

DATA ETHICS ADVISORY GROUP REVIEW

Final Report

12 November 2020

Confidential

Released under Official Information Act 1982



CONTENTS

Introduction	3
Main conclusions and options	5
Insights	9
Purpose, role and focus	10
Outputs and achievements	15
Operating approach	19
Membership and resourcing	23
Supporting the Treaty principles	28
Alignment with other groups	31
Options for consideration	37
Overview	38
Options, including benefits and challenges	40
Appendices	48
List of persons interviewed	49
Bibliography	50

Released under Official Information Act 1982

INTRODUCTION

Preface

This report has been prepared for Statistics NZ by Wendy Weber, Bryan Field, Natasha Kuka, and Richard Tait of MartinJenkins.

Context for the review

The Data Ethics Advisory Group (the Group) was set up in September 2019 by the Government Chief Data Steward (GCDS). At that time, it was determined that the operation and membership of the Group should be reviewed after one year to ensure that the Group was achieving its aims.

The Group's primary aim is to assist the New Zealand Government to maximise opportunities and benefits from new and emerging uses of data, while responsibly managing potential risks and harms. The rapid advances in digital and data environments present considerable opportunities to improve the lives of people and communities, and the way in which government operates, but they also present challenges to ensure data is used appropriately.

Objectives and focus of the review

The key objective of this review of the Group is to determine how well it is achieving its stated aims and to identify any required changes and improvements. Specifically, this review has considered the Group's:

- Purpose, role and focus
- Outputs and achievements
- Operating approach

- Membership and resourcing
- Support of the Treaty principles
- Alignment with other groups

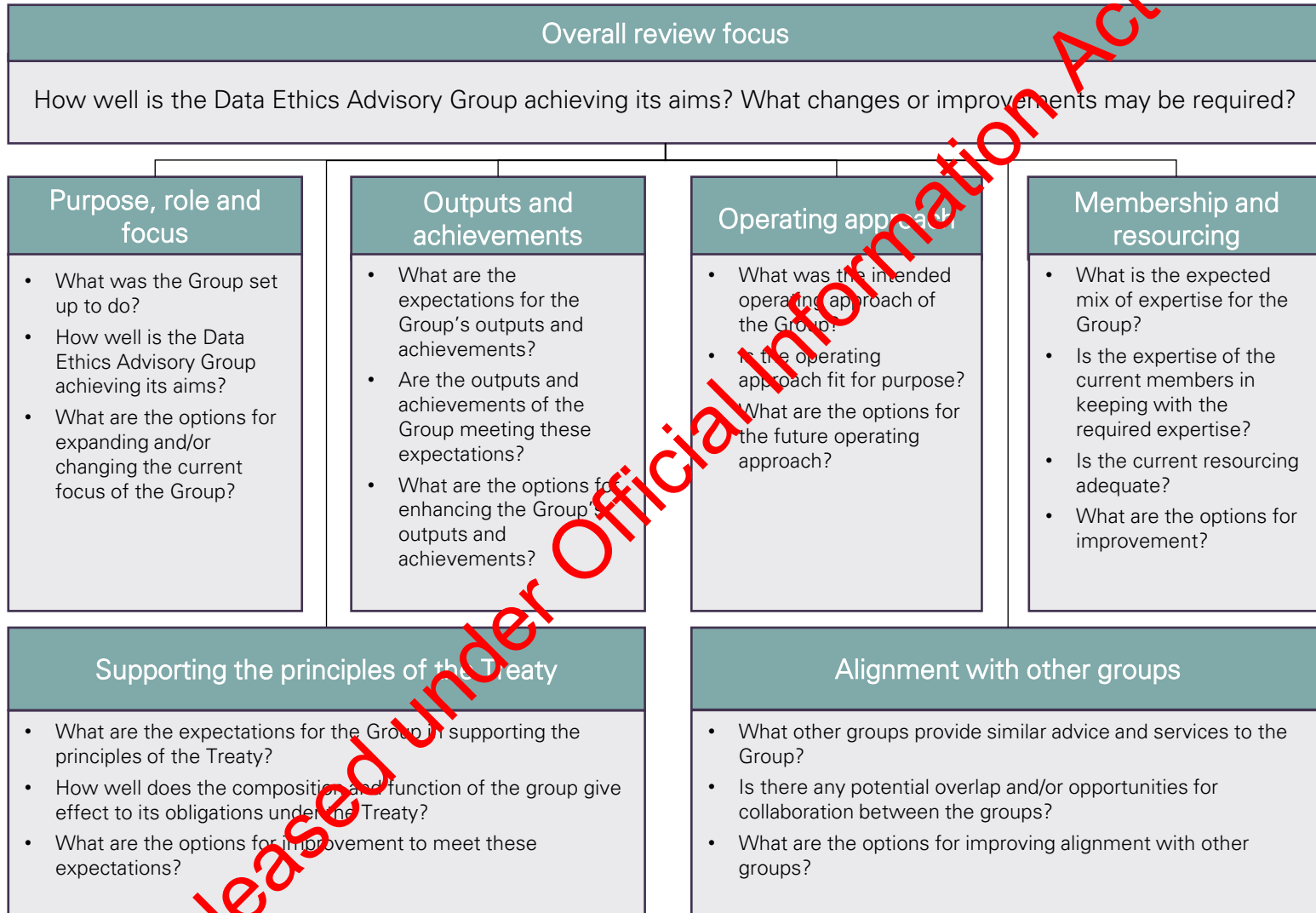
An overview of the review questions for each of these areas is provided on the following page.

Approach to the review

The review took place over a period of six weeks and was undertaken in three phases:

1. **Inception and planning** This phase agreed the broad parameters for the review, including scope, timeframes and key stakeholders to interview.
2. **Research and interviews** Twenty-one individuals who are stakeholders in the Data Ethics Advisory Group were interviewed (See Appendix I for a full listing), alongside a review of relevant documentation. We also facilitated a session with the Group to obtain their feedback as a collective.
3. **Analysis and reporting** Findings from the 'research and interviews' phase were analysed and provided insights to inform our current state analysis. On the basis of the identified improvement opportunities, a range of options were developed for consideration.

REVIEW QUESTIONS



MAIN CONCLUSIONS AND OPTIONS

Released under Official Information Act 1982

MAIN CONCLUSIONS

The Data Ethics Advisory Group has the potential to make a positive impact but needs to sharpen its focus and be appropriately resourced to unleash its potential.

Some successes but not yet fully meeting expectations

The Group has had some successes in providing advice to government agencies and undertaking research on the international approaches to data ethics. It is still early days and COVID-19 was very disruptive to embedding the Group and its operating rhythm. However, the impact the Group is having in achieving its aims is not yet fully meeting expectations.

Focus on 'data ethics assurance upon request' with a relatively low uptake

The Group has been primarily focused on providing advice on data ethics related to specific data-use initiatives in response to requests from government agencies. For a variety of reasons, the number of requests has been fairly low and has not been focused on the more high risk projects in terms of data ethics. In addition, the advice does not have to be followed by the agencies. Continuing the current focus 'as is' means the Group would miss out on opportunities to use its expertise and potential influence to full effect.

The Group's current resourcing and operating approach is not in keeping with the scope of its purpose and role

The Group's purpose and role as described in its Terms of Reference are broad and ambitious. However, the Group was initially expected to meet only four times a year, is currently provided with 0.4FTE in secretariat support, and has no

additional allocated funding to commission research or other projects.

Need to sharpen the Group's focus as well as strengthen its operating approach and resourcing

To be more effective in achieving its overall aim, the Group should expand and/or change its current focus. At the same time, it should decide on a primary area of focus since the Group has limited time and resources. Even with a more specific focus, the Group will require additional resources to support its work in order to be effective. More time involvement from the members may also be needed. The Group's operating approach also needs adjustments to ensure it is aligned to the different choices about focus.

Four options to sharpen the Group's focus

On the following page, we have summarised the main options to sharpen the Group's focus and enhance its impact. The report provides a more in-depth description of the options and an assessment of the benefits and challenges of each option.

Supporting the principles of the Treaty

The general consensus by the Group's members is that the Group is not yet meeting the expectation of fully supporting the principles of the Treaty of Waitangi. There is a separate set of options for consideration to address this issue.

MAIN OPTIONS

Four main optional focus areas for the Group have emerged.

#	Option	Group's area of focus	Key pros and cons
1	<p>'Data ethics assurance' focus</p> <p>Deepen the data ethics assurance role on behalf of the Government</p>	<p>Initial focus on identifying potential data ethics issues, ensuring transparency, and advising on mitigating measures.</p> <p>Compared to the current approach, there would be a more direct and proactive approach to identifying and addressing potential data ethics issues.</p>	<p>If the right leverage can be established, this approach would provide a more direct impact on maintaining public trust in the government's use of data, by focusing attention in the areas that need it most.</p> <p>The ToR will have to be adjusted to provide the Group with more leverage. The lack of an agreed data ethics framework may also be a potential impediment.</p>
2	<p>'Trusted advisor' focus</p> <p>Strengthen the advisory role for government agencies</p>	<p>Initial focus on enhancing the capability of government agencies to maximise data-use opportunities while managing potential risks.</p> <p>Compared to the current focus, there would be a more proactive approach in strengthening the capability of government agencies and providing useful tools and support. More balanced focus between encouraging data-use innovation and data ethics assurance.</p>	<p>Enhancing the capability in data-use innovation and data ethics and providing practical data ethics guidelines and self-assessment tools would be beneficial to agencies and the Government as a whole.</p> <p>Since advice does not have to be sought or accepted, the direct influence on preventing data ethics issues may be limited. The proactive approach to capability building and developing tools will require more time and resourcing.</p>
3	<p>'System-level advisor' focus</p> <p>Widen the role towards providing fresh thinking and insights</p>	<p>Initial focus on providing thinking and advice at a system level on data-use innovation and data ethics to GCDS and the Government.</p> <p>Compared to the current focus, there would be a shift from advising individual agencies to becoming a 'think tank' and advising GCDS and the Government at the system level.</p>	<p>This focus will support New Zealand in being ahead of the debate on data ethics and to develop an agreed data ethics framework as a first step.</p> <p>It would be a radical departure from the current focus and would potentially overlap with the focus of the Digital Council.</p>
4	<p>Combined areas of focus</p> <p>Combine any or all of the above areas of focus</p>	<p>Combine two or three areas of focus as described above</p>	<p>Combining areas of focus would cover more of the Group's Terms of Reference</p> <p>It could lead to a lack of clarity of the Group's focus (both internally and externally) and the need for substantially more time from members and more resourcing.</p>

BASELINE IMPROVEMENTS FOR CONSIDERATION

Regardless of the choice of focus area, there are certain baseline improvements which should be considered to enhance the effectiveness of the Group.

More frequent Group meetings

According to the Terms of Reference, the Group is expected to meet four times a year or every 13 weeks. In practice, the Group has already increased the frequency of their meetings. Feedback from the Group was that the frequency of meetings should go up to approximately every 6 weeks to be able to cover sufficient ground and be responsive to requests for advice within a reasonable timeframe.

If the selected focus area requires substantially more time commitment from the members than initially expected, alternative arrangements should be considered to ensure members are adequately compensated for their time.

Additional Secretariat support

Right now, the Secretariat consists of a part-time (0.4 FTE) Advisor. The Advisor is providing all the support as laid out in the Terms of Reference. If the frequency of Group meetings and number of received requests for advice go up, there may be need for additional support at the Advisor level.

The Group also suggested that to be able to become more proactive and effective, additional full time support is needed at a Principal Advisor level to help with research, analysis, and writing. The focus of this person's work and the required expertise will partly depend on the selected area of focus.

Enhanced alignment with other groups

There are several other groups such as the Digital Council and the NZ Ethics Committee which are providing advice in areas that are potentially overlapping with the Group's area of focus. It will be important that the Group collaborates closely with these other groups so that they manage any overlap and are able to add value to each others' work. Closer relationships – such the Group's Chair or one of the Group's members being a member of one or more of the other groups – could also be considered.

Options for improving the support of the Treaty principles

The Group suggested several improvements to better meet the expectation of fully supporting the principles of te Tiriti o Waitangi. There is currently only one Māori member in the Group due to a resignation. Increasing Māori membership to at least two members was seen as a lever to increased Treaty related expertise and advice but insufficient by itself. In addition, the capability of the whole Group in the area of Te Ao Māori would need to be enhanced through training and additional Treaty-based expertise should continue to be co-opted in. There should also be close collaboration with key groups such as the Iwi Leaders forum and Te Mana Raraunga to hear their data and ethics concerns or issues first hand. The establishment of Te Ao Māori Co-Design Group was seen as a key step towards improving this area.

INSIGHTS

This section sets out insights into how well the Data Ethics Advisory Group is meeting its aims and what, if any, changes or improvements are required.

The insights are presented in themes. For each theme, an overview of the initial expectations and set up of the Group is provided first. This is followed by the findings from our interviews and desk-top review which compare the current state with the initial expectations and include suggestions for improvement. A list of persons interviewed and documentation is provided in the Appendices.

Finally – under each theme - the improvement suggestions are presented in the form of four optional areas of focus. In the next section of this report, an overview will be provided of these four options, including an assessment of benefits, challenges and resourcing requirements of each option.

Released under Official Information Act 1982

PURPOSE, ROLE AND FOCUS: Expectations

What was the Group set up to do?

The Group's Terms of Reference describes the purpose and role as follows:

Purpose	Focus on current (upon request)	Focus on current (proactive)	Focus on future
Assist the NZ Government to maximise opportunities and benefits from new and emerging uses of data	Encourage data-use innovation – upon request <ul style="list-style-type: none"> Provide advice and comments to State Sector agencies (upon request) on specific data initiatives which demonstrate new and emerging uses of data with a view to maximising opportunities and benefits Work with other groups established to provide advice to government on the current data system (upon request) 	Encourage data-use innovation – proactive <ul style="list-style-type: none"> Provide advice and comments to GCDS on specific data initiatives which demonstrate new and emerging uses of data Encourage the innovative use of data in government Work with other groups established to provide advice to government on the current data system (initiative taken by the Group) 	Encourage data-use innovation – future focus <ul style="list-style-type: none"> Provide advice and comments to GCDS on emerging trends and opportunities for innovation Provide fresh thinking and suggestions for how NZ's current data system may be changed or improved Work with other groups established to provide advice to government on the future data system
While responsibly managing potential risks and harms	Data ethics assurance – upon request <ul style="list-style-type: none"> Provide advice and comments to State Sector agencies (upon request) on data ethics and the appropriate governance of specific data initiatives (including reflecting the principles of Te Tiriti o Waitangi) 	Data ethics assurance - proactive <ul style="list-style-type: none"> Provide advice and comments to GCDS on data ethics and the appropriate governance of specific data initiatives Encourage the ethical use of data in government Extend an invitation to the Minister where the Group is concerned that their guidance has been misinterpreted or applied in bad faith 	Data ethics assurance – future focus <ul style="list-style-type: none"> Provide advice and comments to GCDS on data ethics issues and areas of concern with respect to emerging trends and opportunities for innovation

In its first year, the Group has been primarily focused on providing data ethics assurance upon request.

PURPOSE, ROLE AND FOCUS: Findings

How well is the Data Ethics Advisory Group achieving its aims?

The Group is currently only partially achieving its aims because its purpose and role as described in the ToR are broad ranging while the resourcing and influencing mechanisms of the Group are limited.

To be effective in achieving its overall aim, the primary focus of the Group should be sharpened, and it should have the appropriate resourcing as well as operating approach aligned with the chosen focus.

The Group's Terms of Reference is very broad

The Group's purpose as described in the ToR covers the spectrum from encouraging data-use innovation to providing data ethics assurance. It also expects the Group to be responsive to requests for advice as well as proactive in providing advice and support – both with a focus on current and future developments.

The Group is currently only covering part of its purpose and role

To date, the Group has primarily focused on providing data ethics assurance upon the request from government agencies. This only covers part of its overall purpose and role. This should not be seen as a criticism but as a natural consequence of the need to prioritise given very broad expectations and limited time and resources.

Need to sharpen the Group's focus

However, to be more effective in achieving its overall aim, the Group members felt that the Group should expand and/or change its current focus.

"We are expert academics, thought leaders and innovators who have a lot to offer and we are now being asked to do a policeman's role – and that without any authority. The only pressure we have is that our advice is public but we have no leverage."

At the same time, given the Group's limited time and resources, it should decide on its primary area of focus within the roles it has been set up to carry out.

Four options to sharpen the Group's focus

Based on the feedback from the Group's members, the GCDS, and the government agencies, four options to sharpen the Group's focus emerged (see following page for details)

1. 'Data ethics assurance' focus – with sufficient leverage to make a difference
2. 'Trusted advisor' focus – providing helpful support and guidance to government agencies
3. 'System-level advisor' focus – using the Group's expertise to provide fresh thinking at a system level
4. Combined areas of focus – a combination of the above

Each area of focus would aim to produce specific outputs and achievements, and require a fit-for-purpose operating approach and resourcing – which will be discussed in the other sections.

PURPOSE, ROLE AND FOCUS: Options

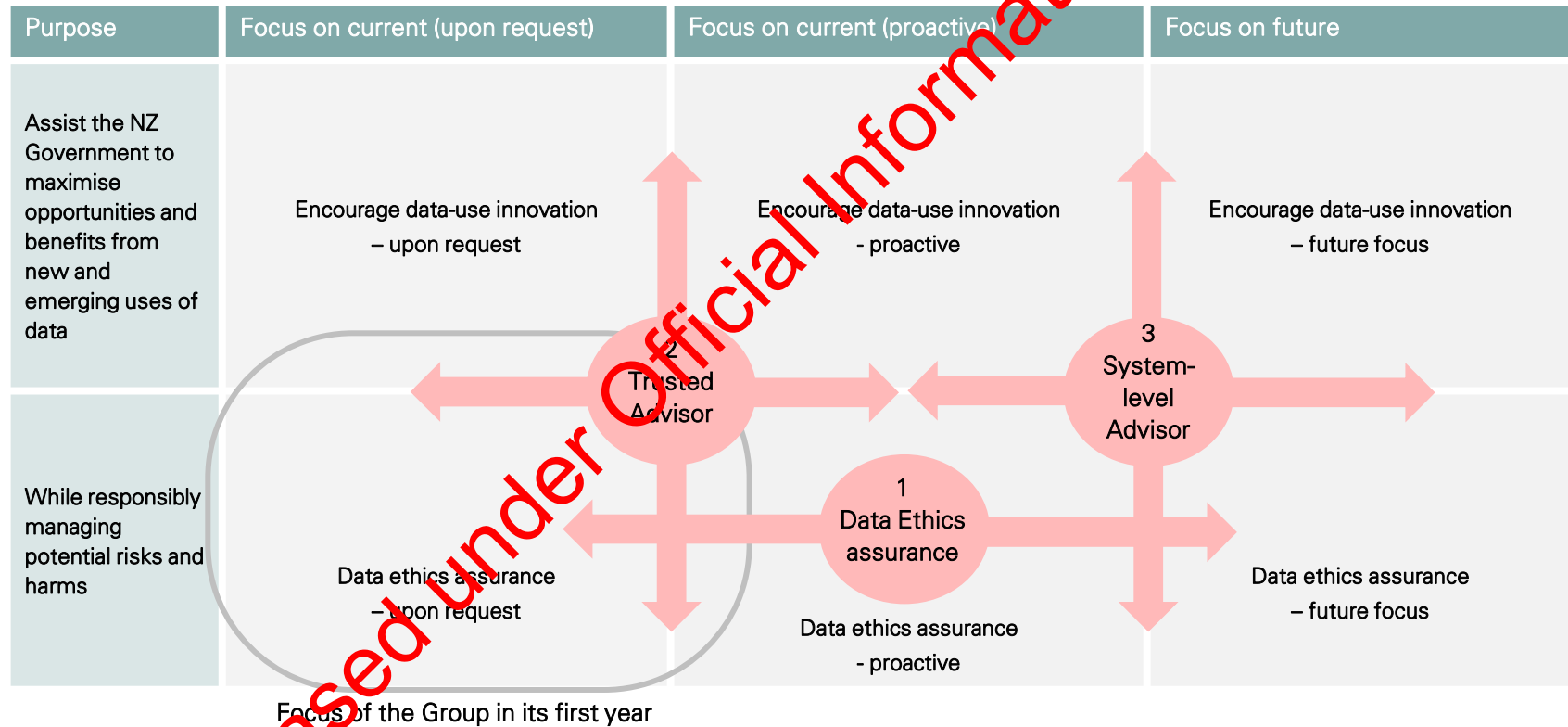
What are the options for expanding and/or changing the current focus of the Group?

#	Optional focus areas	Suggested changes and improvements	Rationale
1	<p>'Data ethics assurance' focus</p> <p>Deepen the data ethics assurance role on behalf of the Government</p>	<p>Initial focus on proactively identifying potential data ethics issues, ensuring transparency, and advising on mitigating measures.</p> <p>Compared to the current focus, there would be a more direct and proactive approach to identifying and addressing potential data ethics issues – supported from the top</p>	<p>With the appropriate leverage, the Group could be the <i>'fence at the top of the cliff'</i> rather than the <i>'ambulance at the bottom'</i>. It would address the current frustration by the Group of not being able to tackle the current data-use initiatives with a relatively high data-ethics risk profile.</p>
2	<p>'Trusted advisor' focus</p> <p>Strengthen the advisory role for government agencies</p>	<p>Initial focus on enhancing the capability of government agencies to maximise data-use opportunities while managing potential risks.</p> <p>Compared to the current focus, there would be a more proactive approach in strengthening the capability of government agencies and providing useful tools and support. And a more balanced focus between encouraging data-use innovation and data ethics assurance.</p>	<p>Based on the feedback, government agencies would welcome support in maximising data-use opportunities while managing potential risks. A central group of experts could provide advice, drive the development of self-assessment tools, and create networking links. Data ethics assurance would still be provided upon request.</p>
3	<p>'System-level advisor' focus</p> <p>Widen the role towards providing fresh thinking and insights</p>	<p>Initial focus on providing thinking and advice at a system level on data-use innovation and data ethics to GCDS and the Government.</p> <p>Compared to the current focus, there would be a shift away from advising individual agencies to becoming a 'think tank' and advising GCDS and the Government.</p>	<p>One could argue that providing advice to agencies is time intensive and may have less impact than a focus on system-level advice. Providing advice to the GCDS and the government at a system-level and, for example, facilitating the development of an agreed data-ethics framework for the government, could have a broader impact.</p>
4	<p>Combined areas of focus</p> <p>Combine any or all of the above areas of focus</p>	<p>Combine two or three areas of focus as described above</p>	<p>By combining areas of focus, the Group could in principle achieve more of its purpose and role as described in its Terms of Reference. This would, however, require more adjustment to resourcing and the operating approach.</p>

PURPOSE, ROLE AND FOCUS: Options (continued)

What are the options for expanding and/or changing the current focus of the Group?

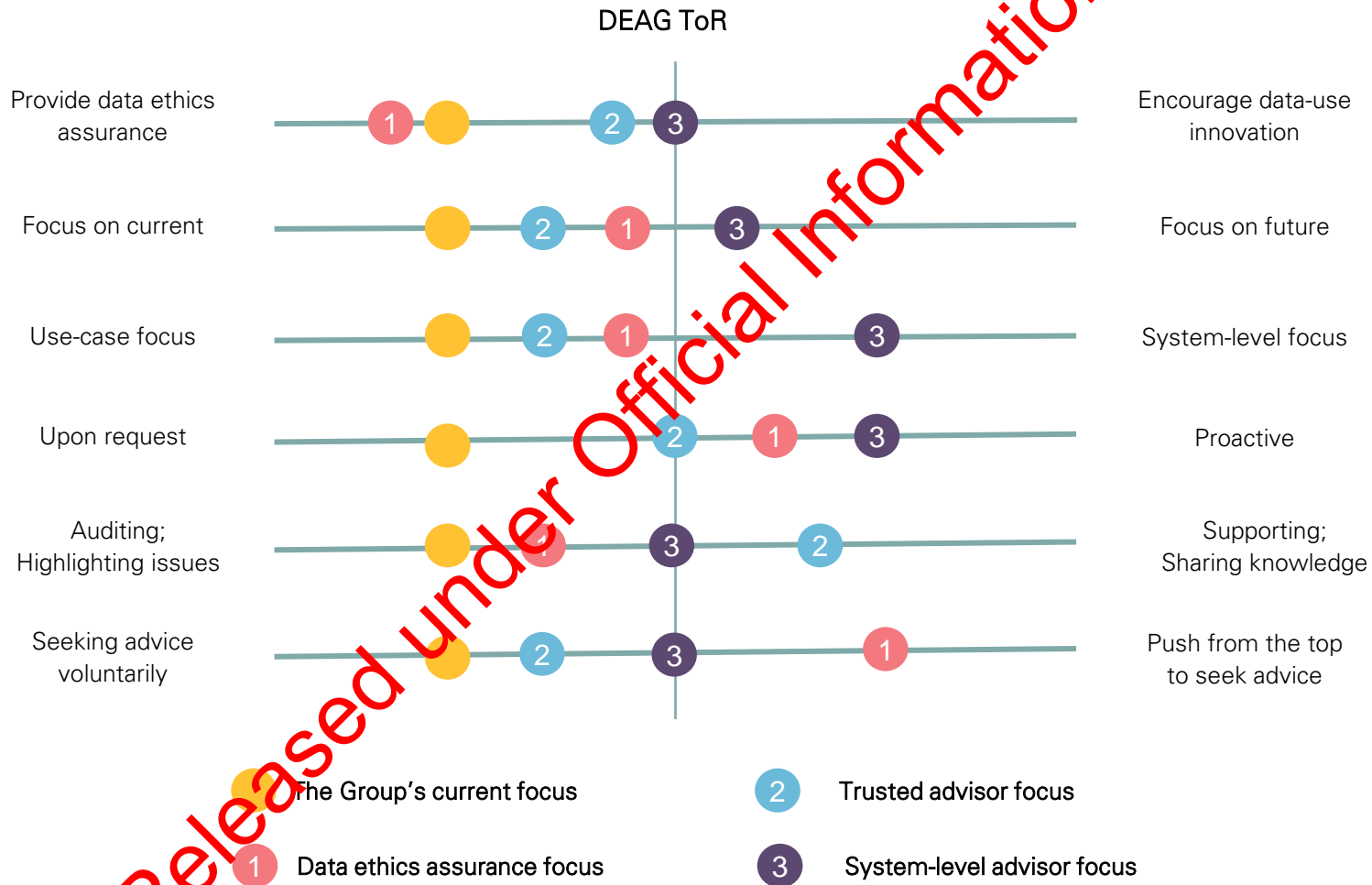
A depiction of the focal point of the first three options is as follows: (Option #4 'Combined areas of focus' would be a combination of two or three of these options)



PURPOSE, ROLE AND FOCUS: Options (continued)

What are the options for expanding and/or changing the current focus of the Group?

At a more detailed level, the shifts in focus compared to the current can be depicted as follows



OUTPUTS AND ACHIEVEMENTS: Expectations

What are the expectations for the Group's outputs and achievements?

The expectations for the Group's outputs can be derived from the Terms of Reference as follows

Purpose	Focus on current (upon request)	Focus on current (proactive)	Focus on future
Assist the NZ Government to maximise opportunities and benefits from new and emerging uses of data	Encourage data-use innovation – upon request <ul style="list-style-type: none"> Advice and comments to State Sector agencies (upon request) on specific data-use initiatives with a view to maximise opportunities and benefits Advice to government on current data-use innovation – in collaboration with other groups (upon request) 	Encourage data-use innovation – proactive <ul style="list-style-type: none"> Advice and comments to GCDS on specific data initiatives which demonstrate new and emerging uses of data Presentations, meetings and think pieces to encourage the innovative use of data in government Advice to government on current data-use innovation – in collaboration with other groups (initiative taken by the Group) 	Encourage data-use innovation – future focus <ul style="list-style-type: none"> Advice and comments to GCDS on emerging trends and opportunities for innovation Presentations, meetings and think pieces on how NZ's current data system may be changed or improved Advice to government on the future data system – in collaboration with other groups
While responsibly managing potential risks and harms	Data ethics assurance – upon request <ul style="list-style-type: none"> Advice and comments to State Sector agencies (upon request) on data ethics and the appropriate governance of specific data initiatives (including reflecting the principles of Te Tiriti o Waitangi) 	Data ethics assurance - proactive <ul style="list-style-type: none"> Advice and comments to GCDS on data ethics and the appropriate governance of specific data initiatives Presentations, meetings and think pieces to encourage the ethical use of data in government Initial data ethics framework and self-assessment tool for agencies Invitation to the Minister where the Group is concerned that their guidance has been misinterpreted or applied in bad faith 	Data ethics assurance – future focus <ul style="list-style-type: none"> Advice and comments to GCDS on data ethics issues and areas of concern with respect to emerging trends and opportunities for innovation

Focus of the Group in its first year

OUTPUTS AND ACHIEVEMENTS: Findings

Are the outputs and achievements of the Group meeting the expectations?

The Group has provided some advice to government agencies and undertaken research on the international approaches to data ethics. However, the outputs and achievements of the Group are not yet meeting the expectations as described in the Terms of Reference. It is still early days and COVID-19 disrupted the embedding of the group and its work.

The Group works well together and its expertise is well respected

Getting the Group up and running can be seen as an achievement in itself. The expertise of the Group's members is highly regarded by the government agencies we interviewed. The members are bringing a broad range of perspectives to the table and work well together. The meetings are seen as well run and the Group navigated successfully through some difficult issues in its first year.

Research on international approaches to data ethics

The Group commissioned the preparation of two discussion papers. The 'International Data Ethics Framework' paper discusses the current landscape of data ethics frameworks, and explores common themes which are particularly relevant to the function of the Group. The other paper discusses the National Statistician's Data Ethics Advisory Committee (NSDEC) operating in the UK – as an example for the Group.

Advice provided to government agencies

The Group provided data ethics advice in response to requests from three government agencies: Ministry of Education, MBIE, and Stats NZ. In total, Group guidance was provided in response to six requests.

Relatively low volume of requests for advice

The Group members expressed disappointment with the low volume of requests for advice. There was also frustration that the requests were not in relation to items with a high data ethics risk profile. The reasons for the low volume and the low-risk nature of the items brought to the Group were identified as follows:

- It's voluntary and government agencies may view seeking advice as an impediment to speedy progress
- Some agencies have specialists internally who are responsible for data ethics
- Government agencies are wary of the advice being published which could potentially damage their reputation
- The advice by the Group to MoE on the 'Equity Index' item created some tension which may be deterring other agencies to seek advice
- It is not clear to agencies whether DEAG is focused on formal 'data-ethics assurance' or a 'trusted advisor'
- DEAG is a relatively new group and not everybody knows about its existence and purpose
- The impact of COVID-19 in 2020 (see below)

Impact of COVID-19

The lockdown in response to COVID-19 had a negative impact on the Group's productivity in its first year. The meetings during lockdown were virtual and only lasted one hour. The first in-person meeting after lockdown was held in July 2020. This is important context when looking at the outputs and achievements of the Group to date.

OUTPUTS AND ACHIEVEMENTS: Findings (continued)

Are the outputs and achievements of the Group meeting the expectations?

Agency feedback on outputs

The Group's advice has mostly been regarded as useful and relevant by the agencies.

The **Stats NZ** recipients of the advice were highly appreciative of the feedback and support. They saw the Group as providing a useful additional checkpoint which brings transparency to what they are doing. However, there was concern by Data Ventures (Stats NZ) that the Group only meets a few times a year – which may not give the Group enough agility to respond in a timely manner to innovative items and product releases.

The **MBIE** recipient also felt that it was useful that the Group acts as an independent advisor providing a test point for agencies. The guidance by the Group was overall viewed as useful. However, the recipient would have preferred an opportunity to discuss the advice – rather than being provided with one-off written feedback. Having only one point of engagement with the Group was not seen as sufficient. More frequent, informal advice from the Group at an earlier stage in the project was also suggested.

The first item that **MoE** brought to the Group on the 'Equity Index' presented some issues. The biggest issue was that the item was brought to the Group very late in the process – when it is difficult to still be receptive to advice which would have been welcome earlier. The other issue was that MoE was not clear what type of things the Group would be looking for and did not provide the right information at the presentation. The initial advice from the Group was seen as harshly worded and unfair – since some things had been put in place by MoE but those had not been part of the presentation. It was also felt by MoE that the

advice went beyond the questions they had posed and the remit of the Group. Although the relationship at the time could be described as 'adversarial', MoE did come back to the Group with another item.

MoE requested advice from the Group on 'Adding PISA data to the IDI' and this is one of the pieces of guidance that the Group is particularly proud of. The item came to the Group at the right time in the process. MoE was half-way through their project and was receptive to the guidance. The types of questions were also in line with the Group's expectations and expertise.

The outputs and achievements of the Group are not yet meeting expectations

Although the Group has made some progress, it has so far primarily focused on advising government agencies on data-ethics issues upon request. Even making an impact in this area has been a struggle given the low volume of requests for advice, the constraint of being able to only answer the questions being asked, the relatively infrequent Group meetings (partly because of COVID but also as prescribed in the ToR), and the lack of resources and/or funding to undertake more proactive activities.

Given the experience to date, it does not seem feasible for the Group to meet all the expectations as laid out in the Terms of Reference. As mentioned under 'purpose, role and function', an important first step will be to clarify and agree where the Group will focus its efforts and what outputs it can truly be expected to provide – given the right operating approach and resources.

OUTPUTS AND ACHIEVEMENTS: Options

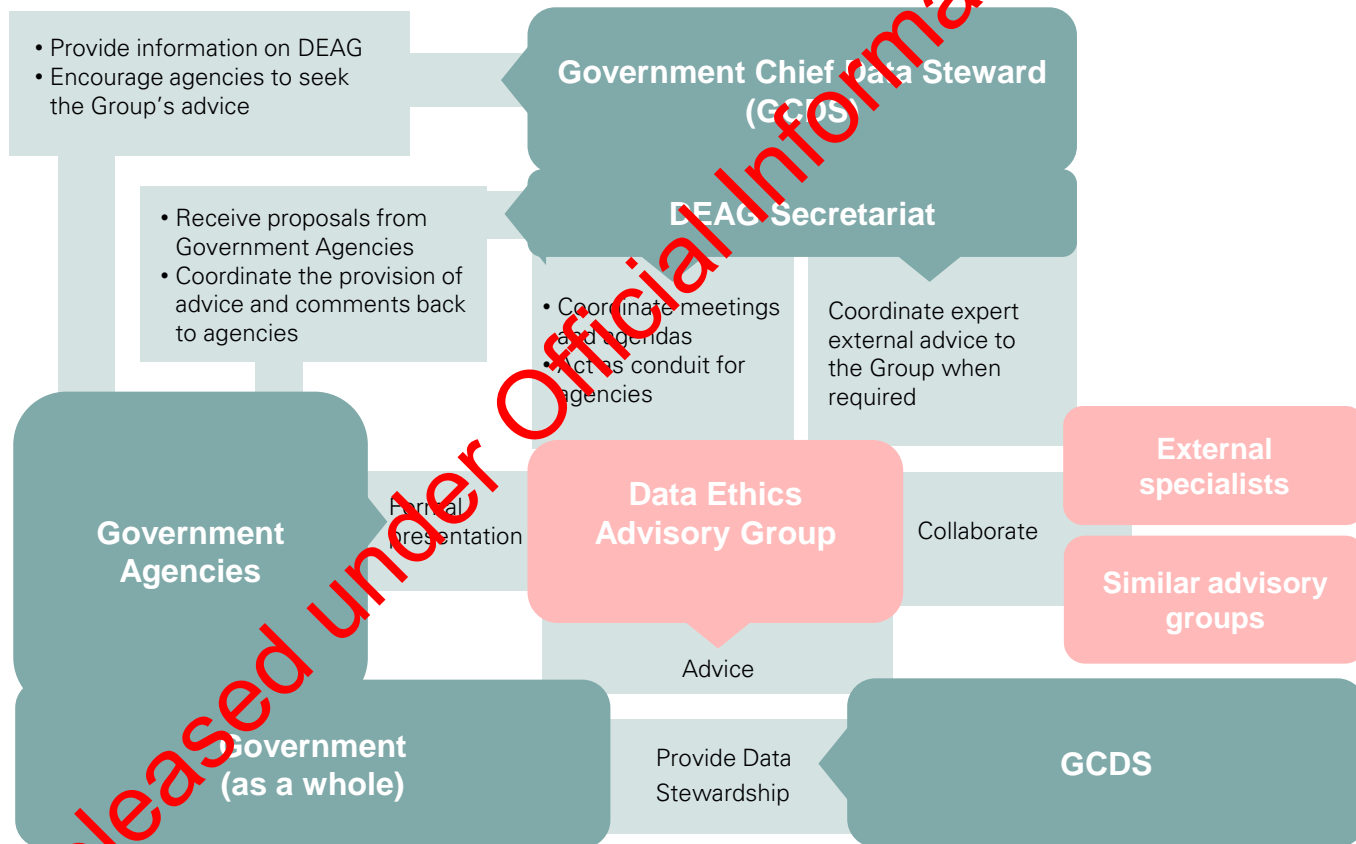
What are the options for enhancing the Group's outputs and achievements?

#	Optional focus areas	Suggested focus of the Group's efforts	Expected outputs and achievements
1	<p>'Data ethics assurance' focus</p> <p>Deepen the data ethics assurance role on behalf of the Government</p>	<ul style="list-style-type: none"> Identify potential areas of data ethics risks for the Government – both with regard to specific data use initiatives and more general innovation in data use Provide advice to government agencies and the Government on key risks with respect to data ethics Facilitate the development of a data ethics framework 	<ul style="list-style-type: none"> Clearly identified areas of data ethics risks Advice to government agencies and the government on key risks with respect to data ethics Data ethics framework and guidelines
2	<p>'Trusted advisor' focus</p> <p>Strengthen the advisory role for government agencies</p>	<ul style="list-style-type: none"> Provide advice to government agencies to support their data-use innovation and data ethics management Develop and provide practical data ethics guidelines and self-assessment tools Facilitate presentations and discussion sessions to raise knowledge and exchange ideas Provide useful networking connections for the agencies 	<ul style="list-style-type: none"> Enhanced capability of government agencies to maximise data-use opportunities and manage data-ethics risks Practical data ethics guidelines and self-assessment tools Networking connections for agencies
3	<p>'System-level advisor' focus</p> <p>Widen the role in providing fresh thinking and insights</p>	<ul style="list-style-type: none"> Analyse current and future developments and brief Ministers and government officials what is coming up (both benefits and risks) Support Stats NZ in being ahead of the debate in New Zealand on data ethics Add to the NZ stock of knowledge on data ethics and identify any gaps in safeguards Facilitate the design of a data ethics framework and guidelines for the Government 	<ul style="list-style-type: none"> Advice to Ministers, government officials and GCDS on current and future developments in data-use innovation and data ethics Think-pieces and research papers on data-use innovation and data ethics – providing practical information and advice Data ethics framework and guidelines
4	<p>Combined areas of focus</p> <p>Combine any or all of the above areas of focus</p>	Combinations of the above	Combinations of the above

OPERATING APPROACH: Expectations

What was the intended operating approach of the Group?

The intended operating approach of the Group, based on the Terms of Reference and additional feedback, can be depicted as follows



OPERATING APPROACH: Findings

Is the current operating approach fit for purpose?

For DEAG to be effective in any or all of its potential roles, the current operating approach needs adjustment. For an effective data ethics assurance focus, the Group needs more leverage. For a trusted advisor focus, the operating approach needs to be more informal as well as focused on providing proactive advice and tools. For a system-level advisor focus, the Group's time needs to be focused more on research, design and engagement rather than providing one-on-one advice to agencies. A combined focus requires a combination of the relevant operating approaches.

The current operating approach is not well suited to any of the Group's potential roles

The current operating approach does not provide enough leech for an effective data assurance role, is too formal and one-sided for an effective trusted advisor role, and would need a complete shift for an effective system-level advisor role.

For a data-ethics assurance focus, the Group needs more leverage and a more proactive approach

The current operating approach does not provide the Group with adequate leverage to perform an effective data ethics assurance role. Government agencies seek advice from the Group on a voluntary basis, the Group can only respond to the specific questions the agencies present, and the Group's advice can subsequently be ignored by the agencies. This part of the current operating approach is more suited to a trusted advisor role where the desired outcome is the raising of awareness and capability rather than directly providing data ethics assurance.

The Group felt that to be more effective in the data ethics assurance role, it needs to focus more on proactively identifying areas and initiatives which carry a high potential data ethics risk. The Group should also be allowed to inform government officials and Ministers on potential risks – with a view to being invited to provide advice on how to mitigate that risk.

For a trusted advisor focus, the approach needs to be more informal, proactive and supportive

The voluntary nature of seeking and accepting advice in the current operating approach is in line with a trusted advisor focus. However, the formal written application for advice, the single point of face-to-face engagement with the Group, and the publication of the advice suggests a formal data ethics assurance focus. This approach makes it relatively difficult for the Group to build a trusting relationship and be seen as supportive.

Members of the Group as well as the government agencies we interviewed suggested having more frequent informal discussions earlier in the process – without publishing the discussion at this stage. In addition, when the Group provides advice, there should be more opportunity for the agencies to discuss the feedback with the Group before the advice is finalised and published.

Another suggestion made was to organise breakfast sessions and presentations to exchange ideas and lift the knowledge and understanding of government officials in data-use innovation and data ethics.

OPERATING APPROACH: Findings (continued)

Is the current operating approach fit for purpose?

For a system-level advisor focus, there needs to be a shift from advising agencies to advising GCDS and the Government

The current operating approach supports a primary focus on inviting government agencies to apply for advice, undertaking the evaluation of data use initiatives from a data ethics perspective, and then formulating and providing the advice. This process currently takes up a lot of the time of the Group, leaving little time for 'providing fresh thinking and suggestions for how New Zealand's current data system may be changed and improved'. The focus on assessing current data use initiatives also does not leave much time for future-focused thinking.

To have sufficient time for this high level thinking, one option is for the Group to meet more regularly (e.g. at least every 3 weeks) to cover both providing advice on data use initiatives to government agencies and to provide advice on emerging trends and opportunities to GCDS and the Government.

The other option is to make the strategic choice to no longer provide advice on individual data-use initiatives but instead provide advice at a system level. This advice could, for example, focus on developing a data ethics framework and guidelines for the Government. A strong future focus is needed to ensure such a framework would be 'future-proofed'.

The shift from advising agencies to advising the Government through GCDS would mean a radical change of the current operating approach.

For a combined focus, the Group needs to combine the relevant operating approaches

For the combined focus, two things should be taken into consideration when combining operating approaches.

First, it may be difficult to combine the data ethics assurance and trusted advisor focus because it is based on a different relationship with government agencies. If the Group is more seen as a 'data ethics assurance watchdog', government agencies might be less inclined to see and use the Group as a trusted advisor.

Second, combining the system-level advisor focus with either of the two other focus areas would require substantially more time investment from the Group as well as additional resourcing.

OPERATING APPROACH: Options

What are the options for the future operating approach?

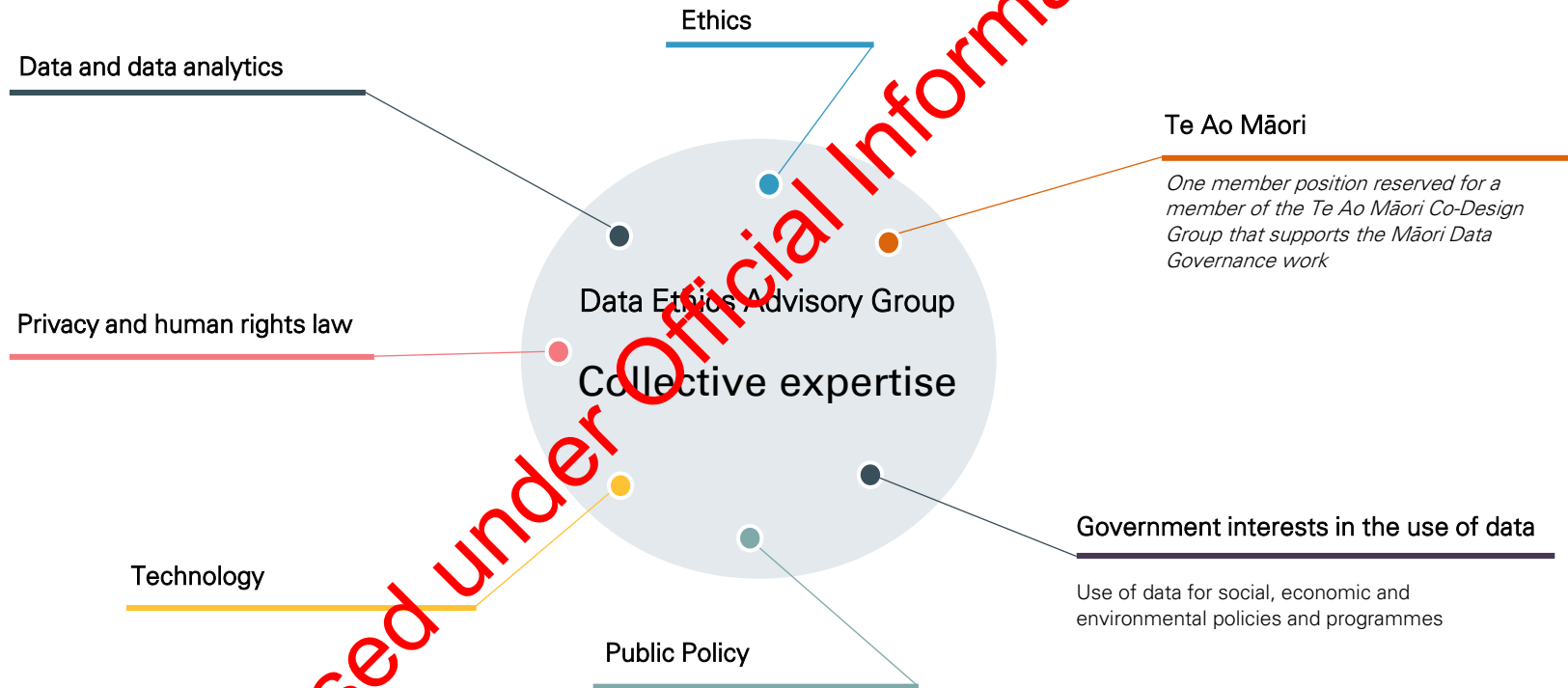
#	Optional focus areas	Suggested operating approach	Rationale
1	<p>'Data ethics assurance' focus</p> <p>Deepen the data ethics assurance role on behalf of the Government</p>	<ul style="list-style-type: none"> • More proactive approach in identifying potential areas of data ethics risk – (However, seeking and accepting the Group's advice would still be optional not mandatory) • Adjust the ToR to enable the Group to directly go to Ministers and government officials to alert them to potential data ethics risk areas – with a view to be invited to provide advice on risk mitigation • Optional: Chair of DEAG becomes a member of the Digital Council – which may support access to Ministers 	<p>To be able to be more proactive in addressing potential areas of data ethics risk, the Group must have effective mechanisms to influence government agencies to come to the Group for advice on specific items. Being able to alert Ministers and government officials of potential data ethics risk areas to be further assessed is one such mechanism – without going so far as to make it mandatory.</p>
2	<p>'Trusted advisor' focus</p> <p>Strengthen the advisory role for government agencies</p>	<ul style="list-style-type: none"> • Be seen as a trusted advisor – focused on providing support rather than 'auditing' • Conduct informal discussion sessions with agencies to provide early advice • Iterative interaction between the Group and the agencies seeking advice • Presentations and discussions to lift awareness • Develop and provide practical self-assessment tools 	<p>The Group would be seen as being "in the corner" of the government agencies and providing helpful and supportive advice and tools. Compared to the current operating approach, there would be more informal and iterative interaction between the Group and the agencies with a focus on lifting the agencies' awareness and capability.</p>
3	<p>'System-level advisor' focus</p> <p>Widen the role towards providing fresh thinking and insights</p>	<ul style="list-style-type: none"> • Shift away from advising government agencies to advising SCDS and the Government • The Group's discussions become the basis for think-pieces and research projects • Invite experts to meetings to delve into specific topics • Strong collaboration with other similar groups • Receive funding to commission research 	<p>The Group would be seen as the 'think tank' with respect to data-use innovation and data ethics in Government. There should be strong collaboration with other groups, such as the Digital Council, to utilise the combined expertise and avoid overlap.</p>
4	<p>Combined areas of focus</p> <p>Combine any or all of the above areas of focus</p>	<p>Combinations of the above</p>	<p>See above.</p>

Released Under Official Information Act 1982

MEMBERSHIP AND RESOURCING: Expectations

What is the expected mix of expertise of the Group?

The Group's Terms of Reference states that the Group will have seven members who will collectively have the following expertise:



MEMBERSHIP AND RESOURCING: Findings

What expertise are the members providing - in relation to the expectations?

The current six members of the Group cover the following areas of expertise (as prescribed by the Terms of Reference). (Two members of the Group have recently resigned and have not yet been replaced)

Current DEAG members	Data and data analytics	Ethics	Te Ao Maori	Privacy & Human Rights Law	Public Policy	Technology (incl Science & Innovation)	Government interests
Professor Juliet Gerrard	✓	✓			✓	✓✓	✓
Kirikowhai Mikaere	✓✓	✓	✓✓		✓	✓✓	✓
Dr Nessa Lynch	✓	✓		✓✓	✓		✓
Kate O'Connor	✓	✓✓			✓	✓	✓
Dr Will Koning	✓✓	✓				✓✓	✓
Professor Colin Simpson	✓✓	✓			✓	✓✓	✓

✓ Core area of expertise

✓ Good knowledge and understanding of this area

MEMBERSHIP AND RESOURCING: Findings (continued)

Are there any gaps in the current expertise of the Group? Is the current resourcing adequate?

The expertise of the current members is highly regarded and covers the required areas of expertise. Two members have recently resigned, creating a gap in specific areas – most notably in the area of Te Ao Māori expertise. Depending on the chosen area of focus, specific additional expertise may be required but could be accessed through alternative routes. For the Group to be effective in any or all of its potential roles, additional full-time secretariat support would be essential.

Highly regarded and relevant expertise

As can be seen in the table on the previous page, the Group covers the required expertise and brings a broad range of knowledge and experience. The Group members are highly regarded and the Chair has a lot of mana and 'clout' as the Chief Science Advisor of the Prime Minister.

The size of the Group

The Group members felt that the current size of the Group – 8 members, including the Chair – is the right size for the Group.

Resignations

Two members have recently resigned. In addition, the Chair will step down at the end of the year. It will be important for the future success of the Group to replace the Chair and the two members with individuals who bring a similar high level of mana and expertise. How best to fill these positions would also depend on the selected areas of focus going forward.

Te Ao Māori perspective and expertise is under-represented

What can be seen in the overview on the previous page is that Te Ao Māori perspective and expertise is relatively under-represented. This is partly because one of two members who recently resigned brought additional expertise in this area. The Group feels that there should be at least two Māori members with the relevant expertise.

Also, it was felt by the Group members that Te Ao Māori expertise of all members requires an up-lift for the Group to be effective in supporting the principles of the Treaty.

Additional specific expertise required

Based on the experiences in the first year, the members indicated the need for the following additional expertise (apart from Te Ao Māori perspective and expertise discussed above):

- Expertise on the impact of data use on minorities and socially vulnerable groups
- More data science expertise – including an understanding of the workings of algorithms
- Experience with developing Data Ethics guidelines
- Legal expertise – data privacy

This expertise may be found in new members filling the current vacancies or the expertise could be co-opted as and when needed.

MEMBERSHIP AND RESOURCING: Findings (continued)

Are there any gaps in the current expertise of the Group? Is the current resourcing adequate?

Option to create a coopted pool of experts on a more permanent basis

There is an option to create a more permanent pool of co-opted experts from which the Group could pull people for particular topics.

The current problem with co-opting is that there is little induction and the expectations are often not clear. Having a more permanent arrangement could mitigate this issue. The experts in this more permanent pool would have an opportunity to put up their hand if they want to contribute to a specific topic or item.

This larger pool of experts would also create the opportunity to have representatives from different communities who would like a voice – such as the Pasifika community.

Increasing and adequately compensating Group members' time involvement

All the optional focus areas that emerged from the feedback require more time involvement from the Group's members compared to the initial expectations – both in terms of meeting frequency as in preparation activities. Currently, the members have full-time jobs and generally do not have a lot of time to devote to the Group. One suggested option is to adopt the model that the Digital Council is using and compensate the members for contributing a certain percentage of their time (e.g. 10 to 20 %) to the Group. This option would have significant funding implications but may be required depending on the expectations for the Group's future outputs and achievements.

Need for more substantive Secretariat support

The Group suggested that to be able to become more proactive and effective, additional full time support is needed at a Principal Advisor level to help with research, analysis, and writing. The focus of this person's work and the required expertise will partly depend on the selected area of focus.

Right now, the Secretariat contains a part-time (0.4 FTE) Advisor. The Advisor is providing all the support as laid out in the Terms of Reference, including receiving proposals from agencies, coordinating the provision of advice and comments back to agencies, coordinating expert external advice to the Group when required, and coordinating Group meetings and agendas.

If the frequency of Group meetings and number of received proposals go up, there will be need for at least a full-time Advisor. However, for the system-level advisor focus, a part-time Advisor will likely be sufficient since there would be no interaction with agencies.

Allocated funding for research and other external support

Currently, the Group does not have any allocated funding for commissioning research or other projects. The two discussion papers were prepared for the Group by an intern from Juliet Gerrard's office on a budget-neutral basis.

Any funding for commissioning research should be considered in conjunction with funding a full-time Principal Advisor position who would be able to undertake research and prepare papers.

MEMBERSHIP AND RESOURCING: Options

What are the options for change and/or improvement?

#	Optional focus areas	DEAG membership	Secretariat and other resources
1	<p>'Data ethics assurance' focus</p> <p>Deepen the data ethics assurance role on behalf of the Government</p>	<ul style="list-style-type: none"> Group should ideally meet every 4 to 6 weeks, partly depending on urgency of requests Areas of expertise: as indicated in the ToR At least two members who bring a strong Te Ao Māori perspective and expertise combined with other relevant expertise 	<ul style="list-style-type: none"> Secretariat: Principal Advisor (at least 1 FTE) to support the identification and assessment of data ethics risks – both with regard to specific data-use initiatives and more general government data-use. Advisor (at least 1 FTE) – current role but expected increased activity Creation of a more permanent pool of experts
2	<p>'Trusted advisor' focus</p> <p>Strengthen the advisory role for government agencies</p>	<ul style="list-style-type: none"> Group should ideally meet every 4 weeks – to be able to respond to requests in an agile manner More frequent interactions between the Group and the agencies would mean more time investment by the members compared to current Areas of expertise: may need more expertise focused on data innovation and its potential benefits At least two members who bring a strong Te Ao Māori perspective and expertise combined with other relevant expertise 	<ul style="list-style-type: none"> Secretariat: Principal Advisor (at least 1 FTE) to support the development of data ethics guidelines and self-assessment tools – and the preparation of presentations. Advisor (at least 1 FTE) – current role but expected increased activity and additional tasks (organising presentations and specialist group) Creation of a more permanent pool of experts
3	<p>'System-level advisor' focus</p> <p>Widen the role in providing fresh thinking and insights</p>	<ul style="list-style-type: none"> Group should ideally meet every 6 to 8 weeks Areas of expertise: may need more expertise focused on a strategic, future-focused view on data innovation and data ethics and what is happening internationally At least two members who bring a strong Te Ao Māori perspective and expertise combined with other relevant expertise 	<ul style="list-style-type: none"> Secretariat: Principal Advisor (1-2 FTE) – to support research and write reports Advisor (0.4 FTE): organising meetings; take notes of discussions Experts invited to contribute to discussions Additional funding for commissioning research and other projects if required
4	<p>Combined areas of focus</p> <p>Combine any or all of the above areas of focus</p>	<p>If multiple areas of focus are selected, the number of times the Group should ideally meet should go up accordingly.</p>	<p>If multiple areas of focus are selected, the size of the Secretariat and the resourcing should go up accordingly.</p>

SUPPORTING THE TREATY PRINCIPLES: Expectations

What are the expectations for the Group in supporting the Treaty principles?

Terms of Reference

The role of DEAG as set out in the Terms of Reference is to provide wider system and societal thinking about factors that affect new or emerging uses of data, including those issues which have the potential to affect the government data system, by reflecting the principles of Te Tiriti o Waitangi.

This expectation is not further described in the terms of reference or any supporting documentation. To inform expectations we (MartinJenkins) have developed our own view of how this responsibility could be given effect (See the paragraph on the right).

It is important to note that agencies will generally have access to their own Treaty related advice and responsibilities, for example through Chief Māori Advisors or Equity Advisors and therefore DEAG should not seek to replicate this.

What agencies will need from DEAG is advice on how Treaty principles relate specifically to data and ethics.

A way of approaching this responsibility

Below we have set out a framework with key questions that DEAG could ask or consider to reflect the principles of the Treaty in its thinking and advice:

Participation

- How have you engaged with Māori?
- How does the proposal impact on Māori?

Partnership

- Does the proposal or project relate to or impact any Treaty settlement obligations of the Crown?
- What are the Māori data sovereignty considerations? E.g. who will own and govern the data.
- Can/should the proposal or parts of the proposal be led by Māori?
- What role should Māori have in design and implementation?

Protection

- Is the approach equitable for Māori?
- What Māori values have been considered in the design?
- Are there particular Māori data interests that are relevant?
- How will you measure impacts?

SUPPORTING THE TREATY PRINCIPLES: Findings

How well does the composition and function of the group give effect to its obligations under the Treaty of Waitangi?

The general consensus by the Group's members is that the Group is not yet meeting the expectation of fully supporting the principles of te Tiriti o Waitangi. There is a separate set of options for consideration to address this issue – which can be found at the end of this section.

There was acknowledgement that the Treaty principles are an important area of focus but:

The Group is unclear what the expectations are and does not have broad Treaty-related expertise

Members acknowledged that treaty-related expertise is not an area of strength. Members noted that they need additional training in this area to adequately give effect to this responsibility.

The Treaty responsibility falls predominantly on Māori members of DEAG

Our view is that because the Group feels lacking in Treaty-related expertise, they rely heavily on Māori members to fill this void. This is a heavy responsibility on one or two members given the complexity of Treaty-related impacts. It may also result in DEAG not fully utilising other skill sets that Māori members bring if the sole focus is Māori and the Treaty.

A stronger Māori membership could help strengthen Treaty-related expertise but will not fully address it

There is currently only one Māori member on DEAG due to a resignation. Increasing Māori membership to at least two members was seen as a lever to increased Treaty related expertise and advice but insufficient by itself. As mentioned above, the capability of the whole Group in this area would need to be enhanced through training.

The establishment of Te Ao Māori Design Group and proposed relationship with DEAG may support greater understanding

The DEAG Terms of Reference note that upon establishment of the Te Ao Māori Design Group, the two groups will work together. In our view this relationship will strengthen and deepen the expertise of the DEAG. It will be important for the groups to set some clear operating principles to ensure the purpose and mana of each group is maintained. DEAG will need to be careful not to devolve 'Treaty' responsibilities to the Te Ao Māori Design Group.

SUPPORTING THE TREATY PRINCIPLES: Options

What are the main options and the benefits and challenges of each?

#	Option	Benefits	Challenges
5.1	Provide treaty-related training to all DEAG members to develop a shared view	Increased knowledge and confidence about the Treaty Reduces the load on Māori members of DEAG	Funding required for training Capacity to attend the training
5.2	Increase the number of Māori members on DEAG, with Treaty expertise	This will directly bolster Treaty-related expertise	Ability to attract additional Māori members with the relevant expertise
5.3	When the Te Ao Māori Design Group is established, develop some operating principles together around engagement and how to share expertise	A relationship with a Māori focused group will strengthen the expertise of DEAG members if there is regular engagement	Capacity to lead and engage
5.4	Consider setting up a meeting with key groups such as the Iwi Leaders forum and Te Mana Raraunga to hear their data and ethics concerns or issues first hand	Facilitates a new relationship between DEAG and the groups Ability for DEAG members to hear issues directly Reduces the load on Māori members to understand all Māori considerations	Capacity of the Group to meet with key groups Capacity of the other groups to engage with DEAG
5.5	Continue to co-opt Treaty-based expertise where needed	The ability to contract in the expertise where it is particularly needed	Funding may be required to contract in the expertise Availability of the right expertise
5.6	Consider developing a pre-assessment tool that agencies can use to do their own Treaty assessment. This tool could be based on the framework we outlined earlier	DEAG will be able to easily assess the gaps in the Treaty related thinking that agencies have previously done	Capacity or funding required to develop pre-assessment tool for Treaty assessment

ALIGNMENT WITH OTHER GROUPS: Expectations

What other groups provide similar advice and services to the Group?

There are several groups that provide ethics advice with some overlap with the Data Ethics Advisory Group

The DEAG has overlap in mandate and role with other government groups and private sector groups. The nature of the overlaps differ, but the most material overlap is with the Digital Council of Aotearoa and the New Zealand Ethics Committee.

The health research sector has its own ethics structures and processes that are regulated

Ethics approval for health sector research (including research using health data) is regulated under various legislation/regulations including the Health Information Privacy Code 1994 (administered by the Privacy Commissioner, <https://www.privacy.org.nz/legislation/privacy-act-and-codes/codes-of-practice/health-information-privacy-code-1994/>). In order to conduct research with health data researchers must have ethics approval for the work – failure to do this could result in disciplinary proceedings through the researcher's professional body.

The National Ethics Advisory Committee (NEAC) is a Ministerial ethics committee that advises the Minister of Health on ethics issues, including setting standards for health ethics. The NEAC oversees groups that consider individual ethics applications, e.g. the Health and Disability Ethics Committees. DEAG member Kate O'Connor is the chair of the Northern B committee.

Stakeholders we talked to from the Ministry of Health said that they used these ethics approval committees rather than DEAG because they are required to.

NZ Universities also have ethics approval committees for research involving human participants

All New Zealand universities undertaking research involving human participants have an ethics approval committee to ensure that the proposed research adequately protects against potential harms. Use of data falls under this definition in many cases.

The New Zealand Ethics Committee (NZEC) provides ethics advice for research falling outside the mandate of Health and Disability and Tertiary sector ethics committees

NZEC is an ethics advisory committee that meets monthly to advise on ethical issues for research that falls outside the mandate of the health sector and tertiary sector ethics committees. It is a non-profit charity that was set up in 2008 by former Health and Disability Ethics Committee chair people. The NZEC follow the Royal Society Code of Professional Standards and Ethics in Science, Technology, and the Humanities (<http://www.royalsociety.org.nz/organisation/about/code>).

NZEC was initially funded with a grant from the Ministry of Social Development, and also received a grant from the Tindall Foundation. NZEC currently receives no external funding. The committee charges researchers a fee of up to \$500 per application.

There are 12 members of the NZEC group, of which five are Māori. The group's focus is wider than data ethics, but they have some skills in this area.

ALIGNMENT WITH OTHER GROUPS: Expectations (cont.)

What other groups provide similar advice and services to the Group?

The Digital Council of Aotearoa promotes innovative use of data and technology, but is not an ethics advisory group

The purpose of the Digital Council of Aotearoa is to advise the Government on how to maximise societal benefits of digital and data-driven technologies to increase equality and inclusivity, wellbeing, and community resilience. It has seven members, including the Chair. It reports to the Minister for Digital Services and the Minister of Statistics.

The Digital Council's terms of reference refer to several focus areas that touch or overlap with the work of DEAG. These include: nurturing digital trust and confidence; balancing data use and accessibility with safeguarding and privacy; and the impact of specific technologies, such as AI and algorithms, on aspects of New Zealand society.

The Digital Council's terms of reference require it to work closely with other groups, including DEAG. The Council's work programme in year one focuses on 'trust'. The interim report about trust and automated decision-making is available now with the final report due to be published in December 2020.

The Digital Council's Chair meets with Ministers every eight weeks, and is able to draw the Ministers' attention to issues of concern.

More details on the Digital Council's purpose, terms of reference, and work programme are available on their webpage via www.digital.govt.nz.

While it offers advice on trust and safe use of data, the Digital Council is not an ethics advisory group. For example, the focus for its year one report on trust and automated decision-making – is a subset of data ethics.

The AI community in NZ has a governing forum funded by its members

The AI Forum seeks to harness the power of AI to enable a prosperous, inclusive, and thriving future New Zealand. It is a not-for-profit NGO funded by its members, and is part of the NZ Tech Alliance. The AI Forum is governed by an Executive Council of elected members. The AI Forum has six working groups, including WGE: Adapting to AI Effects on Law, Ethics, and Society. The Executive Council includes 10 members from a wide range of private sector organisations, plus members from Stats NZ and MBIE. The AI Forum submits on government policy (eg the Algorithm Charter) and has developed principles for Trustworthy AI in Aotearoa (<https://aiforum.org.nz/reports/trustworthy-ai-in-aotearoa-the-ai-principles/>).

Te Mana Raraunga (Māori Data Sovereignty Network) would be a useful collaboration partner for DEAG

Te Mana Raraunga is a network of Māori data experts that advocate for Māori sovereignty over data produced by Māori, or data about Māori. Their charter (<https://www.temanararaunga.maori.nz/tutohinga>) outlines their purpose, which includes "Ensuring data for and about Māori can be safeguarded and protected." Te Mana Raraunga could offer DEAG some useful perspectives on a data ethics framework that upholds the principles of Te Tiriti o Waitangi.

ALIGNMENT WITH OTHER GROUPS: Findings

Is there any potential overlap and/or opportunities for collaboration between the groups?

Yes, there is overlap between the DEAG and other groups. Most notably, the overlap is greatest with the Digital Council of Aotearoa and the NZ Ethics Committee. However, there is nuance to understanding and addressing these overlaps, especially since the overlap will change depending on any changes to the DEAG that the GCDS chooses to make. While there is overlap, this will probably be best addressed through collaboration between the groups. Furthermore, there are potential gaps to address as well.

Overlap with the Digital Council is around trust in automated decision making

The Digital Council of Aotearoa's work programme for year one focuses on trust. They have broken this down into three parts: building foundations (a literature review); finding out what New Zealanders think about automated decision-making (ADM), and bringing it all together (drawing insights from parts 1 and 2 above).

While data ethics is a much wider subject than trust and ADM, it does overlap with the work of DEAG (eg the item that MBIE's Immigration NZ group brought to the DEAG about automated processing of low-risk visa applications). We note that this item would also touch the work of the AI Forum.

When we talked to the Chair of the Digital Council, he mentioned that their focus was on the medium- and long-term, whereas the DEAG were focused on the short-term and data-use initiatives that were brought to them for advice. Most of the DEAG

members said they have had minimal interactions with the Digital Council to date, and little knowledge of their work. One member commented that they seemed to be more focused on leveraging the benefits of data than protecting against harms.

There is also potential for overlap with the subsequent years' work (inclusion and innovation). It will be important that DEAG and the Digital Council collaborate so that they manage any overlap and are able to add value to each others' work. This should include the chairs of DEAG and the Digital Council notifying each other of emerging issues that may require the other's attention (for example, the Digital Council wrote to Ministers about government use of data in response to COVID – DEAG may have had an interesting perspective to share on this).

Overlap with the NZ Ethics Committee needs to be explored further

The NZEC offers an avenue for ethics advice outside of the Health and Disability Ethics Committees and the University Ethics Committees, including government agencies. We have not interviewed a representative of NZEC, but our initial impressions are that they provide general ethics advice for social research, including projects with a Kaupapa Māori dimension. Collaborating with NZEC could be one way for DEAG to improve their advice that has a Māori dimension (possibly through the joint development of a framework for data ethics advice to uphold the principles of Te Tiriti o Waitangi). However, this needs to be explored further before considering it as an option.

ALIGNMENT WITH OTHER GROUPS: Findings (continued)

Is there any potential overlap and/or opportunities for collaboration between the groups?

There is potentially unmet need for data ethics advice in government, but changes to DEAG will affect this

DEAG members that we interviewed said that the items that were brought to them for advice had generally considered the ethical risks of their research and were seeking endorsement of their approach rather than seeking advice. Officials who had used DEAG's services said that they used DEAG for similar purpose (for endorsement rather than advice). Officials from agencies who are regular users of data but had not taken items to DEAG said that either they didn't know much about DEAG, or that their agency already had a comprehensive ethics process and structure.

Currently DEAG only reviews the items that are brought to it and DEAG members noted that these items were few in number. This means that there may be a greater number of data analysis projects happening in government that would benefit from expert advice on data ethics that are not seeking this advice. This is a gap that could be filled by changes to DEAG's operational settings.

If DEAG were to become more active at providing a **data ethics assurance** role, it would make sense for them to collaborate more closely with the Office of the Privacy Commissioner (since privacy is an important dimension of data ethics), and the health research ethics groups supported by the Ministry of Health. The Privacy Commissioner fulfils many functions, including investigating privacy breaches and monitoring data matching programmes between government departments. As such, they have significant

experience in this important aspect of data ethics. The health research groups have a lot of experience in setting standards for ethical health research, and could offer useful perspectives to DEAG on how this could be achieved for data ethics in government.

If DEAG were to become more of a **trusted advisor**, then there may be benefit in DEAG collaborating closely with the New Zealand Ethics Committee. While we have not talked to NZEC, their members have significant experience in social sector research, and specific experience from a Te Ao Māori perspective. It could be possible for DEAG and NZEC to collaborate on developing standards for data ethics which includes a framework that upholds the principles of Te Tiriti o Waitangi.

If DEAG were to become a **systems-level advisor**, it would make sense for them to work closely with the Digital Council and AI Forum. These bodies are focused on innovation in digital technologies, emerging technologies and uses of data (eg AI and machine learning algorithms). DEAG would be well placed to bring a data ethics lens to these data uses as they emerge in a NZ government context.

Regardless of the future direction of DEAG's work, health research ethics are well covered by the health committees and this should not be a focus for DEAG. Ethical issues around use of health data should be considered by the health committees.

ALIGNMENT WITH OTHER GROUPS: Options

What are the options for improving the alignment with other groups?

#	Optional focus areas	Suggested improvements	Rationale
1	<p>'Data ethics assurance' focus</p> <p>Deepen the data ethics assurance role on behalf of the Government</p>	<ul style="list-style-type: none"> Collaborate with the Office of the Privacy Commissioner Collaborate with the National Ethics Advisory Committee (NEAC) and Health sector research committees Recommend to Cabinet that DEAG approval be sought for all interagency data matching/sharing exercises 	<ul style="list-style-type: none"> The Office of the Privacy Commissioner fulfils several roles relevant to data ethics and a new Privacy Act 2020 comes into force on 1 December 2020 Health research ethics committees have a long history in providing ethics assurance for health research – standards for ethical health research have been developed and are implemented by the various committees. These are useful lessons from which DEAG can learn
2	<p>'Trusted advisor' focus</p> <p>Strengthen the advisory role for government agencies</p>	<ul style="list-style-type: none"> Collaborate with the NZ Ethics Committee to develop a framework for ethical data use that gives effect to the principles of Te Tiriti o Waitangi Proactively engage with government agencies on ethical use of data – develop data ethics principles and use these to engage agencies and attempt to provide advice earlier in the process 	<ul style="list-style-type: none"> The NZ Ethics Committee has a lot of experience in social sector research ethics and members who have Kaupapa Māori and Te Ao Māori capability Proactive engagement with agencies around principles for ethical use of data will allow DEAG to have a conversation with agencies about lifting their capability for data ethics and should result in more projects coming to DEAG at an earlier stage
3	<p>'System-level advisor' focus</p> <p>Widen the role in providing fresh thinking and insights</p>	<ul style="list-style-type: none"> Collaborate with the Digital Council of Aotearoa and AI Forum on emerging data uses and technologies, and future-focused research 	<ul style="list-style-type: none"> The Digital Council and AI Forum are focused on emerging technologies and uses of data (e.g. AI, machine learning, automated decision making etc.)
4	<p>Combined areas of focus</p> <p>Combine any or all of the above areas of focus</p>	<p>Combinations of the above</p>	<p>See above</p>

Released under Official Information Act 1982

OPTIONS FOR CONSIDERATION

Released under Official Information Act 1982

OVERVIEW

Summary of options, including benefits and challenges

This section of the report provides a summary description of each of the optional focus areas as well as an overview of the benefits, challenges and required resourcing for each option. It does not provide a final recommendation because the decision on the area of focus will depend on the priorities of the decision makers.

Why consider optional focus areas? Why not just keep the current state focus and make some improvements?

The current focus is primarily on providing data-ethics advice upon request to government agencies with respect to specific data-use initiatives. In terms of the Group achieving its aims, this only covers part of the scope as described in the Group's Terms of Reference. In addition, the current focus has not been highly effective since the number of requests to the Group for advice has been relatively low and certain items which could be regarded as high risk with respect to data ethics have not been brought to the Group.

For the Group to use its considerable expertise in a more effective way, it has to expand and/or change its current focus and operating approach. Covering the whole of the Terms of Reference would be a challenge given a reasonable limit to the members' time commitment and other resourcing. Therefore, some strategic choices with respect to the focus of the Group have to be made.

Suggested improvements – regardless of option

Regardless of the optional focus areas, it would be difficult for this type of advisory group to be effective when they are set up to meet only four times a year, are provided with minimal secretariat support (0.4FTE), and have no allocated funding for commissioning research or other projects.

For any of the future scenarios to work in practice, the number of Group meetings per year should be increased to approximately every 6 weeks, and the Secretariat support should be increased by 1 to 2 FTE (depending on focus area). Depending on focus area, allocated funding to commission research and other projects may also be required.

If the selected focus area requires substantially more time commitment from the members than initially expected, alternative arrangements should be considered to ensure members are adequately compensated for their time.

Options – supporting the Treaty principles

At the end of this section, we have also included the options for enhancing the Group's support of the Treaty principles. These improvement options can be considered separately from the optional focus areas – since they apply equally to each future scenario.

OVERVIEW OF MAIN OPTIONS

Four main options have emerged based on a choice of primary focus of the Group.

#	Option	Group's area of focus	Key features
1	<p>'Data ethics assurance' focus</p> <p>Deepen the data ethics assurance role on behalf of the Government</p>	<p>Primary focus on identifying potential data ethics issues, ensuring transparency, and advising on mitigating measures.</p>	<ul style="list-style-type: none"> • A more direct and proactive approach to identifying and addressing potential data ethics issues in government • Exert influence through Ministers and government officials when required (Advis' TOR to suit) • Formal data ethics advice provided to agencies upon request (as per current approach) • Facilitate development of data ethics framework and standards
2	<p>'Trusted advisor' focus</p> <p>Strengthen the advisory role for government agencies</p>	<p>Primary focus on enhancing the capability of government agencies to maximise data-use opportunities while managing potential risks.</p>	<ul style="list-style-type: none"> • A more proactive approach in strengthening the capability of government agencies • More balanced focus between encouraging data-use innovation and providing data ethics assurance • Provide data ethics guidelines and self-assessment tools • More informal sessions and discussions at earlier stages • Formal data ethics advice – still provided upon request • Networking support
3	<p>'System-level advisor' focus</p> <p>Widen the role in providing fresh thinking and insights</p>	<p>Primary focus on providing system-level thinking and advice on data-use innovation and data ethics to GCDS and the Government</p>	<ul style="list-style-type: none"> • A shift away from advising individual agencies to advising and supporting GCDS and the Government in how NZ's current data system may be changed and improved • Provide 'think pieces' on data-use innovation and data ethics • Commission and guide relevant research • Facilitate development of data ethics framework
4	<p>Combined areas of focus</p> <p>Combine any or all of the above areas of focus</p>	<p>Combine two or three areas of focus as described above</p>	<ul style="list-style-type: none"> • As above – depending on selection of focus areas

OPTION #1 Data ethics assurance focus

What are the main features of this option and what does it mean for the Group's functions and operations?

Data ethics assurance focus: Primary focus on identifying potential data ethics issues, ensuring transparency, and advising on mitigating measures.

Key features	Comparison to current	Suggested focus of the Group's efforts
<ul style="list-style-type: none"> • A more direct and proactive approach to identifying and addressing potential data ethics issues in government • Exert influence through Ministers and government officials when required • Formal data ethics advice provided to agencies upon request (as per current approach) • Facilitate development of data ethics framework and standards 	<ul style="list-style-type: none"> • Compared to the current focus, there would be a more direct and proactive approach to identifying and addressing potential data ethics issues. • The ToR would be adjusted to enable the Group to alert Ministers and government officials of data use developments and initiatives that would present data ethics risk. 	<ul style="list-style-type: none"> • Identify potential areas of data ethics risks for the Government – both with regard to specific data use initiatives and more general innovation in data use • Provide advice to government agencies and the Government on key risks with respect to data ethics • Facilitate the development of a data ethics framework
Suggested expected outputs and achievements	Suggested operating approach	Suggested alignment with other groups
<ul style="list-style-type: none"> • Clearly identified areas of data ethics risks • Advice to government agencies and the government on key risks with respect to data ethics • Data ethics framework and guidelines 	<ul style="list-style-type: none"> • Adjust the ToR to enable the Group to directly go to Ministers and Chief Executives to alert them to potential data ethics risk areas • Optional: Chair of DEAG becomes a member of the Digital Council – which supports the access to Ministers • More proactive approach in identifying potential areas of data ethics risk – (However, seeking and accepting the Group's advice would still be optional not mandatory) • Group should ideally meet every 4 to 6 weeks 	<ul style="list-style-type: none"> • Collaborate with the Office of the Privacy Commissioner • Collaborate with the National Ethics Advisory Committee (NEAC) and Health sector research committees • Recommend to Cabinet that DEAG approval be sought for all interagency data matching/sharing exercises

OPTION #1 Data ethics assurance focus

What are the benefits, challenges and resourcing requirements for this option?

Benefits	Challenges	Resourcing requirements
<ul style="list-style-type: none"> • Clear focus on providing independent oversight to ensure public transparency which gives the public confidence that data is used by Government in an ethical way • If the right leverage can be found, this approach would improve the public's trust of the Government's use of data • Directly identifies where and how things could go wrong with respect to data ethics – 'Be the fence on top of the cliff' • Compared to the other focus areas, most in keeping with the Group members' initial understanding of the purpose of the Group 	<ul style="list-style-type: none"> • Current ToR and operating approach would need to be adjusted to enable the Group to alert Ministers and government officials of potential areas of data ethics risks. • Agencies would be less likely to come to the Group on a voluntary basis • May result in a strong 'black hat' focus rather than encouraging data use innovation • The current advice on data ethics is not yet based on an agreed data ethics framework. It can be seen as fairly subjective – based on the individual viewpoints of the Group members • Being the 'watchdog' and criticising agencies provide potential reputational risks for the members of the Group 	<ul style="list-style-type: none"> • The Group should ideally meet every 4 to 6 weeks • Since the focus expands compared to the current focus, more time is needed from the Group members. They should be adequately compensated – also considering the potential risks involved in an assurance role. • Secretariat: Principal Advisor (at least 1 FTE) to support the identification and assessment of data ethics risks – both with regard to specific data use initiatives and more general government data use. • Advisor (at least 1 FTE) – current role but expected increased activity

OPTION #2 Trusted advisor focus

What are the main features of this option and what does it mean for the Group's functions and operations?

Trusted advisor focus: Primary focus on enhancing the capability of government agencies to maximise data-use opportunities while managing potential risks.

Key features	Comparison to current	Suggested focus of the Group's efforts
<ul style="list-style-type: none"> • A more proactive approach in strengthening the capability of government agencies • More balanced focus between encouraging data use innovation and providing data ethics assurance • Provide data ethics guidelines and self-assessment tools • More informal sessions and discussions at earlier stages • Formal data ethics advice – still provided upon request • Networking support 	<ul style="list-style-type: none"> • Compared to the current focus, there would be a more proactive approach in strengthening the capability of government agencies and providing useful tools and support. • There would also be a more balanced focus between encouraging data use innovation and data ethics assurance. 	<ul style="list-style-type: none"> • Provide advice to government agencies to support their data use innovation and data ethics management • Develop and provide practical data ethics guidelines and self-assessment tools • Facilitate presentations and discussion sessions to raise knowledge and exchange ideas • Provide useful networking connections for the agencies
Suggested outputs and achievements	Suggested operating approach	Suggested alignment with other groups
<ul style="list-style-type: none"> • Enhanced capability of government agencies to maximise data-use opportunities and manage data-ethics risks • Practical data ethics guidelines and self-assessment tools • Networking connections for agencies 	<ul style="list-style-type: none"> • Be seen as a trusted advisor – focused on providing support rather than 'auditing' • Conduct informal discussion sessions with agencies to provide early advice • Iterative interaction between the Group and the agencies seeking advice • Presentations and discussions to lift awareness 	<ul style="list-style-type: none"> • Collaborate with the NZ Ethics Committee to develop a framework for ethical data use that gives effect to the principles of Te Tiriti o Waitangi • Proactively engage with government agencies on ethical use of data – develop data ethics principles and use these to engage agencies and attempt to provide advice earlier in the process

OPTION #2 Trusted advisor focus

What are the benefits, challenges and resourcing requirements for this option?

Benefits	Challenges	Resourcing requirements
<ul style="list-style-type: none"> • Clear focus on building the right culture and capability of government agencies in data-use innovation and data ethics • The speed of data use innovation is outstripping the speed in which it can be regulated. Building the right mindset and capability is an alternative to regulation. • There is a clear demand from government agencies for support and advice in data use innovation and data ethics • The provision of practical data ethics guidelines and self-assessment tools would be beneficial to agencies and the Government as a whole • Conducting presentations and discussion sessions on data use innovation and data ethics would lift the capability on a wider scale • It supports a learning journey which will eventually lead to the ability to develop a data ethics framework 	<ul style="list-style-type: none"> • The fact that advice provided to the agencies will be published (even advice provided in informal sessions) will remain a deterrent for agencies to ask for advice • The trusted advisor focus may not be in keeping with the Group's members initial expectation – which was more focused on data ethics assurance • Advising on individual items and having more iterative discussions, demands a lot of time and effort from the Group for relatively little system-level impact • The calibre of the Group's expertise may be considered too high for the required time investment of being a trusted advisor 	<ul style="list-style-type: none"> • The Group should meet at least every 4 weeks – to be able to respond to requests in an agile manner • Since the focus expands compared to the current focus, more time is needed from the Group members. They should be adequately compensated. • Secretariat: Principal Advisor (at least 1 FTE) to support the development of data ethics guidelines and self-assessment tools – and the preparation of presentations. • Advisor (at least 1 FTE) – current role but expected increased activity and additional tasks (organising presentations and specialist group)

Released under Official Information Act 1982

OPTION #3 System-level advisor focus

What are the main features of this option and what does it mean for the Group's functions and operations?

System-level advisor focus: Primary focus on providing system-level thinking and advice on data-use innovation and data ethics to GCDS and the Government.

Key features	Comparison to current	Suggested focus of the Group's efforts
<ul style="list-style-type: none"> A focus on advising and supporting GCDS and the Government in how NZ's current data system may be changed and improved Provide 'think pieces' on data use innovation and data ethics Commission and guide relevant research Facilitate development of data ethics framework 	<ul style="list-style-type: none"> Compared to the current focus, there would be a shift from advising individual agencies to becoming a 'think tank' and advising GCDS and the Government at the system level. 	<ul style="list-style-type: none"> Analyse current and future developments and brief Ministers and government officials what is coming up (both benefits and risks) Support Stats NZ in being ahead of the debate in New Zealand on data ethics Add to the NZ stock of knowledge on data ethics and identify any gaps in safeguards Facilitate the design of a data ethics framework and guidelines for the Government
Suggested expected outputs and achievements	Suggested operating approach	Suggested alignment with other groups
<ul style="list-style-type: none"> Advice to Ministers, government officials and GCDS on current and future developments in data-use innovation and data ethics Think pieces and research papers on data use innovation and data ethics – providing practical information and advice Data ethics framework and guidelines 	<ul style="list-style-type: none"> Shift away from advising government agencies to advising GCDS and the Government The Group's discussions become the basis for think pieces and research projects Invite experts to meetings to delve into specific topics Strong collaboration with other similar groups Source funding to commission research 	<ul style="list-style-type: none"> Collaborate with the Digital Council of Aotearoa and AI Forum on emerging data uses and technologies

Released under Official Information Act 1982

OPTION #3 System-level advisor focus

What are the benefits, challenges and resourcing requirements for this option?

Benefits	Challenges	Resourcing requirements
<ul style="list-style-type: none">• This focus will support Stats NZ in being ahead of the debate in New Zealand on data ethics• It will add to the NZ stock of knowledge on data ethics and identify any gaps in safeguards• Compared to the other focus areas, there is a stronger focus on expected future developments with respect to data use innovation and data ethics• The focus would include facilitation of the design of a data ethics framework and guidelines for the Government – which are needed for an effective data ethics assurance role• The system-level advisor focus makes full use of the high calibre expertise of the Group's members	<ul style="list-style-type: none">• Radical departure from current focus on providing advice to agencies upon request• More direct overlap with the purpose of the Digital Council, requiring clarity on roles and collaboration• The system-level advisor focus may not be in keeping with the Group's members initial expectation – which was more focused on data ethics assurance and responding to requests for advice from government agencies	<ul style="list-style-type: none">• Number of times the Group should ideally meet: Every 6 to 8 weeks• Secretariat: Principal Advisor (at least 2 FTE fixed term) – to support research and write reports• Advisor (0.4 FTE): organising meetings; take notes – discussions• Additional funding for commissioning research projects (e.g. source grant funding – Universities)

OPTION #4 Combined areas of focus

What are the benefits, challenges and resourcing requirements for this option?

This option would be a combination of two or three of the previous options.

Benefits	Challenges	Resourcing requirements
<p>Combining areas of focus would cover a larger part of the Group's purpose and role as described in the Terms of Reference</p>	<ul style="list-style-type: none">• Less clarity of focus and role – both internally and externally• Combining the data ethics assurance focus and the trusted advisor focus may be problematic. For data ethics assurance, the Group should be independent and have the ability to escalate an issue if required. As a trusted advisor, the Group should be 'on the side' of the government agencies and provide support in meeting data ethics guidelines – rather than acting as judge.	<ul style="list-style-type: none">• Combined areas of focus require a commensurate increase in number of Group meetings, other time involvement of Group members, the size of the Secretariat and other resourcing• The question would be whether the resourcing requirements of combined options would be regarded as feasible

Released under Official Information Act 1982

OPTIONS #5: Better supporting the Treaty principles

What are the main options and the benefits and challenges of each?

#	Option	Benefits	Challenges
5.1	Provide treaty-related training to all DEAG members to develop a shared view	Increased knowledge and confidence about the Treaty Reduces the load on Māori members of DEAG	Funding required for training Capacity to attend the training
5.2	Increase the number of Māori members on DEAG	This will directly bolster treaty-related expertise	Ability to attract additional Māori members with the relevant expertise
5.3	When the Te Ao Māori Co-Design Group is established, develop some operating principles together around engagement and how to share expertise	A relationship with a Māori focused group will strengthen the expertise of DEAG members if there is regular engagement	Capacity to lead and engage
5.4	Consider setting up a meeting with key groups such as the Iwi Leaders forum and Te Mana Raraunga to hear their data and ethics concerns or issues first hand	Facilitates a new relationship between DEAG and the groups Ability for Group members to hear issues directly Reduces the load on Māori members to understand all Māori considerations	Capacity of the Group to meet with key groups Capacity of the other groups to engage with DEAG
5.5	Continue to co-opt Treaty-based expertise where needed	The ability to contract in the expertise where it is particularly needed	Funding may be required to contract in the expertise Availability of the right expertise
5.6	Consider developing a pre-assessment tool that agencies can use to do their own Treaty assessment. This tool could be based on the framework we outlined earlier	DEAG will be able to easily assess the gaps in the Treaty-related thinking that agencies have previously done	Capacity or funding required to develop pre-assessment tool for Treaty assessment

APPENDICES

- List of persons interviewed
- Bibliography

Released under Official Information Act 1982

LIST OF PERSONS INTERVIEWED

The following individuals were interviewed as part of the review.

Data Ethics Advisory Group members

Professor Juliet Gerrard – Chair

Dr Will Koning - member

Kate O'Connor - member

Professor Colin Simpson - member

Dr Nessa Lynch - member

Kirikowhai Mikaere - member

Dr Ang Jury - former member

Dr Amohia Bouton - former member

Government Chief Data Steward (GCDS)

Mark Sowden – Government Statistician

Craig Jones – Deputy Government Statistician, Data System Leadership

Dale Elvy – Manager, System Policy, Data System Leadership

Nienke van Dijken – Advisory, System Policy, Data System leadership

Digital Council

Mitchell Pham – Chair Digital Council

Agencies that took items to the Group

Data Ventures, Stats NZ – Robert Chiu, Head of Data

MBIE – Evelyn Wareham, Chief Data and Insights Officer

Stats NZ – Jacinta Paranihi Senior advisor, Data Leadership and Capability

Agencies that will take an item to the Group

MBIE – Daniel Griffiths, Manager of Markets, Evidence and Insights

Agencies which potentially may ask the Group for advice

Ministry of Justice – Caroline Greaney, General Manager, Civil and Constitutional

Inland Revenue – Doug Lambert, Data Strategy and Governance Lead

Ministry of Health – Simon Ross, Lead Data Steward

Ministry of Health – Nic Aagaard, Principal Advisor for the Health and Disability Ethics Committees and Ethics Committees for Assisted Reproductive Technologies

NZDF – Glenn Kirker, Director Information Lifecycle

RESOURCES

The following documents and websites were used as part of the review.

Documents

- Terms of Reference – Data Ethics Advisory Group (Dec 2019)
- Ethics Group – Terms of Membership
- Algorithm Assessment Report (October 2018), Stats NZ
- DEAG budget information
- Register of declared interests – DEAG members
- The Group’s guidance papers 2019 – 2020
- Discussion paper: An international example of Data Ethics Advisory
- Discussion paper: International Data Ethics Frameworks
- Data System Governance Groups A3 (2020)
- MartinJenkins report for Stats NZ: ‘Review of Secretariat and Advisory Group Functions’ (July 2017)

Websites

- <https://www.data.govt.nz/about/government-chief-data-steward-gcgs>
- <https://www.data.govt.nz/about/government-chief-data-steward-gcgs/data-ethics-advisory-group/>

- <https://www.digital.govt.nz/digital-government/leadership/digital-council-for-aotearoa-new-zealand/>
- <https://www.data.govt.nz/manage-data/co-designing-maori-data-governance/>
- <https://www.privacy.org.nz/the-privacy-act-and-codes/codes-of-practice/health-information-privacy-code-1994/>
- <http://www.royalsociety.org.nz/organisation/about/code>
- <https://www.digital.govt.nz/digital-government/leadership/digital-council-for-aotearoa-new-zealand/digital-council-reports/trust-and-automated-decision-making-interim-report/>
- <https://www.digital.govt.nz/digital-government/leadership/digital-council-for-aotearoa-new-zealand/about-the-digital-council/>
- <https://aiforum.org.nz/reports/trustworthy-ai-in-aotearoa-the-ai-principles/>