data.govt.nz An Independent Review

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DATA.GOVT.NZ: AN INDEPENDENT REVIEW

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Executive Summary

data.govt.nz is a well designed and professional run website – more so than some of its international peers. It is well regarded by its users and by external activists. Yet it is under-used as a resource within the wider open government programme.

data.govt.nz does not have the role in the New Zealand which it should be given – the single, comprehensive, cross-agency catalogue of publicly available government data. Even the Cabinet Declaration on Open and Transparent failed to allocate it this role. The motto should be "if it's public data it's on data.govt.nz".

data.govt.nz also competes for audience and resources with numerous other data portals funded by the New Zealand taxpayer; and more appear to be being developed. The Chief Executives Steering Group needs to sort all this out quickly, including putting data.govt.nz on a stable footing with the right direction, support and resources.

data.govt.nz – and the wider Open Government Programme – are insufficiently known, both inside and outside Government. There is an urgent need for a medium-term communications strategy, and the right people and resources to execute it. This needs to include outreach to the private and community sectors to help stimulate reuse of data in line with the Government's objectives.

This report sets out analysis and detailed recommendations for the next phase of data.govt.nz and other actions essential to achieve the implementation of the Cabinet Declaration.

Introduction

1. This independent review of data.govt.nz was commissioned by DIA. It follows a further year's operational experience. It also follows the August 2011 Cabinet Declaration on Open and Transparent Government. The terms of reference are set out in Annex 1.

2. The review was conducted between 20 October and 24 November 2011. The main evidence for the review was:

- Interviews with NZ Government officials and other stakeholders (a list of those interviewed is at Annex 2)
- A web survey of users of data.govt.nz and follow-up email discussion with some respondents (summary of web survey results at paragraph 16 below)
- Background papers on data.govt.nz and the New Zealand Open Data programme (key papers listed at Annex 3)
- Examination of the web presence of six other nations' data catalogue sites, supplemented by the author's private conversations with some of the staff responsible for those data sites (see paragraphs 19-25 and comparison of functionality at Annex 4).

3. The author also drew on his own experience in establishing the UK Open Data programme, the development of data.gov.uk and his continuing involvement as a member of the UK Transparency Board. However it is important to recognise that the objectives of the New Zealand programme are not the same as those of the UK or some other nations' programmes. So experience elsewhere is not automatically transplantable.

4. The author gratefully acknowledges the help given by all the interviewees and contributors. Special thanks need to go to Nadia Webster the data.govt.nz manager who organised the user survey, supplied copious amounts of background information and gave invaluable advice throughout the review.

5. Although the Terms of Reference for this review referred specifically to data.govt.nz it is impossible to view it in isolation. data.govt.nz is a part of the Open Government Programme – and a major delivery vehicle for it. The recent Cabinet Declaration on Open and Transparent Government has increased the importance of data.govt.nz. The national and international assessment of the success of that declaration will be judged by what appears on data.govt.nz. Realising the full potential of data.govt.nz will require action outside data.govt.nz's own authority. Recommendations are made in this review accordingly.

Background

6. Since late 2008 the Data and Information Re-use Chief Executives Steering Group has been leading a cross-government "Open Government Information and Data Work Programme" (in this report referred to as the "Open Government Programme") to make government held data and information more widely available, discoverable and easy to use. The Steering Group is chaired by Colin MacDonald, the Chief Executive of Land Information New Zealand.

- 7. The Open Government Programme aims to:
 - make non-personal government-held data and information more widely available and discoverable, easily usable and compliant with open government data principles within the NZ legal context; and
 - facilitate agencies' release of the non-personal government-held data and information that people, communities, and businesses want to use and reuse.
- 8. Completed projects include:
 - Barriers to the Re-use of Structured Data
 - Mandates for Releasing Information and Agency Capability
 - Development and Release of the New Zealand Government Open Access and Licensing framework (NZGOAL)
 - #nzdata Workshops: Solving Real World Problems Using NZ Government Data
 - Open Data Engagement Pilot
 - New Zealand Data and Information Management Principles (Update of the Policy Framework for Government Held Information).
 - Declaration on Open and Transparent Government (policy to bring into effect Supporting Open and Transparent Government Direction Two of Directions and Priorities for Government ICT)
- 9. Current projects include:
 - Development of guidance to bring into effect Supporting Open and Transparent Government Direction Two of Directions and Priorities for Government ICT
 - Open Data project http://data.govt.nz
 - Federation of the <u>Environmental and Geospatial Catalogue</u> with <u>http://data.govt.nz</u>
 - Data Re-use Strategy for Tertiary (non-personal)
 - Barriers to the Re-use of Unstructured Data
 - Document Metadata Standards used across Government

10. In June 2009 the civil society group open.org.nz launched Opengovt.org.nz which was presented as an open, independent catalogue of Government and Local Body datasets.

11. In July 2009 the Minister of Finance suggested that open data and online public engagement initiatives could:

- speed up and reduce the cost of public consultations;
- allow the broader community to assist with problem solving by removing the government's monopoly on government data;
- improve access to data for all users including Ministers and other government agencies; and
- ultimately improve government performance.

12. In November 2009 the Department of Internal Affairs (DIA) launched the pilot site data.govt.nz. The intent was to test the effectiveness of a directory model in opening up government data for use in research, online applications, and in commercial and policy decision making. It deliberately chose to restrict its metadata fields to a minimum and to link to the agency sites which store the data. data.govt.nz was reviewed in July 2010 by DIA Research and Evaluation Services: it was found to be working well; the review recommended that it should continue.

13. In August 2011 the Cabinet issued a Declaration on Open and Transparent Government. This said that the government held data on behalf of the New Zealand public and that it was to be released to enable private and community sectors to use it to grow the economy, strengthen social and cultural fabric and sustain the environment, and to encourage business and community involvement in government decision-making.

14. The Cabinet also endorsed a set of New Zealand Data and Information Management Principles. These include principles that open data should be released proactively online and that it should be discoverable and accessible.

Current Usage of data.govt.nz

15. data.govt.nz is a well instrumented website. This reflects the professional approach to website management applied by the relevant part of DIA. The two key conclusions from the instrumentation are:

(1) data.govt.nz receives around 4,000 unique visitors a month.

Some interviewees thought that this was a low number. However data.gov in the US receives around 80,000 visitors a month and data.gov.uk receives around 50,000 visitors a month. These are countries with much larger populations – and with more political visibility of the data catalogue site. Adjusting for population size alone suggests that data.govt.nz is receiving as much traffic as would be expected.

(2) data.govt.nz has a "bounce rate" of 46%, better than most other NZ government websites run by DIA. This suggests that data.govt.nz is capturing the interest of its visitors. This is supported by the finding from the web survey (see below) that two-thirds of survey respondents were regular returners. By contrast only one-third of visitors to data.gov.uk over the last six months were returners.

All this gives some confidence that data.govt.nz is well targeted on data users. It is not attracting excessive numbers of visitors for whom it is not intended.

16. As part of this review DIA conducted a web survey of data.govt.nz users. 38 users responded. The key findings were that:

- most of the respondents were returners 42% had visited the site more than 10 times.
- Note: this may have been skewed by the respondent recruitment process

 which used both email lists and Twitter advertisement which could have disproportionately attracted frequent users. However these users are probably more typical of visitors likely to reuse data. So the findings of the survey are very relevant to assessing how data.govt.nz is supporting reuse of data.
- 24% of the respondents classed themselves open data enthusiasts, 21% as software developers, 11% as researchers and 21% as government employees. There was only one journalist in the sample of 38.
- over half (60.5%) the respondents were "browsers" browsing the data or the requests. Over a quarter (28.9%) were looking for specific data.
- people looking for data used search (51%), categories (26%) and browsing (69%) strategies.

- around two thirds of respondents had found data of interest or the data that they were looking for.
- around two-thirds of respondents who came to data.govt.nz seeking data found the data they were looking for.
- around two-thirds of those who planned to use the data they found intended to use it for data analysis or comparison, the other third planned to use it for a data mashup (including entries for Mix and Mash)
- there was a good level of interest (20% of respondents or more) in all the main categories of data environments, financial/economic, government accountability and transparency, social and location-based.
- nearly 80% of respondents said that they were likely or very likely to visit data.govt.nz again.
- the most frequent suggestion for improvement was simply for more data. There were also suggestions about
 - row-level access to the data (probably through an API).
 - data.govt.nz to do more aggregation of data into a standard format from different local authorities.
 - use of CKAN metadata repository.
 - "people who downloaded this also looked at these" social functionality.

17. These analytics and user feedback lead to a very positive assessment: data.govt.nz is a good website well targeted on its users and well regarded by them. Specifically:

- It has succeeded in being well targeted on data users (and others with interest in data) and has a loyal following.
- All its range of data is attractive to a significant proportion of its users.
- It provides a range of discovery tools which are all significantly used.
- Even at this stage there are a significant proportion of people seeking specific data with an outline plan of how they want to use the data.
- Not only are data.govt.nz users seeking data for building applications (the economic growth objective) but they are also seeking data for data analysis or comparison (relevant to the second objective of public engagement in policy making).
- the main complaint is that it does not have enough data.

18. Therefore overall data.govt.nz is assessed as a sound platform for the delivery of the Open Government Programme and as the national catalogue for data which agencies will be releasing in the future. Nevertheless it will be important to continue to monitor user behaviour and collect user feedback, and to enhance the site in response.

<u>Recommendation 1:</u> Use data.govt.nz for the delivery of the Open Government Programme.

<u>Recommendation 2:</u> Continue to monitor user behaviour and collect feedback, and enhance data.govt.nz accordingly.

International comparisons

19. As part of this review a desk study was conducted of the functionality of six peers of data.govt.nz: data.gov (US), data.gov.uk, data.gov.au, data.gc.ca, data.overheid.nl and datos.gob.es. The author has also used his private contacts with, and personal knowledge of, these sites.

20. Some other national sites were considered for inclusion but these seemed to be, at least at this stage, largely collections of existing statistical information rebranded as an open data site.

21. All seven sites are now similar in basic function and in basic navigation – remarkably so. However the long-standing sites (US, UK and Australia) have, like data.govt.nz, gone through a process of evolution and convergence since their initial launch. A comparison of functionality is in Annex 4.

22. Key differences of note are:

- (1) data.gov and data.gov.uk both serve two distinct audiences data users who want access to the data to build applications and the general public who are interested in what their government are doing. This reflects that each country's open data objectives are about government transparency as well as economic growth
- (2) some (particularly data.gov) provide in-site tools to visualise individual datasets. This is aimed both at "transparency" users (who cannot all be expected to have the technical skills to download and analyse the data offline) and at potential data users (enabling them to inspect the data before downloading it).
- (3) only data.gov, data.gov.uk and data.govt.nz actively present community functions (such as discussion forums) on the data site (in data.gov this was only introduced in version 2).
- (4) most data request functions are "write-only" the request is submitted on a web form and the requests are not shown on the data site at all, with or without the opportunity for others to comment or vote, and there is no specific response to individual requests. Only data.gov.uk and data.govt.nz have collaborative data request features.
- (5) data.gov and data.gov.uk both publish their catalogue of metadata as a dataset in its own right. This has enabled others to run more advanced analysis of the datasets offered than the catalogue operators themselves have been able to do, and has also allowed "super-catalogues" to develop such as http://logd.tw.rpi.edu/page/international_dataset_catalog_search (although actually data.govt.nz and data.gov.au are on this particular site, presumably by scraping and without full metadata)

23. It should be noted that simple comparison of the number of datasets on data sites does not lead to useful conclusions. For instance:

- there are dramatic differences in how geospatial datasets are counted – whether, for instance, the count is of individual files (US and Canada), of national layers (NZ) or of entire national collections (UK).
- there are differences if a lot of data was previously released elsewhere

 harvesting datasets already in the public domain can often be done
 more quickly than releasing new data
- (3) there are differences in how different files (for instance, for different time periods) relating to the same topic in the same organisation are counted. For example US and Canada count files for different time periods as separate datasets whereas New Zealand and the UK usually count different time period files as part of the same dataset (see, for instance, Chief Executives' Expenses in New Zealand).
- (4) APIs particularly to databases, table-makers or linked data triplestores – often count as one although they may give access to what would be otherwise counted as many different datasets.

24. However two other factors may be useful for comparing the coverage of data portals:

- (1) the breadth of coverage: whether the site has significant amounts of data from most agencies of government.
- (2) how re-usable the data is, on Sir Tim Berners-Lee's 5-star scale (see <u>http://www.w3.org/DesignIssues/LinkedData.html</u>)

25. The timescale for this review has not allowed a systematic investigation of either of these factors. However by inspection the data.govt.nz site seems to be reasonably broadly populated: most major agencies have contributed some data already. data.govt.nz also contains a lot of datasets at 2-star and 3-star levels (although some users complained about remaining PDF entries, which are difficult to reuse, including some datasets of Chief Executive expenses). As yet there is little 4-star or 5-star "linked data"; some interviewees were not even familiar with the concept.

<u>Recommendation 3:</u> Periodically assess the re-usability of datasets published on data.govt.nz on the 5-star scale.

Assessment of data.govt.nz Achievements Against Its Product Plan Objectives

Data.govt.nz objective: increase the number and range of government datasets available for public access through data.govt.nz

26. Since its launch data.govt.nz has seen a steady increase in the number of datasets in the catalogue. There has been an organic growth of around 50 datasets a month and a big step with the release of 885 LINZ datasets in July 2011. Thus visitors to data.govt.nz receive a reasonable sense of new material flowing through (unlike for instance the abysmal performance of the Northern Ireland Government in the UK, which listed 6 datasets on <u>http://www.opendatani.info/</u> at its launch two years ago, but have not added any more since!)

27. However with 1684 datasets at the time of writing data.govt.nz actually has less datasets than <u>http://www.digitalnz.org/</u> which claims 2413 datasets (as well as other digital content); for instance the Ministry of Fisheries has only 2 datasets on data.govt.nz whereas (under two variants of its name) it has 686+2=688 datasets on digitalnz.govt.nz. This may be due to DigitalNZ both taking metadata from data.govt.nz and using custom-built web harvesting tools to collect data directly from government (and other) websites and API.

- 28. More significantly:
 - (1) there appears to be no baseline of how many datasets each agency has. Thus neither the overall coverage of data.govt.nz nor the individual compliance of each agency to the Cabinet Declaration could be measured. The Data and Information Management Principles require lifecycle information management but do not explicitly require the maintenance of "information asset registers". New Zealand is certainly not unique in this, and the construction of comprehensive information asset registers where dataset holdings are distributed even with individual agencies is not easy to do.
 - (2) (some interviews suggested that some agencies are putting a "sample" of their datasets on data.govt.nz – perhaps with the expectation that these will bring data users to a larger listing of datasets on their own website. This defeats the purpose of data.govt.nz.
 - (3) other interviewees suggested that some agencies are taking a judgement about the potential value of datasets they could put on data.govt.nz and only putting what they consider as "important" data there. Again this defeats the purpose of data.govt.nz. While the government's policy for previously unreleased data is that high-value data should be prioritised, all data that is released should be put on data.govt.nz
 - (4) many agencies have 'landing pages' of data links to which data.govt.nz points (rather than data.govt.nz pointing to the data itself). Reasons for this have been said to be to avoid the need to update data.govt.nz itself

so frequently and to give "context" to the data. The use of landing pages in this way is not really acceptable for a data catalogue – again the use of a landing page makes the data less discoverable on data.govt.nz and so less likely to be re-used. Data.govt.nz should always point to the data itself. Context, documentation and other supporting material should be given in a text description in the catalogue and/or <u>separate</u> links to such material on the owning agency's website. The updating of data.govt.nz itself is not burdensome, and if it is not updated when new data is added by the owning agency then the publication of that new data will not effectively communicated to data users.

29. All this points to a wider issue. There is no agreed policy – not in the Cabinet Declaration or in the Data and Information Management Principles, and not (yet) from the Chief Executives Steering Group – that all agencies <u>should</u> put all their public datasets on data.govt.nz. In addition responsibilities are currently unclear, with agencies listing some datasets and the data.govt.nz team itself listing others. Getting datasets onto data.govt.nz should be the responsibility of agencies owning data; the role of data.govt.nz should be to assist them.

<u>Recommendation 4:</u> all government datasets being made available for public access should be on data.govt.nz

<u>Recommendation 5</u>: Putting a dataset on data.govt.nz should be the responsibility of the agency owning the dataset.

<u>Recommendation 6:</u> data.govt.nz should point to data. Current landing pages should be phased out.

Data.govt.nz objective: ensure ease and efficiency of listing government datasets on data.govt.nz

30. Interviewed users were very positive about the ease and efficiency of adding datasets. The manual interface was highly commended ("ridiculously simple"; "anybody used to shopping on the internet should find it simple to use"). Alternative approaches such as batching of updates by the Treasury were due to needs for additional internal controls than any shortcoming in data.govt.nz itself. Some isolated problems had been reported by some staff putting Chief Executive expenses onto data.govt.nz. However a review of the emails and other comments they had sent suggested that the issues were largely due to the novelty of the overall process of expenses release (despite comprehensive SSC guidance).

31. Nevertheless the current manual entry process needs to be enhanced to meet the requirements likely to arise very soon from a greater flow of datasets from the implementation of the Cabinet Declaration on Open Government. These improvements should include:

(1) data provenance and authority to list need to be clear. Currently manual listing from within government is assured by manual intervention by the central team and by email confirmation. As a pilot

service, data.govt.nz was not connected to the iGovt authentication service. That needs to be done so that agencies can be fully accountable for listings of their data.

- (2) non-government users can enter datasets into the catalogue, albeit with pre-moderation from the data.govt.nz team. The need for this functionality needs to be kept under review – and in the medium term the moderation might be more appropriately performed by the agency which actually owns the data which is proposed to be listed.
- (3) stricter rules for mandating and validating metadata so as to remove further the need for manual intervention by the central team
- (4) by thus freeing up resources, the data.govt.nz team can put more effort into the active curation and quality assurance of the descriptive metadata to ensure maximum discoverability.
- (5) stronger direction towards the use of the default Creative Commons Attribution (CC-BY) licence in accordance with NZGOAL, or No Known Rights (NKR) where appropriate, and capture of a statement of explanation where a more restrictive more licence has been specified.

32. This final point is vital. Currently only 72% of datasets on data.govt.nz are explicitly licensed CC-BY or NKR in accordance with the NZGOAL default. Moreover this figure is flattered by the bulk collection of 883 LINZ datasets all of which were made CC-BY in a single decision. Excluding these LINZ datasets only 41% of the other datasets are explicitly CC-BY or NKR, 25% have explicitly more restrictive licences and 34% have licensing described as "other licensing – refer to agency".

33. It is not clear whether this is a legacy of decisions taken before the agreement of NZGOAL, evidence that current decisions are not being taken in line with NZGOAL or evidence that in practice only a minority of decisions will be to release data under an open licence. If there is a problem with decisions using the NZGOAL methodology then this would be best resolved before decisions on licensing need to be taken on datasets released as a result of the Cabinet Declaration. The 2012 report back to Cabinet on NZGOAL uptake will need to report on actions to address this.

<u>Recommendation 7:</u> The facilities for listing data on data.govt.nz should be improved along the lines indicated in paragraph 31.

<u>Recommendation 8:</u> The reasons for the apparently high level of use of restrictive licences should be investigated, and changes made to NZGOAL procedures as necessary.

<u>Recommendation 9:</u> data.govt.nz should continue to catalogue all publicly available government datasets, even those currently with a non-open licence.

Data.govt.nz objective: help to identify demand for and potential use of requested government data

34. The data.govt.nz website itself has a world-class data request function. It is particularly notable for its "social" features such as voting and comments and for the transparency of agency replies to requests. By comparison with its peers only data.gov.uk comes close (but it does not have such transparency of responses). Most other national catalogues have a 'write-only' request function, and once the request is made it is lost from view. Others cannot see the request, let alone comment on it; and there is no public response to the request.

35. However the effectiveness of the overall function in opening up data is not so convincing. So far there 39 (83%) requests have not been met out of a total of 47. Some of the requests have been given a response that the agency will look at it, but no further action has been reported even after several months.

36. By contrast data.gov in the US claims to have received approximately 900 suggested datasets from the time of the site launch in May 2009 to December 2009 and data has been provided in 42% of cases. The comparative performance is:

| Outcome | data.gov | data.govt.nz | |
|---|-----------|--------------|--|
| Dataset already published | 16% | 6% | |
| Dataset released or will be in near future | 26% | 11% | |
| Dataset could be published at a later date | 36%) |) | |
| Dataset withheld on security, privacy or technology | 22%) 58% |) 83% | |
| grounds |) |) | |

37. The main problem in New Zealand seems to be that there is no process or authority agreed with agencies for following up data requests. The onus is solely on the data.govt.nz team to find someone to consider and respond to the request. In some cases all that can be done is to send an email to the public enquiry point in an agency. Timescales are by individual negotiation. This is time-consuming for the data.govt.nz team. They also feel that they only have limited authority to challenge an agency's response (although the Cabinet Declaration has become a useful source of authority for them in the last few months).

38. The key improvements required include:

- (1) a nominated single person in each agency to receive requests and take responsibility for pursuing them with the data owner. (It is important that the person has authority to pursue the request within their department: in the overall implementation of the Cabinet Declaration there may need to be a nominated senior "champion" for open data in each agency, and this person would be the natural point to ensure that follow-up action on requests was taken.
- (2) a "service level agreement" for responses set by the Chief Executives Steering Group. This should include maximum times for a public holding response and for a definitive response.

- (3) requested data should be considered a priori "high value" data in terms of the Cabinet declaration. There should be a presumption in favour of release. Positively responding to requests should be seen as an indicator of an agency's compliance with the Cabinet declaration.
- (4) enable and encourage direct contact between the requester and data owner where necessary to clarify the request more straightforwardly – although a formal response should still be given and the data released publicly if appropriate as well.
- (5) periodic reporting to the Chief Executives Steering Group of the requests made and the decisions taken so they ensure that the government overall is responding positively to bona fide requests for data for re-use.
- (6) data.govt.nz should publish statistics on requests in a similar fashion to US data.gov.

<u>Recommendation 10:</u> Improve the data request procedures along the lines set out in paragraph 38.

Data.govt.nz objective: promote to government agencies the potential benefits of opening up government data

Data.govt.nz objective: engage with government agencies to encourage and aid them to list government data on data.govt.nz

Data.govt.nz objective: communicate effectively to government agencies the rationale for providing their data in machine readable formats

39. Limited resources have constrained the amount of general communication about data.govt.nz within government and the amount of advocacy with individual agencies to encourage them to release data. The team's work to respond to individual agencies which make enquiries and to respond to other stakeholders has understandably and inevitably taken priority.

40. Many interviewees have spoken of the need to increase the communication to government agencies about data.govt.nz – and about the Open Government Programme in general. They said "the challenge is now communication not technology". Doing so will require both a clear communications strategy in the work programme and people, skills and resources to execute the strategy. Putting this in place is now an urgent priority.

41. Part of this work should be to address the difficulty of agencies accessing information about the New Zealand Open Government Programme. It is currently spread among various disjoint parts of the New Zealand government web estate which do not interlink, including:

- (1) <u>http://ict.govt.nz/programme/opening-government-data-and-information</u> which contains information on the Cabinet Declaration and the Information Management Principles (and rather oddly has its own summary of latest datasets on data.govt.nz at <u>http://ict.govt.nz/feeds/opendata</u> rather than redirecting to data.govt.nz itself)
- (2) <u>http://ict.govt.nz/directions-and-priorities/data-and-information-reuse-</u> <u>chief-executives-steeri</u> which has details of the governance through the Chief Executive Steering Group, but which does not link to the programme it is overseeing
- (3) <u>http://ict.govt.nz/guidance-and-resources/information-and-data/</u> which contains some background information and presentations, and at <u>http://ict.govt.nz/guidance-and-resources/information-and-data/nzgoal</u> a summary of NZGOAL which points to
- (4) <u>http://nzgoal.info/</u> which contains content and tools about NZGOAL
- (5) <u>http://mixandmash.org.nz/</u>

(6) <u>http://wiki.open.org.nz</u> (which is not a government site and which is showing signs of a lack of active curation such as defacement)

42. A valuable first step would be to ensure that all the material that individual public servants in agencies will need to implement their part of the programme is available in one, well structured place. The best place for this would be data.govt.nz. There should be strong common editorial content for this audience. There could be deep links to specific content maintained by others (but not just to home pages).

<u>Recommendation 11:</u> Put in place urgently a clear and resourced internal and external communication strategy for the implementation of the Cabinet Declaration including the role of data.govt.nz.

<u>Recommendation 12:</u> Increase the awareness of data.govt.nz within government agencies by using it as a communications vehicle for the Open Government Programme as a whole.

Data.govt.nz objective: improve online government data discovery through data.govt.nz

43. The data discovery functions within data.govt.nz are good compared to its peers, with official categorisation and – uniquely – user-suggested tagging. The filtering function is also good. Evidence from the users of data.govt.nz suggested that they use a combination of different search strategies, and data.govt.nz supports a good range of discovery tools. Some of the users have suggested that faceted search should be added to data.govt.nz, particularly now that the number of datasets exceeds 1000. International peers are already moving in this direction, and DigitalNZ has already implemented some faceting in its search.

44. However datasets in the data.govt.nz catalogue can only be accessed through the data.govt.nz website itself. While an API is under development it does not currently have the functionality to allow more complex searches within the API – or the extraction of all the metadata so it could be searched offline. It would therefore be useful if data.govt.nz published its metadata as a dataset in its own right, so that others could search it with different tools.

45. Good descriptive metadata is essential to data discovery. The initial policy on data.govt.nz was to limit the amount of metadata required. This was to make it extremely easy to add datasets. In addition some of the metadata fields are optional. This initial policy was understandable and pragmatic: it was easily implementable, avoided prolonged debate about metadata standards, and dramatically reduced the barrier to actually putting datasets into the catalogue.

46. However resource constraints and other priorities have not allowed this initial policy to be revisited. This has had three unfortunate consequences:

- (1) metadata for some datasets is incomplete, including date of publication and contact details if data users wish to get further details from the data owners. Some – but not all – of these datasets are those originally entered onto data.govt.nz by the central team in DIA to populate the catalogue initially – they were limited to easily discoverable information on other agencies' websites.
- (2) there are no metadata fields covering documentation, file structure (apart from file type) or codes used. This leads to the use of 'landing pages' as the target for the data link itself, obscuring the data, preventing instrumentation (such as how many people downloaded the data?) and giving a poorer user experience
- (3) the sparse metadata on data.govt.nz is used as a justification for the creation of additional portals and catalogues elsewhere in the New Zealand public services. Paradoxically the limited resources for data.govt.nz may have led to what is probably greater, and certainly duplicative, expenditure elsewhere.

47. The first of these needs to be tackled sooner rather than later. It needs to be clear that the accuracy of the metadata is the responsibility of the agency which owns the dataset and the data.govt.nz team need to run periodic sweeps to assure the accuracy with the data owners.

48. Tackling the second also has some urgency. The implementation of the Cabinet Declaration should lead to a flood of new datasets onto data.govt.nz during 2012. It would be more efficient for individual agencies to be able (and required) to enter more comprehensive metadata in one go when creating the new catalogue entries.

49. The third raises the policy issue of separate portals. This is discussed at paragraphs 69-82 below. However where collections of rich metadata already exist and data.govt.nz is automatically updated from them it should be possible to incorporate this richer metadata within the data.govt.nz repository and make it searchable in some way.

50. It may be possible to enhance the current database within the CMS to support these moves (indeed geodata.govt.nz uses the same CMS). However it is timely to consider migrating data.govt.nz's back-end metadata repository to a well-supported and open-ended metadata repository package: several contributors to this review suggested the open-source CKAN package which is used by a number of other data portals. It is likely that this will prove more flexible and scalable as data.govt.nz grows.

51. In the design of the metadata changes data.govt.nz should bear in mind a distinction made by a metadata enthusiast interviewed for this review: descriptive metadata is used in two different ways during discovery:

- <u>searching</u> is normally by keyword (and, for geodata, by bounding box). For search a full text description of the dataset in the language of the user is essential, with good curation adding relevant other keywords
- (2) <u>search results</u> require more metadata about the datasets found so that the potential user can more accurately evaluate which datasets are worth accessing directly.

<u>Recommendation 13:</u> Extend data.govt.nz metadata along the lines discussed in paragraphs 46-51.

<u>Recommendation 14:</u> Publish the file of metadata for the datasets in data.govt.nz's catalogue as a dataset in its own right.

<u>Recommendation 15:</u> Consider migration to a well-supported, open-ended specialist metadata repository package

Data.govt.nz objective: increase the level of awareness of data.govt.nz in the public domain

52. There is good awareness of – and support for – data.govt.nz among open data "activists". data.govt.nz is seen as having responded well to the challenge laid down by open.org.nz and to have worked well with them. Activists consider that DIA have "delivered an extraordinary amount on a shoe-string budget".

53. data.govt.nz also shows up well in internet search. Interviewees commended the Search Engine Optimisation of data.govt.nz which has helped ensure this.

54. However awareness of data.govt.nz suffers from the lack of cross-promotion among similar initiatives. For instance the flagship Mix and Mash competition, run by DigitalNZ, has a separate existence. data.govt.nz does not feature significantly on its website (for instance data.govt.nz is third on the list of "other data sources" on http://mixandmash.org.nz/the-competition/data-sources) or in its promotional materials. Since the purpose of the competition is to promote data reuse in line with the government's policy it is surprising that there is not more signposting of where much of the data can be found.

55. There is no evidence that there is a widespread awareness of data.govt.nz among the general public or media. A search for data.govt.nz on Google NZ News gives no local stories. (By contrast similar searches for data.gov and data.gov.uk show substantial and continuing coverage, with some significant mainstream media coverage as well as technical media). With the primary New Zealand objective being the re-use of data, rather than transparency to the general public, the lack of awareness of data.govt.nz among the general public is not a big problem – indeed data.govt.nz does not aim to cater for a general public audience. However data.govt.nz should offer some general explanation of the open government programme suitable for general public visitors. It should also provide material to help those in the general population – both in business and in the community - who want to use open data to engage with the government in decision-making.

56. There is also no evidence of widespread awareness of data.govt.nz among relevant businesses including IT firms. This is rather more concerning as these are the audiences most likely to be able to use data quickly in ways which lead directly to economic gain. Now that data.govt.nz is up and running and the Cabinet Declaration is being implemented the communications strategy should include specific messaging and engagement with these groups.

57. Other jurisdictions have or have had specific roles to promote external awareness and re-use of data. Best known is Jeanne Holm, the US data.gov "evangelist". She is specifically responsible for promoting data.gov among the open data and data reuse communities. There is currently no such role in data.govt.nz (or in the Open Government Programme more generally). To date in New Zealand some of this role is performed by key figures in open.org.nz. They have proved effective in doing this and data.govt.nz has maintained good links with the activist community. However as the programme grows it will become increasingly unfair to rely just on volunteer contributions from activists. An additional contribution of

government people and resources should be in the Open Government Programme plans.

<u>Recommendation 16:</u> The communications strategy for the Open Government Programme should require cross-promotion between the different government websites involved.

<u>Recommendation 17:</u> data.govt.nz should have some material about itself and the Open Government Programme aimed at general public visitors, but it should not at this stage aim to cater further for them.

<u>Recommendation 18:</u> The communications strategy should include specific messaging and engagement with relevant businesses including IT firms.

<u>Recommendation 19:</u> Open Government Plans should include resources for external awareness, particularly to prospective data re-users; as part of this an "evangelist" role should be considered.

Data.govt.nz objective: enable and showcase New Zealand government data re-use initiatives through data.govt.nz

58. Showcasing data reuse initiatives is important to:

- (1) show that the Government's policy is leading to results which help real people and which have economic and social value
- (2) create beneficial links in the data user community typically allowing those with data use skills (such as smartphone application developers) to "advertise" their abilities to others looking to use other data.
- (3) increase appreciation <u>within government</u> of the benefits of open data and to give credit to those agencies which have supplied data which is being used.

59. Most other government data portals have an 'Apps Gallery' of third-party applications using government data. data.govt.nz does not. It is understood that the development of an Applications Gallery was in the data.govt.nz plans but was descoped for resource reasons.

60. data.govt.nz does however have a "List a Reuse" function. This is a very good idea – and gathers some of the applications which would be in an Apps Gallery. However the listing of reuse is only visible from the detailed page on the individual dataset. Thus the information is not leveraged to provide publicity material for the initiative as a whole on the main pages of data.govt.nz.

61. There are also some valuable case studies of NZ Government data reuse available, but these are on <u>http://wiki.open.org.nz/Data_Release_Case_Studies</u>, <u>http://wiki.open.org.nz/Open_Data_Mini_Case_Studies</u>, and <u>http://opendatastories.org</u> without any strong association with data.govt.nz.

62. In addition the Mix and Mash competitions are presented separately from data.govt.nz and with different branding. Mix and Mash does not cross-promote data.govt.nz (see paragraph 54), nor does data.govt.nz showcase Mix and Mash winners which have used data.govt.nz data.

63. The List a Reuse function, the case studies and the Mix and Mash competitions provide a good set of examples of data reuse. data.govt.nz should draw them together and showcase them to support the overall communications of the Open Government Programme.

<u>Recommendation 20:</u> data.govt.nz should showcase prominently on its own site examples of data reuse, drawing on material already available including "List a Reuse" responses.

<u>Recommendation 21:</u> data.govt.nz and the Open Government Programme should continue to collect and highlight new examples of re-use.

Data.govt.nz objective: support data re-use initiatives (eg mash up competitions)

Data.govt.nz objective: participate in data re-use conversations both within and outside government

64. data.govt.nz staff have supported the mash up competitions. They partnered with DigitalNZ on the Mix & Mash competition, helping with communications and cross-promoting Mix and Mash on data.govt.nz during the period of the competition itself. Data.govt.nz has been a source of data for Mix and Mash competitions, and there is evidence that the Mix & Mash competition increased traffic to data.govt.nz while it was running (the precise figure is blurred by the Cabinet Declaration in the same period).

65. However the competitions have been run by others and the public web presence for them is elsewhere. As already mentioned in paragraphs 54 and 62, it would have been more supportive of the overall open government initiative to have heavy and continuing cross-promotion between data.govt.nz and Mix n Mash/DigitalNZ.

66. data.govt.nz staff also work with open.org.nz to support and promote data reuse. Open.org.nz have been effective in organising events such as (in 2011) the Open Data Workshop, the Open Government Data Day and the NetHui 2011 with Government and Openness themed sessions.

67. However competitions, hack-days and volunteer activity may not be sufficient in the longer term to drive the development of sustainable applications which re-use data and provide economic advantage. This is an emerging issue in all open data initiatives whose objectives are primarily economic growth. While hack-days and competitions often provide excellent ideas and "proof of concept" applications, the development of sustainable applications takes longer and takes the determined commitment of resources by someone. Developers are not free and hackday/competition fatigue can set in – see for instance http://mulqueeny.wordpress.com/2010/11/18/developers/

68. One interviewee suggested that data.govt.nz should have a limited amount of funding to make grants – each of the order of NZ\$10,000 – to part-fund taking brilliant ideas or proof-of-concepts into at least beta versions of live services. Others supported the general idea of relatively modest development grants competitively awarded to each of a portfolio of applications aim at catalysing wider development. This approach would address some of the most commonly heard causes of failure to move forward from proof-of-concepts.

<u>Recommendation 22:</u> Open Government Programme should consider the case for modest grants to develop selected proof-of-concepts into sustainable, if beta, live services.

The positioning of the data.govt.nz website with respect to other New Zealand government data catalogues, repositories and other data discovery mechanisms.

- 69. data.govt.nz is one of a number of New Zealand government data catalogues:
 - (1) DigitalNZ "We aim to make New Zealand digital content more useful. This includes helping people use digital material from libraries, museums, government departments, publicly funded organisations, the private sector, and community groups."
 - (2) LINZ Data Service "provides access to nationally significant geospatial datasets that include topographic, hydrographic, survey, titles and geodetic data."
 - (3) geodata.govt.nz (also run by LINZ) "New Zealand's catalogue of publicly-funded geospatial data a core part of New Zealand's developing spatial data infrastructure"
 - (4) statisphere.govt.nz "New Zealand's official statistics portal enabling users, producers and researchers to find available information about New Zealand's Official Statistics System."
 - (5) http://www.contractmapping.govt.nz/ "gives you easy access to information about social services that the government funds in your community." – using data from the Ministry of Social Development, Ministry of Justice, Ministry of Health, Ministry of Education and Te Puni Kokiri.

70. In addition there are a number of agency-specific data portals (such as http://geoportal.doc.govt.nz and http://data.ecan.govt.nz), and there are a number of agency "data pages" which provide a low-cost substitute for a data portal.

71. One internal interviewee summed up the overall position in New Zealand by saying "we have enough data portals to reach from here to Africa". External interviewees were scathing about the proliferation of data catalogues, their costs and the diversion of effort from actually getting more data published.

The case for a single government data catalogue

72. International best practice is that the data itself should remain at all times the responsibility of the agency which 'owns' that data and is ultimately accountable for its integrity and release. Then the key issue is how to provide the catalogue or catalogues that allow that data to be found by the widest possible audience of potential data users.

73. Most jurisdictions are introducing a single government data catalogue. The arguments for having a single, comprehensive government data catalogue are usually considered overwhelming:

- (1) people wanting data should have one place to come where they can be confident of finding it, if it exists at all.
- (2) people wanting data should not have to understand or navigate the structure of government in order to find it
- (3) related data from different parts of government should be in one place so that it all can be found together
- (4) a single data catalogue can more easily ensure cross-government consistency in its metadata, licensing and search
- (5) a single data catalogue fed directly by authoritative data "owners" avoids the problem of the same dataset being discoverable under different names in different places.
- (6) a single data catalogue makes the data more visible on public search engines
- 74. The alternatives are not attractive:
 - (1) individual agency data portals would require data users to know where in government to look for data; they would lead inevitably to differences in metadata, search and other discoverability factors; and they would increase costs overall. The costs of operating a data portal are largely independent of the number of datasets it holds, and there is a perdataset cost of entering metadata which is both low and about the same whether putting it on an agency portal or a cross-government portal. Thus the more good-quality data portals, the higher the overall cost to the New Zealand taxpayer.
 - (2) a "federated search" approaches (where a cross-government portal searches a large number of separate agency datastores) sounds attractive because it avoids awkward organisational issues. However for this approach to work reliably and effectively it requires a <u>much</u> <u>tighter</u> central control on departmental systems than a single government data catalogue. This is because common standards have to be verifiably applied everywhere at once. It is also more extensive and much less accommodating of change since all agencies' datastores and the central portal need to be kept in strict step.

Requirements of geospatial data

75. The existence of geospatial-based data catalogues was attributed by some interviewees to the current lack of geospatial metadata or search capabilities on data.govt.nz – although this does not of course explain why New Zealand has <u>several different</u> geospatially-based data catalogues. It is true that data.govt.nz started with a simple metadata model to make it easier for agencies to add datasets in the early days. However now adding full geospatial metadata and search to

data.govt.nz does should be all the easier if the functionality and metadata of the existing geospatial-based data catalogues has been well enough developed to be reused. In particular the addition of map-based search of geospatial attributes does not seem like a big technical obstacle for data.govt.nz. There is widespread availability of the necessary toolsets, including the well-regarded Koordinates platform.

76. In other jurisdictions, a geospatial capability is already being added to data.gov.uk. The aim is that it can also be the platform for the catalogue requirements of the UK's compliance with the EU "INSPIRE" Geospatial Data Directive. The alternative of developing a separate geospatial catalogue were shown to be more costly, more risky and more confusing to data users. Enhancing data.gov.uk has freed resources for other parts of INSPIRE implementation including visualisation of geospatial data.

The need for a clear policy on NZ government data catalogues

77. There appears to be no overall policy on the provision of data catalogues by the New Zealand government. Neither the Cabinet Declaration nor the New Zealand Data and Information Management Principles mention data.govt.nz or expect that data to be made open will be placed there. The detailed Cabinet Paper does mention data.govt.nz (paragraphs 19-20). However it does not suggest, let alone direct, that departments releasing data will do so through data.govt.nz. Indeed the reference back to the Declaration and the Principles in paragraph 30 could be construed as giving agencies freedom as to whether data they publish should be included in the data.govt.nz catalogue or not, and giving them licence to establish more data portals at agency level.

78. Some interviewees said that this omission is because data.govt.nz is still seen as a pilot. Yet this is a circular argument: the future of data.govt.nz depends critically on whether or not it is to be the comprehensive catalogue of public data and so the strategic platform for the implementation of the Cabinet Declaration and of the Information Management Principles. This is a crucial and early decision which the Chief Executives Steering Group need to take and implement.

79. Conversely compliance with the Cabinet Declaration on publication of datasets should <u>require</u> an entry for the dataset to have been placed on data.govt.nz (as well perhaps as on the owning agency's website and on other relevant repositories). The motto should be "if it's open it's on data.govt.nz".

The need for a critical appraisal of other portals

80. The Chief Executives Steering Group will also need to decide what policy to adopt towards other government-funded portals. In this there should be a strong presumption against any new data portals. It is hard to see what the justification for the expenditure would be: if it is <u>really</u> necessary to have a sector-specific view for a specialist audience then this could be done without significant cost by faceted search and/or white labelling of data.govt.nz facilities without duplicating functionality.

81. The case for continuing the operation of each of the existing portals should be rigorously tested. Where there is a proven distinct specialist audience (as is possibly the case for Statisphere) then it could be acceptable for the portal to continue. However this should be on condition that it exports metadata on <u>all</u> its datasets into data.govt.nz. This is so that datasets are discoverable by both the specialist audience and the more general audience of data users visiting data.govt.nz. On the other hand it should not normally be a justification for a separate portal that it provides generic functionality, such as spatial search, which data.govt.nz does not: this should normally be more of an indicator of a generic need to enhance data.govt.nz with some of the functionality developed elsewhere and so maximise the discoverability of all agencies' data. Particular priority should be given to:

- (1) re-considering the case for geodata.govt.nz given the creation of data.govt.nz and the LINZ data service since it was originally authorised. This reconsideration should involve review of whether it is necessary – or appropriate - to include non-government data on a government data catalogue.
- (2) examining whether there is a need for DigitalNZ and data.govt.nz to be completely separate, or whether their catalogue and search functions could be shared.
- (3) considering whether the visualisation functionality of the LINZ data service could be leveraged to provide visualisation services for data.govt.nz. In addition to existing geospatial functionality, LINZ are developing the capability to visualise complex non-geospatial datasets such as relational databases. Although visualisation on data.govt.nz is not essential to the principal policy objective of economic growth through data reuse, the second objective of wider public participation does point towards either in-site visualisation tools or easier loading of data into cloud-based visualisation tools.
- (4) considering whether map-based geospatial search functionality, including relevant extended metadata, developed for geodata.govt.nz, LINZ Data Service and contractmapping.govt.nz could be added into data.govt.nz allowing the closure of contractmapping.govt.nz and geodata.govt.nz.
- (5) ensuring that metadata about all datasets on Statistics NZ including Statisphere is exported to data.govt.nz – and possibly introducing some sub-branding into data.govt.nz that identifies Tier 1 Official Statistics datasets and their assured quality.

82. Where any other catalogues are permitted to continue they should be set a deadline to export metadata on <u>all</u> their datasets to data.govt.nz (so that data.govt.nz can link directly to the data) and to do so in such a way that there is no duplication of datasets on data.govt.nz.

<u>Recommendation 23:</u> Each dataset itself should remain the responsibility of the agency which owns it.

<u>Recommendation 5</u>: Putting a dataset on data.govt.nz should be the responsibility of the agency owning the dataset. *(repeated for ease of reference)*

<u>Recommendation 24:</u> data.govt.nz should be the single, comprehensive government data catalogue for New Zealand.

<u>Recommendation 4:</u> all government datasets being made available for public access should be on data.govt.nz (*repeated for ease of reference*)

<u>Recommendation 25:</u> There should be a strong presumption against any new data portals.

<u>Recommendation 26:</u> The case for continuing the operation of each of the existing portals should be rigorously tested by the Chief Executives Steering Group with a view to rationalisation along the lines suggested in paragraph 81.

<u>Recommendation 27:</u> Any other catalogues should export metadata on <u>all</u> their datasets, and to do so in such a way that there is no duplication of datasets on data.govt.nz.

The role of data.govt.nz in communications

83. A concentration on data.govt.nz will also allow simplification and focus of communications. A communication strategy for the Open Data Programme as a whole will need to settle on a consistent brand. In other jurisdictions such as the USA and the UK the national data catalogue has been synonymous with the open data policy programme. The use of the data catalogue as the brand is mutually reinforcing – increasing the visibility of the data catalogue through close association with the programme and increasing the credibility of the programme by close association with the data already being provided.

84. Therefore in addition to its role as the primary data catalogue data.govt.nz should act as a communications platform for the Open Government Programme including the provision of:

- (1) news and information about the open government programme as a whole, aimed at stakeholders inside and outside government including the general public. (This would also mitigate the current risk if data.govt.nz had a higher visibility with the general public.)
- (2) a "dashboard" showing progress, agency by agency, towards implementing the Cabinet Declaration.
- (3) all the information and tools individual agencies need in order to implement the Cabinet Declaration, including a library/links to policy decisions, governance structures, guidance materials, case studies, how-to instructions and frequently asked questions.
- (4) compelling content about the re-use of data and the applications using it, drawing on the widest possible range of New Zealand examples and, where appropriate, relevant international
- (5) an engagement platform for those outside government interested in open data and its reuse.

<u>Recommendation 28:</u> Use data.govt.nz as the online communications platform and external brand of the Open Government Programme, and extend its content along the lines suggested in paragraph 84. (See also Recommendation 12.)

Wider issues for the Open Government Programme

85. Implementation of the Cabinet Declaration will need an empowered team to drive it. The evidence from other jurisdictions is that the release of data and the implementation of the political decision is faster and more effective when proactively driven by a small knowledgeable, passionate, empowered team. The team should be the executive arm of the Chief Executives Steering Group and should act with the Group's collective authority. data.govt.nz should be seen as formally commissioned by the Group, an integral part of that team and the public presence and brand of the team.

<u>Recommendation 29:</u> Create an appropriately skilled and adequately resourced team to drive implementation of the Cabinet Declaration on behalf of the Chief Executives Steering Group.

86. Implementation of the Cabinet Declaration will also need strong leadership within individual agencies. This role requires both the commitment of time and sufficient authority to take decisions or escalate matters quickly to the Chief Executive for resolution. The absence of this in some agencies is already apparent in the issues about responding to requests for data submitted through data.govt.nz described above. In other jurisdictions this has called for a senior officer in each agency (not the Chief Executive himself) to be specifically accountable for ensuring effective implementation and to be the agency's "champion" for the programme.

<u>Recommendation 30:</u> Chief Executives Steering Group should give other Chief Executives a model role description and ensure that identified leadership is in place in each agency.

87. The implementation of the programme, including decisions about which individual datasets can be released, is likely to be delegated to individual agencies – and rightly so. However it will be important to apply the principles of "comply or explain". For instance there should be more accountability by agencies for decisions not to use the 'default' CC-BY licence expected by NZGOAL – the evidence of datasets on data.govt.nz is that a significant minority are adopting restrictive licences, and some agencies are not allowing commercial reuse at all, undermining the government's overall policy objectives. There is an important role for the Chief Executives Steering Group and the implementation team in ensuring that decisions are taken consistently and in line with the expectations of the Cabinet Declaration.

<u>Recommendation 31:</u> Ensure accountability and transparency of decisions on the release and licensing of individual datasets.

Summary of Recommendations

- 1. Use data.govt.nz for the delivery of the Open Government Programme.
- 2. Continue to monitor user behaviour and collect feedback, and enhance data.govt.nz accordingly.
- 3. Periodically assess the re-usability of datasets published on data.govt.nz on the 5-star scale.
- 4. All government datasets being made available for public access should be on data.govt.nz
- 5. Putting a dataset on data.govt.nz should be the responsibility of the agency owning the dataset.
- 6. data.govt.nz should point to data. Current landing pages should be phased out.
- 7. The facilities for listing data on data.govt.nz should be improved along the lines indicated in paragraph 31.
- 8. The reasons for the apparently high level of use of restrictive licences should be investigated, and changes made to NZGOAL procedures as necessary.
- 9. data.govt.nz should continue to catalogue all publicly available government datasets, even those currently with a non-open licence.
- 10. Improve the data request procedures along the lines set out in paragraph 38.
- 11. Put in place urgently a clear and resourced internal and external communication strategy for the implementation of the Cabinet Declaration including the role of data.govt.nz.
- 12. Increase the awareness of data.govt.nz within government agencies by using it as a communications vehicle for the Open Government Programme as a whole.
- 13. Extend data.govt.nz metadata along the lines discussed in paragraphs 46-51.
- 14. Publish the file of metadata for the datasets in data.govt.nz's catalogue as a dataset in its own right.
- 15. Consider migration to a well-supported, open-ended specialist metadata repository package
- 16. The communications strategy for the Open Government Programme should require cross-promotion between the different government websites involved.

- 17. data.govt.nz should have some material about itself and the Open Government Programme aimed at general public visitors, but it should not at this stage aim to cater further for them.
- 18. The communications strategy should include specific messaging and engagement with relevant businesses including IT firms.
- 19. Open Government Plans should include resources for external awareness, particularly to prospective data re-users; as part of this an "evangelist" role should be considered.
- 20. data.govt.nz should showcase prominently on its own site examples of data reuse, drawing on material already available including "List a Reuse" responses.
- 21. data.govt.nz and the Open Government Programme should continue to collect and highlight new examples of re-use.
- 22. Open Government Programme should consider the case for modest grants to develop selected proof-of-concepts into sustainable, if beta, live services.
- 23. Each dataset itself should remain the responsibility of the agency which owns it.
- 24. data.govt.nz should be the single, comprehensive government data catalogue for New Zealand.
- 25. There should be a strong presumption against any new data portals.
- 26. The case for continuing the operation of each of the existing portals should be rigorously tested by the Chief Executives Steering Group with a view to rationalisation along the lines suggested in paragraph 81.
- 27. Any other catalogues should export metadata on all their datasets, and to do so in such a way that there is no duplication of datasets on data.govt.nz.
- 28. Use data.govt.nz as the online communications platform and external brand of the Open Government Programme, and extend its content along the lines suggested in paragraph 84. (See also Recommendation 12.)
- 29. Create an appropriately skilled and adequately resourced team to drive implementation of the Cabinet Declaration on behalf of the Chief Executives Steering Group.
- 30. Chief Executives Steering Group should give other Chief Executives a model role description and ensure that identified leadership is in place in each agency.
- 31. Ensure accountability and transparency of decisions on the release and licensing of individual datasets.

TERMS OF REFERENCE

Review Objectives

A. To evaluate the usefulness of and ongoing requirement (or not) for the data.govt.nz website

B. To evaluate if data.govt.nz is meeting its objectives as stated in the data.govt.nz product plan 2010-11

- (1) increase the number of range of government datasets available for public access through data.govt.nz
 - (a) ensure ease and efficiency of listing government datasets on data.govt.nz
 - (b) help to identify demand for and potential use of requested government data
 - (c) promote to government agencies the potential benefits of opening up government data
 - (d) engage with government agencies to encourage and aid them to list requested government data on data.govt.nz
- (2) increase the number of people accessing government data through data.govt.nz
 - (a) improve online government data discovery through data.govt.nz
 - (b) increase the level of awareness of data.govt.nz in the public domain
- (3) foster government data re-use
 - (a) enable and showcase New Zealand government data re-use initiatives through data.govt.nz
 - (b) communicate effectively to government agencies the rationale for providing their data in machine readable formats
 - (c) support data re-use initiatives (eg mash up competitions)
 - (d) participate in data re-use conversations both within and outside government

C. To evaluate the positioning of the data.govt.nz website with respect to other New Zealand government data catalogues, repositories and other data discovery mechanisms.

D. To determine if there has been a change in the demographic of data.govt.nz users since the last review, and if so why.

E. To determine if there is ongoing value in retaining and supporting the data.govt.nz website in the light of the Open Government Cabinet paper and the new expectations of government agencies for data release; and if so

F. To identify opportunities for enhancements to the data.govt.nz website and work programme based on user feedback and on research within other jurisdictions

INTERVIEWEES

| Name | Agency |
|-----------------|--|
| Colin MacDonald | Land Information New Zealand |
| Geoff Bascand | Statistics New Zealand |
| Keitha Booth | Department of Internal Affairs/Land Information New |
| | Zealand |
| Emily Marden | Charities Commission |
| Graeme Simpson | Statistics New Zealand |
| Lynley Smith | Institute of Geological and Nuclear Sciences |
| Jason Ryan | State Services Commission |
| Gavin Hamilton | The Treasury |
| John Forne | NZ Geospatial Office (part of LINZ) |
| Jeremy Palmer | Land Information New Zealand |
| Brent Wood | National Institute of Water and Atmospheric Research |
| Glen Barnes | Founder of Open New Zealand (open.org.nz) /Independent |
| | software developer |
| Julian Carver | Canterbury Earthquake Recovery Authority (CERA) / |
| | Founding member of Open New Zealand (open.org.nz) |
| Rob Lee | NZ Police |
| Lisa Cornish | data.gov.au manager, Australia |
| Nadia Webster | Department of Internal Affairs |
| Rowan Smith | Department of Internal Affairs |

BACKGROUND PAPERS

data.govt.nz Product Plan 2010-11

data.govt.nz User Survey 21 Oct 2011

Cabinet Paper on Open Government Aug 2011

Cabinet Decision Minute 8 Aug 2011

Letter from Colin MacDonald on Open Government 16 August 2011

New Zealand Government Open Access Licensing Framework (NZGOAL) version 1 Aug 2010

DIA Open Data Project Progress Report 6 Oct 2011

Options for consolidation of geodata.govt.nz and data.govt.nz (27 Sep 2011, not agreed)

Internal DIA resource hours and costs for running and managing data.govt.nz

Chief Executives Expenses: report on feedback from data providers

data.govt.nz Website Evaluation Report July 2010

INTERNATIONAL DATA PORTALS: FUNCTIONALITY COMPARISON

ANNEX 4

| Site | data.gov (US) | data.gov.uk | data.gov.au | data.gov.ca | data.overheid.nl | datos.gob.es | data.govt.nz |
|--|---------------|-------------|-------------|-------------|------------------|--------------|--------------|
| Functionality | | | | | | | |
| Data catalogue with search by keyword | Y | Y | Y | Y | Y | Y | Y |
| Categories/official tagging | | Y | Y | | | Y | Y |
| User supplied tagging | | | | | | | Y |
| Structured Request data feature with voting and feedback | * | Y | * | | * | | Y |
| Gallery of Third Party Applications | | Y | Y | | | Y | |
| News about open data programme | Y | Y | | | Y | Y | |
| Information about open data programme | Y | Y | | | Y | Y | |
| Comment on individual dataset | Y | Y | Y | | | Y | Y |
| Rate individual dataset | | Y | Y | | | | |
| List a use of a dataset | | | | | | | Y |
| Ideas | | Y | | | | | |
| Community forums | Y | Y | | | | | Y |
| Semantic web functionality: SPARQL endpoint(s) and triple- stores | Y | Y | | | | | |
| | | | | | | | |

* These sites have a data request feature, but it is a write-only page which does not show requests already made, does not allow others to support the request, and does not give public response to the request.