

Algorithmic Impact Assessment Results

Version: 0.10.0

Project Details

1. Name of Respondent

Julie Belanger - Intelligence and Enforcement Branch

2. Job Title

A/ Director

3. Department

Canada Border Services Agency

4. Branch

Information, Science and Technology Branch | Intelligence and Enforcement Branch | Strategic Policy Branch

5. Project Title

Security Screening Automation

6. Project ID from IT Plan

SSA

7. Departmental Program (from Department Results Framework)

Security Screening

8. Project Phase

Implementation

[Points: 0]

9. Please provide a project description:

The SSA project is to implement a modernized security screening system which will facilitate information sharing with other screening partners, and enhance security screening through a modernized case management system, an automated triage function, integrated intelligence systems and tools, business intelligence, and performance monitoring capabilities.

The automated triage function will carry out many of the queries and document inspections that an officer at the Centre for Immigration and National Security Screening (CINSS) would normally do and will calculate the complexity of the case. In doing so, it allows the automated system to route the screening request to the appropriate worklist, allows more timely review of the simpler cases, and allots more time to review the more complex cases. By segregating the work into the above-mentioned worklists, it allows CBSA to more quickly process the simpler cases, resulting in a faster response to the immigration client.

While CBSA's role in the security screening continuum encompasses multiple key decision points, no automated decision is made without human oversight. The administrative decision—in terms of this algorithmic impact assessment—is made by officers making a security screening recommendation to Immigration, Refugee, and Citizenship Canada regarding the admissibility of

an individual under sections 34, 35, and 37 or IRPA.

The development of the algorithmic decision-making solution is being led by the Intelligence and Enforcement Branch (IEB), in consultation with representatives from both the Information, Science, and Technology Branch (ISTB), and the Strategic Policy Branch, specifically the Chief Data office (CDO)

About The System

10. Please check which of the following capabilities apply to your system.

Section 1: Impact Level : 2

Current Score: 60

Raw Impact Score: 60

Mitigation Score: 35

Section 2: Requirements Specific to Impact Level 2

Peer review

Consult at least one of the following experts and publish the complete review or a plain language summary of the findings on a Government of Canada website:

- qualified expert from a federal, provincial, territorial or municipal government institution
- qualified members of faculty of a post-secondary institution
- qualified 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.

OR

Publish specifications of the automated decision system in a peer-reviewed journal. Where access to the published review is restricted, ensure that a plain language summary of the findings is openly available.

Gender-based Analysis Plus

Ensure that the Gender-based Analysis Plus addresses the following issues:

- impacts of the automation project (including the system, data and decision) on gender and/or other identity factors;
- planned or existing measures to address risks identified through the Gender-based Analysis Plus.

Notice

Plain language notice posted through all service delivery channels in use (Internet, in person, mail or telephone).

Human-in-the-loop for decisions

Explanation

In addition to any applicable legal requirement, ensure that a meaningful explanation is provided to the client with any decision that results in the denial of a benefit or service, or involves a regulatory action. The explanation must inform the client in plain language of:

- the role of the system in the decision-making process;
- the training and client data, their source, and method of collection, as applicable;
- the criteria used to evaluate client data and the operations applied to process it;
- the output produced by the system and any relevant information needed to interpret it in the context of the administrative decision; and
- a justification of the administrative decision, including the principal factors that led to it.

Explanations must also inform clients of relevant recourse options, where appropriate.

A general description of these elements must also be made available through the Algorithmic Impact Assessment and discoverable via a departmental website.

Training

Documentation on the design and functionality of the system.

IT and business continuity management

None

Approval for the system to operate

None

Other requirements

The Directive on Automated Decision-Making also includes other requirements that must be met for all impact levels.

[Link to the Directive on Automated Decision-Making](#)

Contact your institution's ATIP office to discuss the requirement for a Privacy Impact Assessment as per the Directive on Privacy Impact Assessment.

Section 3: Questions and Answers

Section 3.1: Impact Questions and Answers

Reasons for Automation

1. What is motivating your team to introduce automation into this decision-making process?

(Check all that apply)

Existing backlog of work or cases

Improve overall quality of decisions

The system is performing tasks that humans could not accomplish in a reasonable period of time

Use innovative approaches

2. What client needs will the system address and how will this system meet them? If possible, describe how client needs have been identified.

The processing of security screening requests needs to be done more quickly and more efficiently. Currently, much of the work undertaken by an NSS officer is in performing queries and in identifying items of concern for an individual.

With the expected increase in immigration in the upcoming years, and also with the expected increase in the number of cases referred for security screening, current NSS staff will be challenged to meet the increased demand.

The automated decision-making will carry out much of the above-mentioned administrative work and,

With the automation carrying out much of the querying, this will save a considerable amount of time on the officer's part, allowing the NSS officers to focus their efforts on the value-added interpretation of the results and subsequent research and analysis.

3. Please describe any public benefits the system is expected to have.

Because the automation will allow cases to be processed more quickly, the administrative decision, in the form of a recommendation to IRCC, will also be rendered more quickly. This, in turn, will result in a reduction in the elapsed time of the related immigration applications.

4. How effective will the system likely be in meeting client needs?

Very effective

[Points: +0]

5. Please describe any improvements, benefits, or advantages you expect from using an automated system. This could include relevant program indicators and performance targets.

will allow CINSS to identify and process the more straightforward cases in a more timely manner. This will provide the following benefits to the NSS program:

- It will position the NSS program to be in a better position to keep up with the increasing demand for services that will arise both from higher immigration numbers and also from the anticipated higher number of cases being referred

- The automation identifies those cases

allowing officers to more quickly review, process, and complete these more straightforward cases.

- The automation performs much of the repetitive, clerical work of performing queries and inspecting supplied information. By having the automation perform this function, it allows NSS officers more time to focus on the value-added function of determining the relevance of the query results.

- Since the automation will perform the same queries and inspections more uniformly across cases, it will result in improved consistency across the processing of all screening requests

- By having the system perform the queries and log the results, it allows the

possibility of measuring the effectiveness of these queries

6. Please describe how you will ensure that the system is confined to addressing the client needs identified above.

All contributing data elements are assessed for privacy impact by each contributing agency, and due diligence has been exercised in ensuring that the minimum requirement of personal information is processed and specifically aligned with legislative authorities under the CBSA Act, Immigration and Refugee Protection Act, the Privacy Act, and associated regulations.

The automated decision-making system has been devised to be one which measures the complexity of a screening request, as opposed to one that might suggest an eventual outcome of a case. By taking this approach, and with a human "in-the-loop" for all administrative decisions, any risk of unintended consequences is greatly reduced.

7. Please describe any trade-offs between client interests and program objectives that you have considered during the design of the project.

The client interests are aligned with program objectives in our application of automated decision-making. Both the client and the program are interested in improving the overall efficiency of the immigration program, of which security screening plays a part. Improved efficiency in security screening not only meets program objectives, but the client (the applicant on the immigration application) could receive their response from IRCC more quickly.

8. Have alternative non-automated processes been considered?

Yes

[Points: +0]

9. If non-automated processes were considered, why was automation identified as the preferred option?

Current and historic processes are non-automated, and the inefficiencies in the process are the main reasons for the move to automate.

10. What would be the consequence of not deploying the system?

Service cannot be delivered in a timely or efficient manner

[Points: +2]

Service delivery cannot achieve performance targets

[Points: 0]

Service quality is not as high

[Points: 0]

Risk Profile

11. Is the project within an area of intense public scrutiny (e.g. because of privacy concerns) and/or frequent litigation?

Yes

[Points: +3]

12. Are clients in this line of business particularly vulnerable?

Yes

[Points: +3]

13. Are stakes of the decisions very high?

Yes [Points: +4]

14. Will this project have major impacts on staff, either in terms of their numbers or their roles?

Yes [Points: +3]

15. Will the use of the system create or exacerbate barriers for persons with disabilities?

No [Points: +0]

Project Authority

16. Will you require new policy authority for this project?

No [Points: +0]

About the Algorithm

17. The algorithm used will be a (trade) secret

Yes [Points: +3]

18. The algorithmic process will be difficult to interpret or to explain

No [Points: +0]

About the Decision

19. Please describe the decision(s) that will be automated.

The "Decision" being rendered by the automated decision-making function will affect the triage workflow of that screening request,

This automated decision forms part of the workflow to arrive at the CBSA's administrative decision, which is to render a security screening recommendation to IRCC regarding that individual.

20. Does the decision pertain to any of the categories below (check all that apply):

Access and mobility (security clearances, border crossings) [Points: +1]

Impact Assessment

21. Which of the following best describes the type of automation you are planning?

Partial automation (the system will contribute to administrative decision-making by supporting an officer through assessments, recommendations, intermediate decisions, or other outputs) [Points: +2]

22. Please describe the role of the system in the decision-making process.

}In doing so, it prescribes the more timely review of the simpler cases, and allots more time to review the more complex cases. By segregating the work in the above-mentioned manner, it allows CBSA to more quickly process the simpler cases, resulting in a faster response to

those immigration clients.

Irrespective of the automated decision, an NSS officer will always review the results of the automated assessment and will perform any required research so as to determine whether an individual poses national security concerns. The NSS officer will then make the administrative decision, which is CBSA's final recommendation to IRCC. IRCC will then utilize CBSA's final recommendation as part of their decision-making process so as to determine the admissibility of an individual.

23. Will the system be making decisions or assessments that require judgement or discretion?
No [Points: +0]

24. Please describe the criteria used to evaluate client data and the operations applied to process it.
Client data will be evaluated by a rules-based algorithm

25. Please describe the output produced by the system and any relevant information needed to interpret it in the context of the administrative decision.
The output produced by the automated decision system will be as follows:

In each of the above scenarios, a human will review the assessment results produced by the automated system and, based on their experience and knowledge, will render the CBSA's final recommendation on the case.

26. Will the system perform an assessment or other operation that would not otherwise be completed by a human?
No [Points: +0]

27. Is the system used by a different part of the organization than the ones who developed it?
No [Points: +0]

28. Are the impacts resulting from the decision reversible?
Reversible [Points: +1]

29. How long will impacts from the decision last?
Most impacts are perpetual [Points: +4]

30. Please describe why the impacts resulting from the decision are as per selected option

above.

The impact of CBSA's administrative decision (its final recommendation to IRCC) is perpetual in that it has an effect on IRCC's final admissibility decision, which has an effect on the individual into perpetuity.

31. The impacts that the decision will have on the rights or freedoms of individuals will likely be:
Moderate impact [Points: +2]

32. Please describe why the impacts resulting from the decision are as per selected option above.

The administrative decision being made by CBSA may have an impact on an individual's freedom in that CBSA's decision could influence IRCC's decision to allow an individual to enter or stay in Canada.

33. The impacts that the decision will have on the equality, dignity, privacy, and autonomy of individuals will likely be:
Moderate impact [Points: +2]

34. Please describe why the impacts resulting from the decision are as per selected option above.

On the topic of equality, the automated system and ensuing manual processes are geared to identify national security concerns only, irrespective of anything else about the individual. As a result, a person's equality rights are not impacted by the administrative decision.

With regard to privacy implications, the automated decision along with its ensuing manual processes are in full compliance with the Privacy Act. As a result, there is no undue impact on the privacy of the individual.

The administrative decision being made by CBSA may have an impact on an individual's dignity and autonomy in that CBSA's decision could influence IRCC's overall admissibility decision to allow an individual to enter or stay in Canada. As a result, CBSA's administrative decision may have an effect on this regard.

35. The impacts that the decision will have on the health and well-being of individuals will likely be:
Moderate impact [Points: +2]

36. Please describe why the impacts resulting from the decision are as per selected option above.

The administrative decision being made by CBSA may have an impact on an individual's health and well-being in that CBSA's decision could influence IRCC's overall admissibility decision to allow an individual to enter or stay in Canada. As a result, CBSA's administrative decision may have an effect on this regard.

37. The impacts that the decision will have on the economic interests of individuals will likely be:
Moderate impact [Points: +2]

38. Please describe why the impacts resulting from the decision are as per selected option above.

The administrative decision being made by CBSA may have an impact on an individual's economic interests in that CBSA's decision could influence IRCC's overall admissibility decision to allow an individual to enter or stay in Canada. As a result, CBSA's administrative decision may have an effect on this regard.

39. The impacts that the decision will have on the ongoing sustainability of an environmental ecosystem, will likely be:

Little to no impact [Points: +1]

40. Please describe why the impacts resulting from the decision are as per selected option above.

Not applicable in our case. There are no environmental impacts

About the Data - A. Data Source

41. Will the Automated Decision System use personal information as input data?

Yes [Points: +4]

42. Have you verified that the use of personal information is limited to only what is directly related to delivering a program or service?

Yes [Points: +0]

43. Is the personal information of individuals being used in a decision-making process that directly affects those individuals?

Yes [Points: +2]

44. Have you verified if the system is using personal information in a way that is consistent with: (a) the current Personal Information Banks (PIBs) and Privacy Impact Assessments (PIAs) of your programs or (b) planned or implemented modifications to the PIBs or PIAs that take new uses and processes into account?

Yes [Points: +0]

45. Please list relevant PIB Bank Numbers.

Secure Tracking System - PIB As a result of the SSA PIA being completed, a new PIB will be created to be more reflective of the security screening program.

46. What is the highest security classification of the input data used by the system? (Select one)

Secret / Top Secret [Points: +4]

47. Who controls the data?

Federal government [Points: +1]

48. Will the system use data from multiple different sources?

Yes [Points: +4]

49. Will the system require input data from an Internet- or telephony-connected device? (e.g. Internet of Things, sensor)

No [Points: +0]

50. Will the system interface with other IT systems?

Yes [Points: +4]

51. Who collected the data used for training the system?

Another federal institution

[Points: +2]

52. Who collected the input data used by the system?

Another federal institution

[Points: +2]

53. Please describe the input data collected and used by the system, its source, and method of collection.

About the Data - B. Type of Data

54. Will the system require the analysis of unstructured data to render a recommendation or a decision?

Yes

[Points: 0]

55. What types of unstructured data? (Check all that apply)

Audio and text files

[Points: +2]

Section 3.2: Mitigation Questions and Answers

Consultations

1. Internal Stakeholders (federal institutions, including the federal public service)

Yes

[Points: +1]

2. Which Internal Stakeholders have you engaged?

Data Governance

Program Policy

Legal Services

Access to Information and Privacy Office

Office of the Privacy Commissioner of Canada

Communications services

3. External Stakeholders (groups in other sectors or jurisdictions)

Yes

[Points: +1]

De-Risking and Mitigation Measures - Data Quality

4. Do you have documented processes in place to test datasets against biases and other unexpected outcomes? This could include experience in applying frameworks, methods, guidelines or other assessment tools.
Yes [Points: +2]
5. Is this information publicly available?
No [Points: +0]
6. Have you developed a process to document how data quality issues were resolved during the design process?
Yes [Points: +1]
7. Is this information publicly available?
No [Points: +0]
8. Have you undertaken a Gender Based Analysis Plus of the data?
Yes [Points: +1]
9. Is this information publicly available?
No [Points: +0]
10. Have you assigned accountability in your institution for the design, development, maintenance, and improvement of the system?
Yes [Points: +2]
11. Do you have a documented process to manage the risk that outdated or unreliable data is used to make an automated decision?
Yes [Points: +2]
12. Is this information publicly available?
No [Points: +0]
13. Is the data used for this system posted on the Open Government Portal?
No [Points: +0]

De-Risking and Mitigation Measures - Procedural Fairness

14. Does the audit trail identify the authority or delegated authority identified in legislation?
Yes [Points: +1]
15. Does the system provide an audit trail that records all the recommendations or decisions made by the system?
Yes [Points: +2]
16. Are all key decision points identifiable in the audit trail?
Yes [Points: +2]
17. Are all key decision points within the automated system's logic linked to the relevant legislation, policy or procedures?

Yes [Points: +1]

18. Do you maintain a current and up to date log detailing all of the changes made to the model and the system?

Yes [Points: +2]

19. Does the system's audit trail indicate all of the decision points made by the system?

Yes [Points: +1]

20. Can the audit trail generated by the system be used to help generate a notification of the decision (including a statement of reasons or other notifications) where required?

No [Points: +0]

21. Does the audit trail identify precisely which version of the system was used for each decision it supports?

Yes [Points: +2]

22. Does the audit trail show who an authorized decision-maker is?

Yes [Points: +1]

23. Is the system able to produce reasons for its decisions or recommendations when required?

No [Points: +0]

24. Is there a process in place to grant, monitor, and revoke access permission to the system?

Yes [Points: +1]

25. Is there a mechanism to capture feedback by users of the system?

Yes [Points: +1]

26. Is there a recourse process established for clients that wish to challenge the decision?

Yes [Points: +2]

27. Does the system enable human override of system decisions?

Yes [Points: +2]

28. Is there a process in place to log the instances when overrides were performed?

Yes [Points: +1]

29. Does the system's audit trail include change control processes to record modifications to the system's operation or performance?

Yes [Points: +2]

30. Have you prepared a concept case to the Government of Canada Enterprise Architecture Review Board?

Yes [Points: +1]

De-Risking and Mitigation Measures - Privacy

31. If your system uses or creates personal information, have you undertaken a Privacy Impact Assessment, or updated an existing one?

Yes [Points: +1]

32. Please indicate the following in your answer: Title and scope of the Privacy Impact

Assessment; How the automation project fits into the program; and Date of Privacy Impact

Assessment completion or modification.

Security Screening Automation - Phase 2, with a Phase 3 and 4 version prepared in the future.

Scope is on the implementation of the SSA component/ solution and any impacts on an individual's (immigration client's) privacy

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With much of this administrative work being automated, and with the assessment results stored with the case, the triage function, along with downstream assessment functions will be much more efficient.

The automation will also derive the level of complexity for the screening request (based on the aforementioned assessment),

Date of Phase 2 PIA completion is targeted for July 31, 2023. Phase 3,4 PIA will be completed prior to implementation, with a target date of March, 2024.

33. Have you designed and built security and privacy into your systems from the concept stage of the project?

Yes [Points: +1]

34. Is the information used within a closed system (i.e. no connections to the Internet, Intranet or any other system)?

No [Points: +0]

35. If the sharing of personal information is involved, has an agreement or arrangement with appropriate safeguards been established?

Yes [Points: +1]

36. Will you de-identify any personal information used or created by the system at any point in the lifecycle?

No [Points: +0]