

Aide memoire to the Minister of Statistics: Feedback from agencies on the Algorithm Charter

Date	27 February 2020	Note by	2 March 2020	Priority	Μ
Will be	Meeting with officials on 2 March 2020				
discussed at	Meeting with Digital and Data Ministers on 4 March 2020				

Purpose and key issues

- 1. This aide memoire updates you on feedback we've received from government agencies on the Algorithm Charter for Aotearoa New Zealand, to support your discussion at the Digital and Data Ministers meeting on 4 March 2020.
- 2. While there is strong support for a Charter generally, some agencies believe that the expanded scope (extending from operational algorithms to all algorithms) will be unworkable and they would not be willing to sign the Charter on that basis¹.
- 3. As we have advised you previously, the views of many of the public submissions, particularly those from NGO's that promote government transparency and public rights, are to remove the distinction between operational and all algorithms.
- 4. To support your discussion of the possible scope of the Charter with your digital and data colleagues, we've identified three options to discuss at the meeting, reflecting the different perspectives we've heard.

Background

- 5. The development of an algorithm charter was endorsed by Data and Digital Ministers in June 2019 and officials have since consulted on a draft version and made updates in response to public feedback [MM1859, MM1882 and MM1933 refers].
- 6. Ahead of the upcoming Digital and Data Ministers meeting and as we discussed on 17 February, officials circulated the revised *Algorithm Charter for Aotearoa New Zealand* to gauge agency comfort with the proposed text.

We've received a range of feedback on the Charter

- 7. Overall, agencies support the intent of the Algorithm Charter for Aotearoa New Zealand and believe that a Charter can provide assurance for the public in how government is using algorithms. Several agencies have indicated that they're prepared to sign the current version of the Charter.
- 8. As we noted in our report of 13 February [MM1933 refers], during our previous discussions with some data agencies, there was a clear preference to limit the scope of the Charter to only apply to operational algorithms (those that have a significant impact on people or groups) due to the resource implications of retroactively reviewing current algorithm settings on a wider basis.
- 9. The feedback we've recently received from public consultation suggests that many submitters see no reason for the scope of the Charter to be limited to only operational algorithms, with submitters suggesting that government agencies should apply the kind of good practice set out in the Charter to all of their data-driven decision-making processes.
- Based on the Algorithm Assessment report (2018), confining the scope to operational algorithms would limit the number of algorithms within scope to between one and six algorithms per agency. We understand that widening the scope to include all algorithms and to business rules (simple decision-making processes) would significantly increase the number per agency.
- 11. In our report of 13 February, we proposed removing the distinction between operational and non-operational algorithms to respond to public feedback, and limiting the initial scope of the

¹ This includes agencies who use significant volumes of data and analytical techniques in their work.

Charter to new algorithms, thereby providing a 5-year period before it would apply to all algorithms to enable agencies to plan and manage applying it more broadly.

- 12. In their recent feedback, some agencies have maintained their view that they can only support a Charter that is limited in initial scope to operational algorithms. They suggest that a widened scope would have high compliance costs, and ultimately lead to potential delays in delivering analytic work and reduced transparency as the public could find it difficult to determine which algorithms have the greatest impact on decisions affecting them.
- 13. Comments on scope were a major theme of the public consultation process, with more than half of submissions received providing views on whether the Charter should apply only to operational algorithms. We expect that responding to this feedback would improve the Charter's impact on public trust and confidence.
- 14. Excluding business rules from the scope is one possible solution, that would respond to the feedback from public consultation to remove the distinction between operational and non-operational algorithms, while also responding to the concerns of large data agencies about the quantum of items that might fall within an expanded scope.
- 15. An alternative approach could be to consider staged implementation of the Charter, starting by applying commitments to operational algorithms and expanding the commitments to all algorithms, excluding business rules, after an agreed period of time. This would provide a phased approach for implementation and could respond to public feedback on the Charter's scope.
- 16. We provide more detail about each of these options below to support a discussion between digital and data Ministers about the scope of the Charter. We've also attached a version of the Charter reflecting each option for reference.

We have employed a common definition of algorithms for all options

17. We propose to use the same set of definitions that were set out in the 2018 Algorithm Assessment Report. Under this definition an algorithm is an analytical process that interprets or evaluates information (often using large or complex data sets) to identify patterns and trends to inform decisions.

Option One: All Algorithms (confined initially to new algorithms for 5 years)

- 18. Under this option, the Charter would initially apply to all new algorithms, as identified by the signatory. Over 5 years the signing agency would be expected to apply commitments to existing algorithms.
- 19. We consider this to be the highest-impact option that would cover a large volume and wide range of algorithms², and as a result would have the highest impact on public trust and confidence in government. This is also the highest-resource option for signing agencies.

Option Two: The Charter applies to all new algorithms excluding Business Rules

- 20. Under this option, the Charter would initially apply to all new algorithms except Business Rules, and over 5 years the signing agency would be expected to apply commitments to existing algorithms that are not Business Rules.
- 21. Business Rules, as defined in the Algorithm Assessment Report, are: Simple algorithms created by people that use rules to constrain or define a business activity. They make determinations about individuals or groups, without a significant element of discretion.
- 22. We consider this to be a similar approach to that of the Law Foundation in their report on Artificial Intelligence (2019). Most Business Rules are likely to be of less interest or concern to the public, and this option would mean that agencies can focus efforts and resources on reporting on the rest of their new algorithms.

² At this stage we do not have confirmation of the number of algorithms this would apply to across the system.

23. While some agencies have signalled support for removing Business Rules from the scope of the Charter, most have advised us that this scope change alone is still too broad without a staged implementation.

Option Three: The Charter applies to operational algorithms only

- 24. Under this option, the Charter would apply to operational algorithms only. This draws on the definition of algorithms used for the Algorithm Assessment Report: These algorithms *result in, or materially inform, decisions that significantly impact on individuals or groups. They may use personal information about the individuals or groups, but do not need to do so exclusively.*
- 25. This option does not address concerns raised by a majority of public submissions on this topic about the scope of the Charter. However, this option has the lowest-resource implications for signing agencies, making the prospect of a large number of agencies signing the Charter more likely, and shows government progress in this important and evolving area of data ethics.

Option Four: Staged implementation

- 26. Under this option, implementation of Charter commitments would apply to operational algorithms for the first 2 years after signing and then to all algorithms used by an agency, excluding business rules.
- 27. This option could address public submissions about the scope of the Charter and allow for a staged implementation for agencies. We would report on the progress of implementing the Charter during the 2-year period to ensure that the next stage of implementation is achievable and meets the intended objective of the Charter.
- 28. This option has low resource implications in the immediate term for signing agencies, which we believe would encourage agencies to sign and would also show government progress in this important and evolving area of data ethics. We understand this option has the broad support of agencies.

Other feedback

- 29. Some of the other feedback we've received from agencies has been about the implementation of the Charter, once the scope is agreed. As we have advised you previously, we have looked to the Ministry of Social Development Accessibility Charter as a model for the implementation of a voluntary charter by government agencies. We've been working with the officials involved in that Charter to learn from their experience, and we plan to develop further support and guidance for agencies in due course.
- 30. The Charter is one part of the work across the data system to improve the transparency and accountability of data use. Other examples of activity that is already established include the Data Protection and Use Policy developed by the Social Wellbeing Agency (formerly the Social Investment Agency), the Privacy Human Rights and Ethics tool developed by the Ministry of Social Development and our establishment of an independent Data Ethics Advisory Group.
- 31. As we noted in our report of 13 February [MM1933 refers], we have already made some updates to the Charter in response to the public feedback. These changes include clearer alignment with the *Principles for the Safe and Effective Use of Data and Analytics*, strengthening the commitment for agencies to actively consult with people, communities and groups interested in, or impacted by, algorithms and use of more accessible plain English text.

Next steps

- 32. We recommend you discuss the options for amending the scope of the Charter at the meeting of Digital and Data Ministers on 4 March and agree on a preferred option.
- 33. Depending on the outcome of the discussion at the Digital and Data Ministers meeting on 4 March, signatories for the endorsed Charter will be discussed by Chief Executives at the Digital Government Leadership meeting on 9 March.

ALGORITHM CHARTER FOR AOTEAROA NEW ZEALAND

The Government Chief Data Steward responds to new and emerging data issues to ensure that government agencies have the right skills and capability to maximise the value of data.

This is achieved through setting data standards and establishing common capabilities, developing data policy and strategy. This is undertaken in conjunction with other Functional Leads such as the Government Chief Digital Officer, the Government Chief Information Security Officer, the Chief Archivist and regulators such as the Privacy Commissioner.

Context

Technology is moving rapidly and new tools, like algorithms, mean many more decisions can be made, much faster.

The government needs to make sure that people are at the heart of all these decisions, and that the new tools are being used carefully and ethically.

What is an algorithm?

An algorithm is an analytical processes that interprets or evaluates information (often using large or complex data sets) to identify patterns and trends to inform decisions.

Action

The charter shows an organisation's commitment to using algorithms fairly and transparently. This commitment helps people have confidence in the government. The Chief Executive, Chief Information Officer and Chief Data Officer of an organisation sign the Charter.

For more information contact: **datalead@stats.govt.nz** or visit **www.data.govt.nz**

Commitment

The Algorithm Charter for Aotearoa New Zealand is New Zealand government agencies' commitment to improving transparency and accountability in the use of algorithms.

In 2018 the New Zealand government reviewed the way government agencies use algorithms to improve people's lives. The aim of the *Algorithm Assessment Report* was to let New Zealanders know how the government uses algorithms, and the ways government makes sure algorithms are being used fairly and transparently.

The Algorithm Assessment Report used the *Principles for the Safe and Effective Use of Data and Analytics* developed by the Privacy Commissioner and the Government Chief Data Steward to make recommendations about algorithm use.

The recommendations led to the establishment of the *Data Ethics Advisory Group* in 2019 and other work is ongoing.

Open Government Partnership:

The New Zealand government has made a commitment to the Open Government Partnership (OGP), an international agreement to increase transparency.

REVISED ALGORITHM CHARTER FOR AOTEAROA NEW ZEALAND

Introduction:

This Charter demonstrates a commitment to ensuring New Zealanders have confidence in how government agencies use algorithms.

This Charter is one of many ways that government is demonstrating transparency and accountability in the use of data. However, it cannot fully address important considerations, such as Artificial Intelligence and Māori Data Sovereignty as these are complex and require more focussed solutions.

Commitment:

Our organisation understands that decisions made using algorithms impact people in New Zealand

We commit to the actions outlined in this charter in developing all new algorithms.

Over the next five years, we commit to aligning existing algorithms with the actions outlined in this Charter and the *Principles for the Safe and Effective use of Data and Analytics*.

- Maintain transparency by clearly explaining how decisions are informed by algorithms. This may include:
 - » Plain English documentation of the algorithm,
 - » Making information about the data and processes available (in some cases, such as algorithms being used for national security, there may be exceptions),
 - » Publishing information about how data are collected, secured and stored.
- Deliver clear public benefit through Treaty commitments by:
 - » Embedding a Te Ao Māori perspective in the development and use of algorithms consistent with the principles of the Treaty of Waitangi.
- Focus on people by:
 - » Identifying and actively engaging with people, communities and groups who have an interest in algorithms, and consulting with those impacted by their use.
- Make sure data is fit for purpose by:
 - » Understanding its limitations.
 - » Identifying and managing bias.
- Ensure that privacy, ethics and human rights are safeguarded by:
 - Regularly peer reviewing algorithms to assess for unintended consequences and act on this information.
- Retain human oversight by:
- Nominating a point of contact for public inquiries about algorithms.
- » Providing a channel for challenging or appealing of decisions informed by algorithms.
- » Clearly explaining the role of humans in decisions informed by algorithms

Signed		
Chief Executive:	Chief Information Officer:	Chief Privacy Officer:
Organisation:	Organisation:	Organisation:
Date:	Date:	Date:

OPTION TWO : ALL NEW ALGORITHMS EXCLUDING BUSINESS RULES DRAFT

New Zealand Government

Stats NZ Tatauranga Aotearga

ALGORITHM CHARTER FOR AOTEAROA NEW ZEALAND

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What is an algorithm?

An algorithm is an analytical processes that interprets or evaluates information (often using large or complex data sets) to identify patterns and trends to inform decisions.

What is a Business Rule?

A Business Rule is a simple algorithm created by people that use rules to constrain or define a business activity. They make determinations about individuals or groups, without a significant element of discretion.

Action

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Commitment

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The Algorithm Assessment Report used the *Principles for the Safe and Effective Use of Data and Analytics* developed by the Privacy Commissioner and the Government Chief Data Steward to make recommendations about algorithm use.

The recommendations led to the establishment of the *Data Ethics Advisory Group* in 2019 and other work is ongoing.

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Commitment:

Our organisation understands that decisions made using algorithms impact people in New Zealand.

We commit to the actions outlined in this charter in developing all new algorithms, except Business Rules. Over the next five years, we commit to aligning existing algorithms excluding Business Rules with the actions outlined in this Charter and the *Principles for the Safe and Effective use of Data and Analytics*.

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 - » Identifying and actively engaging with people, communities and groups who have an interest in algorithms, and consulting with those impacted by their use.
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Signed		
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OPTION THREE : OPERATIONAL ALGORITHMS ONLY DRAFT

New Zealand Government

ALGORITHM CHARTER FOR AOTEAROA NEW ZEALAND

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What are operational algorithms?

These are analytical processes that interpret or evaluate information (often using large or complex data sets) that result in, or materially inform, decisions that impact significantly on individuals or groups. They may use personal information about the individuals or groups concerned, but do not need to do so exclusively.

Action

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We commit to the actions outlines in this charter in developing all new operational algorithms.

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Chief Executive:	Chief Information Officer:	Chief Privacy Officer:
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Date:	Date:	Date:

OPTION FOUR: STAGED IMPLEMENTATION DRAFT

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We commit to the actions outlined in this charter in developing all new algorithms, excluding business rules. For the first two years, these commitments will apply to operational algorithms only.

'Over the next five years, we commit to aligning all existing algorithms with the actions outlined in this Charter and the *Principles for the Safe and Effective use of Data and Analytics*'

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Date:	Date:	Date: