Report to the Minister of Statistics:
Responding to feedback on the Algorithm Charter

Date	11 September 2019	Priority	Medium	Ref number	MM1882

Timeline and next steps

Decision or action required by:	16 September 2019
Will be discussed at:	Officials' meeting on 16 September 2019 if required
Purpose	▪ The purpose of this briefing is to provide an update on the development of a voluntary algorithm charter and agree next steps ahead of the meeting of Digital and Data Ministers on 25 September.
Linkages	▪ The charter is part of the wider algorithm transparency work that also includes a workforce capacity initiative and a timeline for possible algorithm regulation. ▪ A companion report includes details about the workforce capacity initiative (MM1888) and outlines next steps. ▪ This work delivers on our Open Government Partnership commitment to increase the transparency and accountability of how government uses algorithms.
Publicity	▪ We have consulted widely across-government with 28 agencies about the draft algorithm charter. ▪ If appropriate, this briefing will be proactively published on the Stats NZ website as per standard practice.

Recommended action

It is recommended that you:

1. **Note** that this report should be considered alongside the companion report about the workforce capacity initiative (MM1888).

    NOTED

2. **Note** that officials were invited by Digital and Data Ministers to report back about a voluntary algorithm charter at their next meeting on 25 September.

    NOTED

3. **Note** that we have consulted with a wide range of agencies about a draft charter and made several changes to reflect this feedback

    NOTED

4. **Note** that we intend to discuss the revised draft with the Digital Government Leadership Group of Chief Executives (DGLG) at their next meeting on 26 September and seek their endorsement and agreement to a preferred option for implementation.

    NOTED

5. **Agree** that this briefing and the draft Charter be circulated in advance of and discussed at the next Digital and Data Ministers meeting on 25 September

    AGREE / DISAGREE

In confidence

6. **Seek** agreement from Digital and Data Ministers at their meeting on 25 September that yourself, and the Minister for Digital Government Services, make any amendments to the draft Charter arising from the discussion at the DGLG meeting.

AGREE / DISAGREE

7. **Seek** agreement from Digital and Data Ministers at their meeting on 25 September to publish the draft Charter for public consultation by the end of 2019 following these amendments

AGREE / DISAGREE

8. **Note** that publishing the Charter this will meet New Zealand's commitment to engagement with civil society as part of the Open Government Partnership Action Plan and contribute to our wider commitment on algorithmic transparency

NOTED

9. **Note** that we propose to report back to Digital and Data Ministers in early 2020, following public consultation about the revised draft charter and seek agreement for implementation of the Charter.

Eleisha Hawkins
General Manager, System and Partnerships
Stats NZ

Hon James Shaw
Minister of Statistics
Date:

Background

1. In October 2018 we undertook an assessment of the use of algorithms in 14 government agencies. The Algorithm Assessment report (the assessment) made a number of recommendations that could help New Zealanders be informed and have confidence in how the government uses algorithms to inform decisions about individuals.

2. In June 2019 we advised you that we had identified a range of possible options to progress work on the recommendations. This included a mandated action plan, a voluntary charter or an initiative to improve data ethics in the analytics workforce. We recommended the combination of a voluntary charter and workforce capacity initiative as the most viable ways to respond to the recommendations of the assessment and advised you that these options had received broad support from agencies.

3. At the last meeting of Digital and Data Ministers in June 2019, Ministers endorsed these options and agreed the direction of this work could include eventual regulation of public and private sector algorithms. Officials were invited to report back to the next Digital and Data Ministers meeting with a plan for delivering the endorsed options and an indicative timeline for possible regulation.

4. We have been developing the plan for a voluntary charter and workforce capacity initiative in consultation with other government agencies. The Government Chief Digital Officer has agreed to lead the work on a timeline for possible regulation as a part of their existing work programme with the World Economic Forum.

The Algorithm Charter

5. The Algorithm Charter (the Charter) is intended to provide a clear response to the recommendations of the assessment and to increase public confidence in government use of algorithms by providing a tangible commitment from signatory agencies to increase transparency and accountability.

6. The Charter and the wider system work around algorithmic transparency is an opportunity to position New Zealand government as a thought leader in this space. Responding to the assessment builds on existing momentum to support New Zealanders and contribute meaningfully to global debate on this important and growing issue.

We consulted on an initial draft charter

7. We initially consulted with government agencies on a high-level charter, which articulated several of the principles for the Safe and Effective Use of Data and Analytics (see appendix two), but which did not describe how these might be implemented in significant detail. We received written feedback from 17 agencies, with a range of different responses to the charter:

    - Some agencies confirmed they would be willing to sign up to the draft charter as proposed.

    - Other agencies agreed with the charter, and supported its intended purpose, but had concerns regarding its scope, how accountability would attach to the text, and what this would mean for implementation.

    - Some agencies indicated they wouldn't support signing the charter in its current state or felt it wouldn't be appropriate to sign as they do not use algorithms.

8. We heard that the data system is crowded and guidance for best practice needs to align with existing activity. There is broad support for continuing to align the charter with the Principles. We developed the following model to explain how the charter could relate to existing system tools currently under development and included this as part of our consultation.

Overarching agreement to demonstrate commitment to public	**Algorithm Charter** *Administered by GCDS, signed by government agencies*	
Sector-specific policies and guidelines for data use	**e.g. Data Protection and Use Policy** *Development facilitated by Social Investment Agency*	
Agency-specific frameworks for data use	**e.g. Privacy, Human Rights and Ethics Framework** *Administered by the Ministry of Social Dvevelopment*	

9. Much of the feedback we received suggested that adopting the kind of incremental approach promoted by the charter as being 'too little' but other feedback from agencies has been equally opposed to more significant reform, such as the mandated action plan, consulted on earlier this year, as being 'too much'.

We have revised the draft Charter to reflect agency feedback

10. A charter signed by New Zealand government agencies will contribute positively to the use of algorithms by government and signal a commitment to ethical practise in emerging technologies. We believe that a public document, like the charter, signed by Chief Executives provides an appropriate level of accountability.

11. We have revised the draft charter to reflect agency feedback (see appendix one). This revision includes responses to the concerns expressed by agencies in the following ways:

   - **Accountability:** the revised draft charter includes a range of specific actions that relate directly to the recommendations from the assessment. This includes expectations on reporting and reviewing. We see this as a positive step towards greater transparency and accountability at a pace that's manageable for agencies.

   - **Scope:** the revised draft charter confirms that the scope for the agreement is algorithms only. It nominates the Principles for the Safe and Effective Ese of Data and Analytics as a tool that agencies will use in algorithm work. The rationale for this is that incremental progress will contribute to long-term system change, and the original commission from Ministers was to develop an algorithm charter in line with recommendations from the algorithm assessment report.

   - **Implementation:** the revised draft charter provides a list of specific actions that agencies commit to delivering on over the next 5 years. It outlines these actions so that the public can be confident about what will change as a result of agencies signing the Charter, but we are making a deliberate choice not to dictate to agencies in this document how they will go about implementation. This follows the model of the Accessibility Charter[1] (see appendix 3).

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[1] As a model, the Accessibility Charter follows a hybrid of regular public reporting and central reporting support; agencies report 6-monthly on their progress against commitments with support from an official within the Ministry of Social Development. Reports are sent to the Minister for Disability Issues and shared with responsible officials across the relevant agencies.

Building a consensus view across the data system

12. As the Charter will be signed by Chief Executives, we propose to table the current revised draft Charter with the members of the Digital Government Leadership Group (DGLG) for discussion at their next meeting on 26 September. This group is well-positioned to take both a system-wide view on appropriate content for the charter and make commitments on behalf of agencies about becoming signatories.

13. At that meeting we will seek that the DGLG endorse the revised draft Charter, discuss options for implementation, and agree a preferred option for implementation. This model of seeking endorsement from Chief Executive's follows the same model as was used for the Accessibility Charter.

Next steps

14. We recognise that the sequencing of the Digital and Data Ministers meeting on 25 September and DGLG meeting on 26 September is not ideal for finalising the revised draft charter and implementation.

15. We seek your agreement that this paper and the revised draft Charter be circulated to Digital and Data Ministers ahead of the meeting on 25 September and request that Ministers provide comments or feedback on the revised draft at that meeting.

16. We recommend that you seek the agreement of the Digital and Data Ministers that the Minister for Government Digital Services and yourself make any amendments to the Charter arising from the DGLG meeting on 26th September

17. Following this we recommend the draft Charter is published for public consultation, meeting New Zealand's Open Government Partnership commitment to collaboration with civil society.

18. We propose to provide a final report back to Digital and Data Ministers, including a summary of feedback received from consultation in early 2020 and seek agreement for finalisation and implementation of the Charter.

Appendix one: Revised Draft Algorithm Charter

Algorithm Charter

September 2019 – REVISED DRAFT FOR ENDORSEMENT BY DGLG

Across the government data system, algorithms have a key role in supporting agencies to undertake their work to improve the lives of people in New Zealand. This Charter exists to demonstrate government's commitment to using algorithms in a fair and transparent way.

Our organisation is committed to transparent and accountable use of algorithms and other advanced data analytics techniques. Over the next 5 years we will use the Principles for the safe and effective use of data and analytics in our work.

This means we will:

- Clearly explain how significant decisions are informed by algorithms and be clear where this isn't done for reasons of greater public good (for example, national security).
- Embed a Te Ao Māori perspective in algorithm development or procurement.
- Ensure that the perspectives of other communities, such as LGBTQI, Pasifika and people with disabilities are taken into account.
- Identify and consult with groups or stakeholders with an interest in algorithm development.
- Publish information about how data are collected and stored.
- Offer technical information about algorithms and the data they use, upon request.
- Develop or adapt tools and processes to ensure that privacy, ethics, and human rights considerations are considered as a part of algorithm development and procurement.
- Regularly collect and review data relating to the implementation and operation of algorithms, and periodically assess this for bias or unintended consequences.
- Have a robust method for peer-reviewing these findings.
- Clearly explain who is responsible for automated decisions and what methods exist for challenge or appeal via a human.

Signed

Chief Executive: Chief Information Officer   Chief Privacy Officer

Organisation: Organisation   Organisation

Date: Date: Date:

Principles for the safe and effective use of data and analytics

Background

Guidance, oversight, and transparency are essential to fostering trust, confidence, and integrity around the use of data the government holds on behalf of New Zealanders. It's important for Kiwis to understand how their personal data is used.

These principles support safe and effective data and analytics. They will underpin the development of guidance to support government agencies on best practice for the use of data and analytics for decision-making.

The principles were jointly developed by the Chief Government Data Steward and the Privacy Commissioner.

Deliver clear public benefit

The use of data and analytics must have clear benefits for New Zealanders. Data and data analytics are tools that support decision-making and it's essential that in collecting and using public data, government agencies consider, and can demonstrate, positive public benefits.

This includes:

- considering the views of all relevant stakeholders

- ensuring all associated policies and decisions have been evaluated for fairness and potential bias and have a solid grounding in law

- embedding a te ao Māori perspective through a Treaty-based partnership approach.

Ensure data is fit for purpose

Using the right data in the right context can substantially improve decision-making and analytical models, and will avoid generating potentially harmful outcomes.

Decision-makers need to be aware of how data is collected and analysed, including the accuracy, precision, consistency, and completeness of data quality, and take special care when re-using data that was originally collected for another purpose.

They should also be conscious of analytical models constructed to interpret data, and any automated decision-making occurring as part of this process. Ensuring data and analytical models are fit for purpose will help avoid risks like bias or discrimination.

Focus on people

Keep in mind the people behind the data and how to protect them against misuse of information. It's essential to consider the privacy and ethical implications of any analytical process that draws on data collected about people, as using data and analytics for decision-making can have real-life impacts.

Consider the methods used to protect personal identifying information and preserve the security of any output. Combining multiple anonymous datasets can re-identify individual people.

Personal information should only be kept for as long as necessary.

Maintain transparency

Transparency supports collaboration, partnership, and shared responsibility, and is essential for accountability. This includes ensuring New Zealanders know what data is held about them; how it's kept secure; who has access to it; and how it's used.

Consultation with stakeholders and Māori as partners ensures manaakitanga (data users show mutual respect), and kaitiakitanga (New Zealanders are mindful of their responsibilities and the communities they source data from), by making sure all data uses are managed in a highly trusted, inclusive, and protected way.

Data use and analytical processes should be well documented and in line with all relevant legislation, and state sector guidelines. Explanations of decisions – and the analytical activities behind them – should be in clear, simple, easy-to-understand language.

Understand the limitations

While data is a powerful tool, all analytical processes have inherent limitations in their ability to predict and describe outcomes. These limitations are sometimes not evenly distributed, meaning they can perpetuate or intensify poor outcomes for particular groups. An awareness of these limitations is essential when analysing data. Decision-makers must be fully informed.

Developing data capability helps to create depth of understanding and implement the most useful data tools while keeping any limitations in mind.

Regular assessments to check for bias and other harmful elements, and address any over-reliance on correlations, are essential in the development and operation of analytical processes. Feeding assessment outcomes back into the design of systems and processes can help ensure unfair or discriminatory outcomes aren't generated.

Retain human oversight

Analytical processes are a tool to inform human decision-making and should never entirely replace human oversight.

Ensure significant decisions based on data involve human judgement and evaluation, and that automated decision-making processes are regularly reviewed to make sure they're still fit for purpose.

Decision-makers should approach analytical tools with an appropriate awareness of limitations of data quality and other sources of error.

To ensure accountability, decisions based on analytical methods or automated processes affecting people should be openly disclosed, and appropriate review and feedback mechanisms developed to preserve fundamental rights and freedoms.

Accessibility Charter

Our organisation is committed to working progressively over the next five years towards ensuring that all information intended for the public is accessible to everyone and that everyone can interact with our services in a way that meets their individual needs and promotes their independence and dignity.

Accessibility is a high priority for all our work.

This means:

- meeting the New Zealand Government Web Accessibility Standard and the Web Usability Standard, as already agreed, by 1 July 2017

- ensuring that our forms, correspondence, pamphlets, brochures and other means of interacting with the public are available in a range of accessible formats including electronic, New Zealand Sign Language, Easy Read, braille, large print, audio, captioned and audio described videos, transcripts, and tools such as the Telephone Information Service

- having compliance with accessibility standards and requirements as a high priority deliverable from vendors we deal with

- responding positively when our customers draw our attention to instances of inaccessibility in our information and processes and working to resolve the situation

- adopting a flexible approach to interacting with the public where an individual may not otherwise be able to carry out their business with full independence and dignity.

- Our organisation will continue to actively champion accessibility within our leadership teams so that providing accessible information to the public is considered business as usual.

Chief Executive   Manager Communications   Manager IT

Date

New Zealand Government