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# Submission of Transparency International New Zealand (TINZ) on Draft Algorithm Charter

## Introductory comments

TINZ welcomes this opportunity to make a submission on this important issue. We acknowledge that algorithms can be powerful tools to increase efficiency and effectiveness in use of resources, to improve knowledge and to enable innovation. However, as highlighted in the relevant reports and research, the use of algorithms has generated problems of persistent error, bias, concealment, negative extension of use and choice restriction. The Charter is an opportunity for a commitment by public sector agencies to more consistently use transparency as an accountability tool to detect, reduce and mitigate these problems.

Transparency International New Zealand is an independent chapter of a global movement with over 100 country chapters. A key advocacy point of Transparency International is that transparency, integrity and accountability are primary antidotes to corruption. Transparency International New Zealand is respected as the lead civil society group on this topic in New Zealand. We have contributed to the discussion on data on analytic use through submissions and through co-hosting of forums for public sector leaders on this topic (co-hosted with the Office of the Auditor-General).

Globally, Transparency International is active in support of civil society groups and government using open data, and is a civil society leader in the use of new technologies. A few of many examples are:

- In 2019 Transparency International launched an e-learning course entitled Using Governance Data to Fight Corruption Across the SDGs[1].
- The TI International Secretariat cooperated with the European Commission to develop ARACHNE data analytics software that cross-checks data from various public and private institutions and helps to identify projects susceptible to risks of fraud[2].
- The UK Chapter of Transparency International is adopting AI solutions to automate open-web and database research on potential partners and third parties to help provide it with the assurance that they are partnering in the fight against corruption with the right organizations[3].

[1] https://knowledgehub.transparency.org/product/using-governance-data-to-fight-corruption-across-the-sdgs-handbook-for-e-learning-course
[2] https://blog.transparency.org/2015/01/09/the-potential-of-fighting-corruption-through-data-mining/
[3] https://www.exiger.com/perspectives/transparency-international-uk-adopts-exiger%E2%80%99s-ai-powered-technology-setting-new

- Transparency Georgia operates an open-source procurement monitoring and analytics portal[4], which extracts data from the government's central e-procurement website and repackages it into user-friendly formats.
- Transparency International Solomon Islands worked with Global Witness, who used detailed research, satellite imagery, drone photography and trade data. This showed that tropical timber across the Solomon Islands is being harvested on an unsustainable scale, and that much of the activity driving this environmental destruction is at high risk of being illegal.[5]

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**TINZ Response to Consultation Questions**

For this submission TINZ is fortunate to have input from its Chair Suzanne Snively, Director John Hall, and CEO Julie Haggie.

**Does the proposed text provide you with increased confidence in how the government uses algorithms?**

1. TINZ supports the commitment in the Charter to the *Principles for the safe and effective use of data and analytics.* The combination of the two promote accountability and transparency as tools to enhance social values such as fairness, equality of opportunity/equality of outcome, equity, freedom of choice, justice, truth, autonomy, privacy and trust[6].

2. We think that improvements could be made to the data principles and reflected in the Charter:
    i. The prime focus is on the impact of algorithm use relating to people.
    **TINZ recommends** including impacts on natural systems/biodiversity.

    ii. Improving transparency for population groups or environmental/social resources that will be affected by resource allocation as a result of algorithm use.
    **TINZ recommends** that where one population group or natural resource may be more or less affected this should be identified, with a clear explanation about *why,* including a focus on fairness.

    iii. **TINZ recommends** that agencies be encouraged to welcome independent review (eg by journalists and researchers); noting that this may involve data analysis techniques which are not undertaken by the agency itself.

    iv. It is concerning that while it is expected that there will be exceptions for the "greater public good" there is no clarification of what the "greater public good" means.
    **TINZ recommends** that this is elaborated upon, to ensure true accountability.

[4] https://www.open-contracting.org/2014/02/03/how_georgia_is_handling_procurement_transparency/ https://tendermonitor.ge/en
[5] https://www.globalwitness.org/en/campaigns/forests/paradise-lost/
[6] A governance framework for algorithmic accountability and transparency, pg 19 https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624262/EPRS_STU(2019)624262_EN.pdf

3. The charter sets a general statement aimed at lessening inconsistencies identified between government agencies in the Algorithm Assessment report[7]. We think that that more could be achieved:

   i. **TINZ recommends** the inclusion of a commitment to cross agency engagement on matters such as algorithmic literacy, frameworks for algorithmic hygiene[8], governance frameworks, whistleblowing, peer bias assessments and public consultation.

   ii. The Charter and the Principles lack clarity on contracted or supply chain algorithm development. Where external organisations develop or use algorithms to support public services or projects, will the commitments in this charter apply to them? **TINZ strongly recommends** that they are included.

   iii. **TINZ strongly recommends** that the Charter is strengthened by inclusion of a commitment by government agencies to support for the development of industry standards in algorithm use.

4. TINZ fully supports the commitment to embed a Te Ao Māori perspective in algorithm development or procurement. The word 'embed' implies power sharing and accountability.

5. TINZ fully supports the commitment to take into account the perspectives of communities, such as LGBTQI+, Pasifika and people with disabilities as appropriate. **TINZ recommends** a requirement that the perspectives of other relevant vulnerable communities be taken into account as well, this should include migrant communities and representatives (noting the extensive use of algorithms by Immigration New Zealand).

6. TINZ fully supports the inclusion of a principle of accountability in the charter through clear explanations of who is responsible for automated decisions and what methods exist for challenge or appeal.

7. TINZ welcomes the inclusion of a commitment to allow more detailed information to be provided on request. We understand the cautions around providing entire data sets (gaming, commercial sensitivity, reverse engineering) but as is noted by the European Parliament[9], it is independent review of algorithm use that has exposed some significant international misuse of data, and instances of bias.

8. **TINZ recommends** a concise description of the purpose for employing transparency. The 2019 European Parliament study *A governance framework for algorithmic accountability and transparency* notes that:

   *It is helpful to divide transparency and explanation into two categories: Understanding the overall system, and understanding a particular outcome. These may require quite different approaches. A key idea to keep in mind is the goal of transparency. Is it to understand how the system works? Or how it behaves?*[10]

   This study also clarifies the clear motives for having transparency in algorithm use:

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[7] https://data.govt.nz/assets/Uploads/Algorithm-Assessment-Report-Oct-2018.pdf

[8] Algorithmic bias detection and mitigation: Best practices and policies to reduce consumer harms https://www.brookings.edu/research/algorithmic-bias-detection-and-mitigation-best-practices-and-policies-to-reduce-consumer-harms/

[9] European Parliament *A governance framework for algorithmic accountability and transparency* https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624262/EPRS_STU(2019)624262_EN.pdf

[10] https://www.europarl.europa.eu/RegData/etudes/STUD/2019/624262/EPRS_STU(2019)624262_EN.pdf

*We want systems to be transparent not to satisfy idle curiosity, but to help achieve important social goals related to accountability:*

*We want to inspect an algorithmic system's data and algorithms to:*

- *Check for bias in the data and algorithms that affects the fairness of the system. (The mechanics, costs, and secondary effects are different when checking data vs. algorithms).*
- *Check that the system is drawing inferences from relevant and representative data.*
- *See if we can learn anything from the machine's way of connecting and weighting the data - perhaps there's a meaningful correlation we had not been aware of.*
- *Look for, and fix, bugs.*
- *Guard against malicious/adversarial data injection.*
- *We want the hierarchy of goals and outcomes to be transparent so:*
- *It can be debated and possibly regulated.*
- *Regulators and the public can assess how well an algorithmic system has performed relative to its goals, and compared to the pre-algorithmic systems it may be replacing or supplementing.*

*We want an organisation's compliance status to be public so:*

- *Regulators can hold the organisation accountable in case of failure.*
- *The public can evaluate the trustworthiness of the organisation, so people can make informed decisions as users about the services offered, and so citizens can become better informed about the benefits, risks, and trade-offs of algorithmic-based services overall.*

9. **TINZ recommends** that the charter needs to either include or reference guidelines or standards that will provide greater specificity as to the following:
    a. How stakeholders will be identified;
    b. What level of consultation stakeholders can expect the government to undertake;
    c. Where, how often and what kind of information will be published about how data is collected (it would be helpful to have a central location for this data);
    d. the details of a peer-review methodology.

### Should the Charter apply only to operational algorithms?

The case for a focus on operational algorithms has been made well. We are concerned at the total exclusion of algorithms used for policy development and research. There could be more clarity on this, as many government agencies are involved in substantial analysis of the populations they serve and the resources they manage or have interest in. Analytical modelling of large data sets often informs policy and procurement decisions (for example modelling on injury types and rates) that then affect outcomes.

**TINZ strongly recommends** a clear definition of both and a centralised register of both so that there is more clarity on how many agencies are using algorithms on both operational and other types of algorithms, and what the purpose of each of these algorithms is.

### Have we got the right balance to enable innovation, while retaining transparency?

10. We have already noted the significant gap – that service providers undertaking public services or managing resources do not appear to be specifically included. They should be Whilst corporate innovation is an important contributor to wellbeing, competition and corporate governance goals can also generate concealment.

11. We are confident that Stats New Zealand and the Privacy Commissioner have expert understanding of the challenges around the opaqueness of some machine learning algorithms. *High transparency might involve getting our heads around reams and reams of data – and then still only being able to guess at what lessons the algorithm has learned from it*.[11]

12. Whilst there is some international research, we are not clear on what New Zealand users are looking for in terms of transparency relating to algorithm use, or what they trust. A **TINZ recommends** that research is undertaken to learn more about the different levels of transparency (including explanation) that New Zealanders look for.

### Have we captured your specific concerns and expectations, and those of your whanau, community or organisation?

13. We are pleased to see reference to relevant legislation. We expect that legislation (Human Rights Act, Bill of Rights Act and Privacy Act) are being reviewed to ensure they apply to digital practices whilst also allowing for safe harbour analysis/research to detect bias.

14. We note the *right to information* (a prime focus of the General Data Protection Regulation GDPR), and think that this is a useful rights principle to apply to policy and legislation though we would extend that to include a *right to explanation*. We note that an explanation may often be necessary in allowing stakeholders to effectively seek judicial review of inappropriate administrative actions[12].

15. We expect that the relevant agencies will be developing self-regulatory best practice in procurement, planning and review. The PHRaE framework developed by the Ministry of Social Development is a good model to use.

16. Agencies should be strongly encouraged to actively engage with civil society groups, such as Transparency International NZ as part of formal feedback.

17. Transparency International New Zealand has taken a position in other submissions on the need to include digital literacy within a framework of literacy. Students should be encouraged to understand what algorithms do and how they are used in both operations and analysis.

For any queries on this submission please contact:

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[11] https://hbr.org/2018/07/we-need-transparency-in-algorithms-but-too-much-can-backfire

[12] Counterfactual Explanations Without Opening the Black Box: Automated Decisions and the GDPR https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3063289

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**About Transparency International (TINZ)**

TINZ is a chapter of Transparency International, the global civil society organisation against corruption. TINZ is a not-for-profit incorporated society with charitable status; non-political and non-partisan. TINZ is a caretaker of New Zealand's high trust, high integrity society. Its reports, assessment documents and facilitation of discussions have positively impacted New Zealand's approaches towards corruption prevention and open government.

The respect given to TINZ is driven from documents such as *Integrity Plus 2013 New Zealand National Integrity System Assessment (NIS) and subsequent updates in 2015 and 2018 towards a 2nd edition ,* as well as the Corruption Perceptions Index produced by the global body. TINZ has also worked with central government agencies on initiatives to strengthen understanding on a broad range of issues around transparency, open government, and integrity systems. This includes innovative Public Sector CEO Leadership Integrity Forums, jointly hosted with the Office of the Auditor General.

TINZ actively brings critical and constructive voices to the table wherever anti-corruption expertise, advocacy and action are needed, and has played a key role in efforts to promote integrity and transparency and to resist and expose corruption. The portfolio of Transparency International is wide and its approaches are focused on detecting and preventing corruption. The large network of committed stakeholders places the international body and the New Zealand chapter in the privileged position of being able to continue advocating for integrity and transparency as antidotes to corruption within a global socio-political context that is ever more challenging.