and assessments made or assisted by automated decision systems in accordance with the _Directive on Service and Digital_, and in support of the testing (6.3.1), monitoring (6.3.2), data governance (6.3.6) and reporting requirements (6.5.1 and 6.5.2).

6.3 Quality assurance

Testing and monitoring outcomes

6.3.1   Before an automated decision system is in production, testing the data, information, and underlying model for accuracy, unintended biases and all factors that may unintentionally or unfairly impact the outcomes or violate human rights and freedoms.

6.3.2   Monitoring the outcomes of the automated decision system to safeguard against unintentional or unfair outcomes and to verify compliance with human rights obligations, departmental and program legislation, and this directive, on a scheduled basis.

6.3.3   Ensuring that testing and monitoring assesses human rights and is consistent with applicable legislation such as the _Canadian Charter of Rights and Freedoms_, _Canadian Human Rights Act_, and the _United Nations Declaration on the Rights of Indigenous Peoples Act_.

6.3.4   Documenting client feedback, unexpected impacts, human overrides of the decision or assessment made by the system and other system failures as appropriate.

6.3.4.1   Using findings from outcome monitoring and documented feedback, unexpected impacts and human overrides to identify issues and take corrective actions.

Data quality

6.3.5   Validating that the data used to train the automated decision system and the data input into the system are relevant, accurate, up-to-date, and in accordance with the _Policy on Service and Digital_ and the _Privacy Act_.

Data governance

6.3.6   Establishing measures to ensure that data used and produced by the automated decision system are traceable, protected and accessed appropriately, and lawfully collected, used, retained, disclosed and disposed of in accordance with the _Directive on Service and Digital_, _Directive on Privacy Practices_, and _Directive on Security Management_.

Peer review

6.3.7   Consulting the appropriate qualified experts to review the automated decision system, algorithmic impact assessment and supporting documentation, and publishing the complete review or a plain language summary prior to the automated decision system's production, as prescribed in Appendix C.

Gender-based Analysis Plus

6.3.8   Completing a Gender-based Analysis Plus during the development or modification of the automated decision system, as prescribed in Appendix C.

Employee training

6.3.9   Providing training to each employee involved in any aspect of the development, use or management of automated decision systems, as prescribed in Appendix C.

Security

6.3.10   Conducting risk assessments during the development and maintenance of the automated decision system and implementing appropriate information management and information technology security protections, in accordance with the _Policy on Government Security_ and the _Policy on Service and Digital_.

6.3.11   Implementing measures to secure data and model integrity to prevent tampering and unauthorized modifications, ensuring alignment with Government of Canada guidance, standards, and industry best practices, as prescribed by Treasury Board of Canada Secretariat.

Legal

6.3.12   Consulting with the department's legal services from the concept stage of an automation project to ensure that the use of the automated decision system is compliant with applicable legal requirements.

Ensuring human involvement

6.3.13   Ensuring that the automated decision system allows for human involvement, as prescribed in Appendix C.

6.3.14   Obtaining the appropriate level of approvals prior to the production of an automated decision system, as prescribed in Appendix C.

6.4 Recourse

6.4.1   Informing clients of recourse options to challenge the administrative decision.

6.4.1.1   Ensuring that recourse options are timely, effective, and easy to access.

6.5 Reporting

6.5.1   Publishing information on the effectiveness and efficiency of the automated decision system in meeting program objectives on the Open Government Portal.

6.5.2   Publishing information on the Open Government Portal on how the use of the automated decision system is fair and transparent and does not violate human rights and freedoms.

7. Roles and responsibilities of Treasury Board of Canada Secretariat

The Treasury Board of Canada Secretariat is responsible for:

7.1   Providing government-wide guidance on the use of automated decision systems.

7.2   Developing and maintaining the Algorithmic Impact Assessment tool and any supporting documentation.

7.3   Communicating and engaging government-wide and with partners in other jurisdictions and sectors to develop common strategies, approaches, and processes to support the responsible use of automated decision systems.

7.4   Raising with the relevant deputy head as appropriate any compliance issues that arise with this directive.

7.5   Supporting policy implementation by working with departments, as appropriate, to ensure that automated decision systems are fair, effective and transparent.

8. Application

8.1   This directive applies to all institutions subject to the _Policy on Service and Digital_.

8.2   Other departments or separate agencies that are not subject to the _Policy on Service and Digital_ are encouraged to meet the requirements of this directive as good practice.

8.3   **Agents of Parliament**

8.3.1   The following organizations are considered agents of Parliament for the purposes of the directive:

- Office of the Auditor General of Canada
- Office of the Chief Electoral Officer
- Office of the Commissioner of Lobbying of Canada
- Office of the Commissioner of Official Languages
- Office of the Information Commissioner of Canada
- Office of the Privacy Commissioner of Canada
- Office of the Public Sector Integrity Commissioner of Canada

8.3.2   The heads of agents of Parliaments are solely responsible for monitoring and ensuring compliance with this directive within their organizations, as well as for responding to cases of non-compliance in accordance with any Treasury Board instruments that address the management of compliance.

8.3.3   The subsections 6.2.2.1 and 7.4 do not apply to agents of Parliament.

8.3.4   Agents of Parliament are not required to publish the algorithmic impact assessment (6.1.1) or reporting information on the Open Government Portal (6.5.1 and 6.5.2).

8.3.5   The heads of agents of Parliaments are responsible for approval of level 4 systems to operate (6.3.14, Appendix C).

9. References

9.1 Legislation

- *Financial Administration Act*
- *Access to Information Act*
- *Canadian Charter of Rights and Freedoms*
- *Canadian Human Rights Act*
- *United Nations Declaration on the Rights of Indigenous Peoples Act*
- *Privacy Act*
- *Security of Information Act*
- *Accessible Canada Act*

9.2 Related policy instruments

- *Policy on Access to Information*
- *Policy on Service and Digital*
- *Policy on Government Security*
- *Policy on Privacy Protection*
- *Policy on People Management*
- *Directive on Open Government*
- *Directive on Security Screening*
- *Directive on Security Management*
- *Directive on Service and Digital*
- *Directive on Privacy Practices*
- *Values and Ethics Code for the Public Service*

10. Enquiries

10.1   For interpretation of any aspect of this directive, contact Treasury Board of Canada Secretariat Public Enquiries.

10.2   Individuals from departments may contact ai-ia@tbs-sct.gc.ca for any questions regarding this directive, including the Algorithmic Impact Assessment tool.

Appendix A - Definitions

administrative decision

Any decision that is made by an authorized official of a department as identified in section 8 of this directive pursuant to powers conferred by an Act of Parliament or an order made pursuant to a prerogative of the Crown that affects legal rights, privileges or interests.

algorithmic impact assessment

A framework to help departments better understand and reduce the risks associated with automated decision systems and to provide the appropriate requirements that best match the type of system being designed.

automated decision system

Any technology that either assists or replaces the judgment of human decision makers. These systems draw from fields like statistics, linguistics and computer science, and use techniques such as rules-based systems, regression, predictive analytics, machine learning, deep learning, and neural networks.

human rights

The rights to which persons are inherently entitled because they are human beings (Source). Human rights are protected in the *Canadian Charter of Rights and Freedoms*, *Canadian Human Rights Act*, and the *United Nations Declaration on the Rights of Indigenous Peoples Act*.

production

An automated decision system is in production when it is in use and has impacts on real clients. This can include when it is in beta or user testing and producing outputs that impact clients.

proprietary

Refers to systems, algorithms or software owned by an entity, such as a company or government. These systems are often closed source, meaning the source code is not publicly available.

test environment

An environment containing hardware, instrumentation, simulators, software tools, and other support elements needed to conduct a test. A system in a test environment may mimic a production environment but does not impact real clients. Test environments may include exploration zones and sandboxes.

Appendix B - Impact Assessment Levels

Level	Description
I (1)	The context in which the system is operating likely has low levels of risk associated with it. This may be because of: • the identity factors of the clients that may be impacted • the line of business and the decision that the system is supporting • the type of technology being used The decision will likely have little to no, easily reversible, and brief impacts on some of: • the rights of individuals or communities • the equality, dignity, privacy, and autonomy of individuals • the health or well-being of individuals or communities • the economic interests of individuals, entities, or communities • the ongoing sustainability of an ecosystem The data used by the system likely presents low levels of risk. This may be because of: • the sensitivity of the data (such as the use of non-personal or unclassified information) • the use of structured data • the data collection approach
II (2)	The context in which the system is operating likely has moderate levels of risk associated with it. This may be because of: • the identity factors of the clients that may be impacted • the line of business and the decision that the system is supporting • the type of technology being used The decision will likely have moderate, likely reversible and short-term impacts on some or all of : • the rights of individuals or communities • the equality, dignity, privacy, and autonomy of individuals • the health or well-being of individuals or communities • the economic interests of individuals, entities, or communities • the ongoing sustainability of an ecosystem The data used by the system likely presents moderate levels of risk. This may be because of: • the sensitivity of the data (such as the use of personal, non-personal, unclassified or protected information) • the use of structured or unstructured data • the data collection approach

Level	Description
III (3)	The context in which the system is operating likely has high levels of risk associated with it. This may be because of: • the identity factors of the clients that may be impacted • the line of business and the decision that the system is supporting • the type of technology being used The decision will likely have high, difficult to reverse and potentially ongoing impacts on some or all of : • the rights of individuals or communities • the equality, dignity, privacy, and autonomy of individuals • the health or well-being of individuals or communities • the economic interests of individuals, entities, or communities • the ongoing sustainability of an ecosystem The data used by the system likely presents high levels of risk. This may be because of: • the sensitivity of the data (such as the use of personal or protected information) • the use of unstructured data • the data collection approach
IV (4)	The context in which the system is operating likely has very high levels of risk associated with it. This may be because of: • the identity factors of the clients that will be impacted • the line of business and the decision that the system is supporting • the type of technology being used The decision will likely have very high, irreversible and perpetual impacts on some or all of: • the rights of individuals or communities • the equality, dignity, privacy, and autonomy of individuals • the health or well-being of individuals or communities • the economic interests of individuals, entities, or communities • the ongoing sustainability of an ecosystem The data used by the system likely presents very high levels of risk. This may be because of: • the sensitivity of the data (such as the use of personal, protected, or classified information) • the use of unstructured or incomplete data • the data collection approach

Appendix C - Impact Level Requirements

Requirement	Level I	Level II	Level III	Level IV
Notice (sections 6.2.1–6.2.2)	Plain language notice posted through all service delivery channels in use (Internet, in person, mail or telephone).	Same as level I	Plain language notice posted through all service delivery channels in use (Internet, in person, mail or telephone). In addition, the notice must direct clients to the published explanation required under Explanation level I.	Same as level III

Requirement	Level I	Level II	Level III	Level IV
Explanation (section 6.2.3)	In addition to any applicable legal requirement, ensure that a meaningful explanation is published on how the system works in general. The explanation must be in plain language and include information about: • the role of the system in the decision-making process • input data, its source and method of collection • the criteria used to evaluate input data and the operations applied to process it • results of any reviews or audits • the output produced by the automated decision system and any relevant information needed to interpret it in the context of the administrative decision	The explanation from level I is published. In addition, a more detailed, meaningful, plain language, explanation is provided to the client with any decision that results in the denial of a benefit or service, or involves a regulatory action. This explanation must inform the client of the reason or justification of the administrative decision. This involves a clear and client-focused description of how the automated decision system came to the output it did, including: • the principal factors that led to it, such as, where appropriate, a description of the decision tree, scoring or weights of certain factors, and • how the automated decision system output was used by human officers	Same as level II	Same as level II

Requirement	Level I	Level II	Level III	Level IV
	• the principal factors behind a decision This explanation must be made on a discoverable departmental website and linked in the algorithmic impact assessment. Explanations must also inform clients of relevant recourse options, where appropriate.	The client must also be provided with the link to the published level I explanation.		

Requirement	Level I	Level II	Level III	Level IV
Peer review (section 6.3.7)	None	Consult at least one of the following qualified experts and publish the complete review or a plain language summary on a Government of Canada website: • Experts from a federal, provincial, territorial or municipal government institution • Faculty members of a post-secondary institution • Researchers from a relevant non-governmental organization • Contracted third-party vendor with a relevant specialization • A data and automation advisory board specified by Treasury Board of Canada Secretariat	Same as level II	Consult at least two of the following qualified experts and publish the complete review or a plain language summary on a Government of Canada website: • Experts from the National Research Council of Canada, Statistics Canada, the Communications Security Establishment, or Shared Services Canada • Faculty members of a post-secondary institution • Researchers from a relevant non-governmental organization • Contracted third-party vendor with a relevant specialization • A data and automation advisory board specified by Treasury Board of Canada Secretariat

Requirement	Level I	Level II	Level III	Level IV
Gender-based Analysis Plus (section 6.3.8)	None	Ensure that the <u>Gender-based Analysis Plus</u> has been consulted with your department's diversity and inclusion experts and includes: • An assessment of how the automation project might impact different population groups. This includes consideration of the impacts of the automated decision system and data used in the project, as well as the likely impact of the final decision. Where possible, cite the data used to assess the impacts. It is recommended that the data be gender-disaggregated and include other intersecting identity factors such as age, disability and	Same as level II	Same as level II

Requirement	Level I	Level II	Level III	Level IV
		race. If the data is unavailable, identify where the data gaps exist • Details of planned or existing measures to address risks identified through the Gender-based Analysis Plus or other assessments		

Requirement	Level I	Level II	Level III	Level IV

Requirement	Level I	Level II	Level III	Level IV
Training (section 6.3.9)	Role-based training on how to appropriately use and explain the functionalities of the automated decision system, at a high level.	Same as level I	Role-based training on how to appropriately manage, secure, and use the functionalities and explain the capabilities of the automated decision system, including: • the technical aspects of the automated decision system to ensure an up-to-date understanding of the how the system works • potential impacts of the automated decision system on privacy, fairness, and human rights and how to detect them • how to evaluate and, if necessary, override decisions Training must be recurring.	Same as level III

Requirement	Level I	Level II	Level III	Level IV
Ensuring human involvement (section 6.3.13)	The system may make decisions and assessments without direct human involvement. Humans are to be involved in system quality assurance and can intervene in the making of decisions by the system where appropriate.	Same as level I	The final decision must be made by a human. Decisions cannot be made without having clearly defined human involvement during the decision-making process. Humans review the decisions or recommendations made by the system for accuracy and appropriateness. Humans are to be involved in ongoing quality assurance and can intervene in the making of decisions and assessments made by the system.	Same as level III
Approval for the system to operate (section 6.3.14)	Assistant deputy minister responsible for the program.	Same as level I	Deputy head	Treasury Board

© His Majesty the King in right of Canada, represented by the President of the Treasury Board, 2021,
ISBN: 9780660389394

Date modified: 2025-06-24