



Memo

To: MSD Leadership Team
CC: Kamal Acharya, Director of Service Design and Development
From: Polly Vowles, Manager, Income Support Policy
Date: 5 May 2021

This memo contains legal advice and is legally privileged. It should not be disclosed on an information request, without further legal advice.

Automated decision-making in MSD: Proposed legislative and policy framework

Purpose and strategic alignment

1. This memo contains:
 - the proposed legislative and policy framework to guide MSD's use of automated decision-making (ADM)
 - a summary of the stocktake of the current use of ADM in MSD's products and processes; and
 - s9(2)(h) OIA [REDACTED]

MSD's Commitment to Māori

2. Māori are disproportionately represented in the welfare system, and as such the way that MSD delivers services are likely to be of significant interest to Māori. Discussions at two *Te Pātaka Korero a Rua wananga* highlighted that it is important for delivery channels to enable Māori to access support in ways that suits each person and their whānau, whether that be face-to-face, phone-based or online. Data needs to be treated as taonga, and it must always be remembered that Māori collective aspirations are exercised through their rights, meaning that decisions about how services are delivered must be made carefully.

3. s9(2)(f)(iv) OIA [REDACTED]

Recommendations

4. We recommend that the Leadership Team:

- a) **note** s9(2)(h) OIA [REDACTED]
- b) **note** that automation and ADM are used to varying degrees throughout MSD's processes and systems
- c) **agree** that the definition of ADM for the purposes of MSD's ADM Framework and Standard be "Decisions that are made by applying business rules and/or data-based algorithms without substantive involvement by a person"
- d) **note** s9(2)(f)(iv) OIA [REDACTED]
- e) **note** s9(2)(f)(iv) OIA [REDACTED]
- f) **note** s9(2)(h) OIA [REDACTED]
- g) **note** that a new ADM Standard is being developed as part of MSD's ADM Framework and will be part of MSD's Privacy, Human Rights and Ethics Framework (PHRaE)
- h) **agree** that MSD's ADM Framework consist of the following:

Principles:

Any process or decision within MSD will only be automated where there is:

- safeguarding of privacy, ethics, and human rights
- consistency with the principles of Te Tiriti O Waitangi
- clear benefit to those seeking MSD's assistance – e.g. enable clients to address their income support needs themselves via a digital channel
 - clear benefit to the organisation
 - clarity that it is fit for purpose - including understanding limitations and identifying and actively mitigating bias
 - confidence that the policy intent will be upheld
 - transparency in order for the public to understand how decisions are made, and how to review automated decisions, and
 - regular reviewing/monitoring.

Checks and balances:

Checks and balances will be provided through:

- central oversight and governance of all decisions regarding automation, particularly ADM
- the responsible business owners actively assessing privacy, human rights and ethics impacts before introducing any ADM. This would be achieved through requiring every automation proposal to be assessed using MSD's Privacy, Human Rights and Ethics framework (PHRaE)
- annual publication of:
 - the policies and processes used by MSD to mitigate the risks associated with ADM; and
 - the processes and decisions that have been automated, including information on how they are operating (i.e. monitoring information), and
 - a clear process to enable appeals and reviews of any automated decisions.

Oversight and governance

- Central oversight and governance for ADM in MSD will sit with MSD's Transformation and Investment Committee (or its successors)
- ADM-containing processes that are either entirely new or which are existing processes that have been changed/amended will be identified at the earliest opportunity
- Anything that contains ADM will be assessed against the PHRaE (which will contain the new ADM Standard)
- A central register of processes that contain automation (including ADM) will be maintained by MSD so that it can be published annually.

Certification and accreditation

- MSD's Chief Privacy Officer and Chief Information Security Officer will certify that the risks and controls in any given proposal are accurate and that the ADM Standard has been met. The relevant business owner will accredit and approve the use of the proposed process.

Assurance

- Regular monitoring will be undertaken to ensure that any ADM that is approved under MSD's ADM Standard continues to meet the requirements of that Standard.
- i) **note** the draft ADM Standard (attached at Appendix Four) which will be used as the basis for consultation with the Office of the Privacy Commissioner (OPC), the Social Wellbeing Agency and Stats NZ
 - j) **agree** that the final ADM Standard be signed off by MSD's Leadership Team
 - k) **agree** that the Information Team (National Office) will maintain the central register of processes that contain automation
 - l) **note** that additional resourcing is likely to be needed to do the monitoring and assurance under the ADM Framework and that further work will be done to clarify these resourcing requirements
 - m) **agree** that Information Team (National Office) will be responsible for the monitoring and assurance under the ADM Framework

- n) **note** s9(2)(h) OIA [redacted]
- o) **note** the content of the high-level stocktake that has been done to identify which of MSD's processes and systems use ADM (attached at Appendix Five)
- p) **agree** that the high-level stocktake is sufficient to validate MSD's ADM Framework and Standard in order for them to be used as soon as the ADM Standard is approved
- q) **note** s9(2)(h) OIA [redacted]
- r) **agree** s9(2)(h) OIA [redacted]
- s) **note** s9(2)(f)(iv) OIA [redacted]
- t) **note** s9(2)(h) OIA [redacted]
- u) **agree** s9(2)(f)(iv) OIA [redacted]
- v) **agree** that any ADM-containing processes due to go live during PI 19 be assessed against the ADM Standard s9(2)(h) OIA [redacted]

Context

- 5. s9(2)(h) OIA [redacted]
- 6. MSD has previously committed to reporting back to the Minister for Social Development and Employment on this matter, including updates on:
 - a) s9(2)(h) OIA [redacted]
 - b) an initial stocktake of automated decisions and processes in the income support system, and
 - c) a draft policy framework to guide MSD's use of ADM.
- 7. On 1 December 2020, the Transformation and Investment Committee (TIC) considered the paper *Automated decision-making in MSD: Update and proposed*

¹ s9(2)(h) OIA [redacted]

framework. TIC discussed the importance of scope (what is and what isn't an automated decision), §9(2)(h) OIA

8. §9(2)(h) OIA TIC requested a clear definition of what 'automated decision-making' is; clarity about what services/support MSD is automating; §9(2)(h) OIA and clarity about MSD's approach and priority and where we see gains in automated decision making.

COVID-19 Wage Subsidies

9. ADM is used in order to enable MSD to process the very large volumes of applications for the COVID-19 Wage Subsidies (the Wage Subsidy). ADM is also used in the processing of applications for the Short-Term Absence Payment and has been used in the processing of Leave Support Scheme applications.

10. §9(2)(h) OIA

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MSD uses automation and automated decision-making in many parts of its operating model

12. Automation and automated decision-making (ADM) are used to varying degrees throughout MSD's processes and systems.
13. It is important to distinguish between automation and ADM. Automation is the use of systems or components of systems to replace repeatable processes and well-defined decisions in order to reduce dependency on manual actions/interventions. Automation is currently used by MSD in a number of areas, such as directing client phone calls to the most appropriate staff or re-calculating benefit rates following an annual general adjustment.
14. ADM can refer to decisions based on the application of known business rules, decisions based on statistically or analytically derived patterns (e.g. machine learning or Artificial Intelligence) or end to end processes that operate without any human involvement. It is important to make the distinction between a human actor being in the loop and part of the decision-making process, versus being out of the loop, meaning that a decision is fully automated. Currently, MSD mainly uses ADM to process existing, rules-based transactions such as applications for financial assistance that have been made using MyMSD.
15. The following definition of ADM has been used in the stocktake of MSD processes and products. It is proposed that this definition also be used for determining which

processes and systems should be assessed using the new ADM policy framework in the future:

Automated decision-making: decisions that are made by applying business rules and/or data-based algorithms without substantive involvement or assessment by a person.

16. In this context 'substantive involvement' means decision-making that involves deliberate assessment or consideration of a client's specific information and/or circumstances before a decision is made. A person/case manager clicking "yes" or "no" to move a process from one stage to the next (based on a conclusion/decision reached by the system) would not be considered meaningful involvement or assessment.
17. To the best of our knowledge², there are nine clear instances of the use of this type of ADM in MSD processes/systems and a further 17 processes that are close to containing ADM or that lend themselves to having ADM added. See Appendix Five for more information. Note that the processes and systems used in student support and housing have yet to be fully assessed.
18. The key consideration is the likely impact of the automated decision. If the likely impact is moderate or high (as defined in the Algorithm Charter³), then the automated decision has been included in the stocktake. In future, the new ADM framework will need to be used to assess any of MSD's processes or systems that contain ADM of a type that is likely to have a moderate or high impact.

Likely gains in automated decision making

19. s9(2)(f)(iv) OIA

[Redacted text]

20. s9(2)(f)(iv) OIA

[Redacted text]

Other government departments, such as MBIE, IR and ACC also rely heavily on the use of ADM to deliver their services.

² Based on the high level stocktake (as at March 2021) which does not include StudyLink or all of the processes used in Housing – set out in Appendix Five

³ The Risk Matrix in *The Algorithm Charter for Aotearoa New Zealand* defines the possible impacts of algorithm use as:

- **Low:** The impact of these decisions is isolated and/or their severity is not serious.
- **Moderate:** The impact of these decisions reaches a moderate amount of people and/or their severity is moderate.
- **High:** The impact of these decisions is widespread and/or their severity is serious.

https://www.data.govt.nz/assets/data-ethics/algorithm/Algorithm-Charter-2020_Final-English-1.pdf

21. It is anticipated that Māori and Pasefika clients will particularly benefit from smoother and easier to use income support systems and from front line staff being freed up to focus on in-depth and more meaningful engagement.
22. Automation also enables MSD systems to adapt quickly during emergencies, for example automating simple wage subsidy applications during MSD's initial COVID-19 response.

A robust legislative and policy framework is needed to guide MSD's use of ADM

s9(2)(h) OIA

23. s9(2)(h) OIA

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27. s9(2)(h) OIA

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Policy framework for ADM

30. The following framework to guide MSD's use of ADM was agreed by TIC on 1 December 2020. This framework will be embedded in the new ADM Standard, which will be finalised following consultation with relevant external stakeholders.

Principles:

32. Any process or decision within MSD will only be automated where there is:

- safeguarding of privacy, ethics, and human rights
- consistency with the principles of Te Tiriti O Waitangi
- clear benefit to MSD clients – eg enabling clients to address their income support needs themselves via a digital channel
- clear benefit to the organisation
- clarity that it is fit for purpose - including understanding limitations and identifying and actively mitigating bias
- confidence that the policy intent will be upheld
- transparency in order for the public to understand how decisions are made, and how to review automated decisions, and
- regular reviewing/monitoring.

Checks and balances:

33. Checks and balances will be provided through:

- central oversight and governance of all decisions regarding automation, particularly ADM
- the responsible business owners actively assessing privacy, human rights and ethics impacts before introducing any ADM. This would be achieved through requiring every automation proposal to be assessed using MSD's Privacy, Human Rights and Ethics framework (PHRaE)
- annual publication of:
 - the policies and processes used by MSD to mitigate the risks associated with ADM; and
 - the processes and decisions that have been automated, including information on how they are operating (i.e. monitoring information), and
- a clear process to enable appeals and reviews of any automated decisions.

Proposed approach to oversight and governance

34. At the 1 December 2020 meeting, TIC agreed that central oversight and governance for ADM in MSD will sit with TIC.

Approval of decisions to automate

35. Determining what types of decisions and processes could/should be automated requires careful consideration, including assessing the level of discretion that is provided for and the impact of automation on clients' rights and interests.

36. The Minister has been previously advised that MSD will only automate approvals. If an automated process determines that approvals cannot be automatically granted, the transaction will exception out to be reviewed by a person who will then make any decisions necessary.

37. In practical terms, the following approach is proposed:

- ADM-containing processes that are either entirely new or which are existing processes that have been changed/amended will be identified at the earliest opportunity
- Anything that contains ADM will be assessed against the PHRaE (which will contain the new ADM Standard)
- A central register of processes that contain automation (including ADM) will be maintained by MSD so that it can be published annually. TIC's direction is sought on who in MSD should maintain this register.

Certification and accreditation

38. The current certification and accreditation process that MSD uses will continue to be applied. MSD's Chief Privacy Officer and Chief Information Security Officer will certify that the risks and controls in any given proposal are accurate and that the ADM Standard has been met. The relevant business owner will accredit (i.e. accept any risk and approve the use of the proposed process).

Assurance

39. Regular monitoring will be required to ensure that any ADM that is approved under MSD's ADM Standard continues to meet the requirements of that Standard.

40. Additional resourcing is likely to be needed to do the monitoring and assurance under the ADM framework. Further work is required to clarify these resourcing requirements. Guidance is sought from TIC regarding which part of MSD should be responsible for these functions.

A stocktake has been done of MSD's use of ADM

41. A high-level stocktake has been done to identify which of MSD's processes and systems⁵ use ADM and is attached at Appendix Five. Particular attention has been paid to identifying where ADM is used or could be used in situations/processes where the policy or relevant legislation envisages discretion being applied. Further work is required to unpack the processes and systems that are used in StudyLink and in housing processes such as Income Related Rent.

42. A key purpose of the stocktake is to enable MSD to answer the question "How much ADM does MSD use, and where is it used?" s9(2)(f)(iv) OIA

43. This question can be answered based on the results of the high-level stocktake so a forensic and highly detailed examination of each of MSD's processes and systems is not necessary. That is, it should be sufficient to be able to list the processes where ADM (and discretion) is used without needing to say "ADM is used in steps 15 and 25 of the process used to deliver X, but only in step 3 of the process used to deliver Y".

⁵ The stocktake work covers Income Support, Employment and Corporate/supporting processes such as Client and Business Intelligence. The work on processes used in student support and housing is yet to be completed.

44. We consider that the high-level stocktake is also sufficient to validate the ADM framework in order for it to start being used to assess automation proposals as soon as possible.

45. s9(2)(f)(iv) OIA [Redacted]

- s9(2)(f)(iv) OIA [Redacted]

- [Redacted]

- [Redacted]

46. It should be noted that many of the processes s9(2)(f)(iv) OIA were implemented as part of the Simplification Project. s9(2)(h) OIA [Redacted]

s9(2)(h) OIA [Redacted]

47. s9(2)(h) OIA [Redacted]

s9(2)(h) OIA [Redacted]

48. The following will still need to be addressed:

- s9(2)(f)(iv) OIA [Redacted]

- [Redacted]

- s9(2)(h) OIA [Redacted]

⁶ s9(2)(h) OIA [Redacted]



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MSD should start applying the ADM Standard s9(2)(f)(iv) OIA

49. It is recommended that MSD start applying the ADM Standard as soon as it is approved by the MSD Leadership Team, with enforcement taking place through the PHRaE certification process. This will provide the Minister and the public with assurance that the use of ADM by MSD is being done appropriately. s9(2)(f)(iv) OIA

50. If there are any ADM-containing processes that are due to go live during PI 19, it is recommended that these be assessed against the ADM Standard s9(2)(h) OIA

Implications

51. Use of ADM has the potential to improve the services accessed by Māori, for example by reducing the potential for bias, ensuring FACE and enabling more choice about delivery channels for individuals and their whānau. However, MSD needs to continually monitor that kaupapa Māori values are being acknowledged and appropriately incorporated in any use of ADM.

52. Additional resources will be required for the following:

- Maintaining a central register of processes that contain automation (including ADM), and publishing it annually
- The ongoing monitoring and assurance work
- s9(2)(h) OIA
- Completing the high level stocktake for processes used in StudyLink and in Housing

- s9(2)(f)(iv) OIA

Consultation feedback

53. This paper has been developed in close consultation with Kamal Acharya (Director of Service Design and Development) and Lauren Smith (Legal) and discussed at MSD's Transformation and Investment Committee (TIC) meeting on 22 April 2021. It has been amended to reflect TIC's feedback, s9(2)(f)(iv) OIA

54. Comment was also provided by Stephen Crombie (DCE People and Capability), and s9(2)(a) OIA (Simplification Programme). An early version of the paper was extensively discussed at two Te Pātaka Korero a Rua wananga. s9(2)(f)(iv) OIA

55. Consultation with external stakeholders will take place after the Leadership Team has discussed this paper.

Next Steps

56. The next steps are:

- Consultation with the Office of the Privacy Commissioner, Social Wellbeing Agency and Stats NZ
- Finalise the ADM Standard and present to Leadership Team for approval
- s9(2)(h) OIA

Attachments

Appendix One – s9(2)(h) OIA

Appendix Two - s9(2)(h) OIA

Appendix Three – s9(2)(f)(iv) OIA

Appendix Four – Draft ADM Standard for discussion

Appendix Five - High-level stocktake of MSD processes and systems. This stocktake does not yet include the processes and systems used in student support, nor all of those used in housing.

s9(2)(h) OIA

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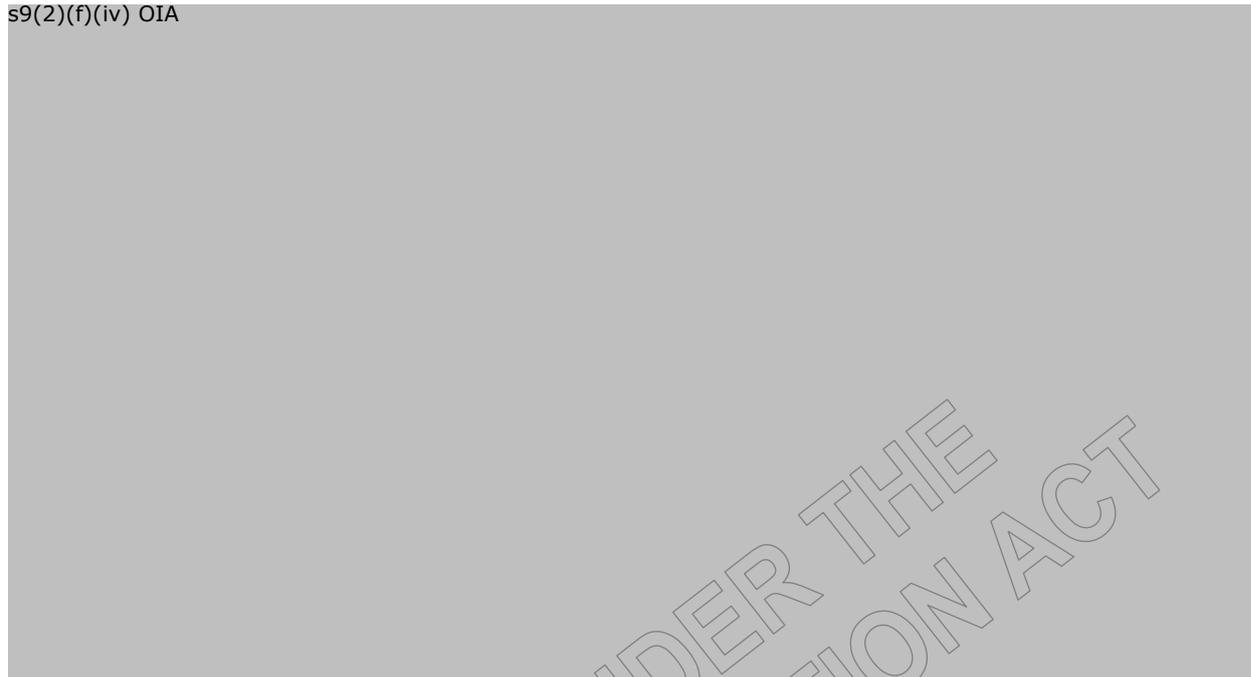
Appendix Two – s9(2)(h) OIA

s9(2)(h) OIA

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Appendix Three – s9(2)(f)(iv) OIA

s9(2)(f)(iv) OIA



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Appendix Four - DRAFT ADM Standard for discussion only

Automated Decision Making Standard

Approved by: **MSD Leadership Team**
Standard Owner: General Manager Information

1 Standard

1.1 Applicability

- 1.1.1 This standard applies to all processes where Automated Decision Making (ADM) is used.
- 1.1.2 ADM is defined as decisions that are made by applying business rules or data-based algorithms without substantive involvement or assessment by a person.
- 1.1.3 In this context "substantive involvement" means decision-making that involves deliberate assessment or consideration of an individual's specific information and/or circumstances before a decision is made.

1.2 Human Oversight

- 1.2.1 The inputs and criteria that are used for automating the decision **must** be determined by a person and reviewed independently.
- 1.2.2 The Ministry **must** provide a channel for challenging or appealing decisions made using ADM.
- 1.2.3 There **must** be a process that includes human review for automated decisions that are challenged.
- 1.2.4 A point of contact **must** be nominated for inquiries about decisions made using ADM.
- 1.2.5 The Ministry **must** clearly explain the role of humans in ADM.

1.3 Transparency

- 1.3.1 The Ministry **must** publicly publish what policies and processes are used to identify and mitigate risks associated with ADM.
- 1.3.2 The Ministry **must** publicly publish information about what decisions are made using ADM and how many decisions were made using ADM by type of decision.
- 1.3.3 The inputs and criteria that are used for automating the decision **must** be made publicly available for scrutinising (unless a lawful restriction prevents this OR it would result in an increased exposure to fraud).
- 1.3.4 The use of ADM **must** be communicated to the client in a way that is easy to understand and clearly shows a decision was made using ADM, the outcome of that decision, and the process for challenging or appealing decisions.

1.4 Automating Discretion

1.4.1 Decisions that require discretion **must not** be automated.

1.5 General

1.5.1 An assessment **must** be undertaken by Policy to determine whether ADM impacts policy intent.

1.5.2 Any impacts on policy intent that are identified **must** be accepted by the [Chief Executive or Minister] before ADM can be implemented as part of the process.

1.5.3 An assessment **must** be undertaken to determine whether ADM will increase the likelihood that people will commit fraud or increase the scale or size of potential fraud.

1.5.4 Where a decision has the potential to adversely affect clients, for example a 'No' decision or the removal of an existing entitlement, the threshold for ADM use **must** be high with limited opportunity for inaccuracy or bias.

1.6 Assurance

1.6.1 Ongoing quality assurance and evidence of accuracy **must** be carried out to ensure that the automation itself produces the expected results, clients are receiving full and correct entitlement (FACE), and unintended bias and discrimination is well managed.

1.6.2 Where decisions made using ADM are found to be biased or based on biased data sets, steps must be taken [immediately] to remove such bias or discrimination caused by the ADM.

1.6.3 Regular monitoring by the Information Group **must** be carried out at least once every three years or more frequently (based on the nature and level of risk connected to the process) to ensure that any ADM that is approved under this standard continues to meet the requirements of the standard.

2 Standard Compliance

2.1 Exceptions

2.1.1 **If any requirements from this standard cannot be met then an exception must be approved by the Leadership Team before the ADM is implemented.**

2.1.2 Exceptions **must** be applied for using the approved exceptions process.

2.1 Compliance Measurement

2.1.1 Compliance with this standard **must** be verified for all new initiatives through the existing Security, Privacy, Human Rights and Ethics Certification and Accreditation process.

4 References

[Principles for Safe and Effective Use of Data and Analytics](#)

[Algorithm Charter for Aotearoa New Zealand](#)

[Data Protection and Use Policy](#)

s9(2)(f)(iv) OIA

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