

STATE SERVICES COMMISSION
Te Komihana O Ngā Tari Kāwanatanga



Promoting Government Information and Data Re-use

Background Paper

State Services Commission
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This Background Paper is the first stage of the **Open Government Information and Data Re-use Project** of the State Services Commission.

We want to work together with suppliers and users of non-personal government information and with people who use it now or wish to re-use it to create new information or products. We want to understand any issues you are facing.

Opening up access to this non-personal government information and data is expected to create value for the New Zealand economy and increase our social and cultural well being.

If you wish to play a part in this work, please send an email to opendata.reuse@ssc.govt.nz.

Executive Summary

The Internet and web technologies have changed the way information is used and discovered. The Internet is now the first place New Zealanders search to find information. Web 2.0 technologies and applications bring people and content together and allow the re-purposing of data and information in ways that were not previously possible.

Government has an opportunity to make its non-personal information more freely available using these technologies. It can release publicly available information as soon as possible; it can also open up its authoritative data for use in new ways. For example, people, businesses and civil society could use it to create new products and services. This provides new opportunities for individuals, communities, businesses and government itself to increase New Zealand's social, cultural and economic well being.

The Policy Framework for Government-held Information, released in 1997, is government's best practice statement for managing information held by Public Service departments. It anticipated a digital environment by encouraging Public Service departments to make government-held information "increasingly available on an electronic basis".

New Zealand government agencies across the wider State Services are starting to open up their non-personal digital information and data. [Statistics New Zealand](#) is leading the way with its making information more freely available initiative. Some Crown entities, for example, [National Institute of Water and Atmospheric Research](#), and [Public Health Information Online](#) make digital data available. [The New Zealand Transport Agency](#) provides real-time traffic data free of charge for development by third parties. Organisations such as [TheyWorkForYou](#) are remixing publicly available information in ways that New Zealanders indicate they want.

Internationally, governments are moving to open up their non-personal information. There is also increasing international demand for governments to provide data in readily usable or re-usable formats.

This paper summarises the current New Zealand government information environment and describes key international policies and initiatives. It then proposes a programme to work with suppliers and users of non-personal government information and data to promote and enable its re-use.

The outcome of this work would be:

- an approach for opening up New Zealand's public information and data, and
- a report on the impact of this approach on the Policy Framework for Government-Held Information

Background

The Policy Framework for Government-held Information¹, released in 1997, is government's best practice statement for managing information held by Public Service departments. It anticipated a digital environment by encouraging Public Service departments to make government-held information "increasingly available on an electronic basis".

The Internet and web technologies have changed the way information is used and discovered. The Internet is the first place New Zealanders now search to find information². Web 2.0 technologies and applications bring people and content together and allow the re-purposing of data and information in ways that were not previously possible. People do not make distinctions between government and non-government information and data. They expect both to be instantly available.

Internationally, governments are moving to open up their non-personal information. The OECD has released its *Recommendation for Enhanced Access and More Effective Use of Public Sector Information [C(2008)36]*³, and its *Policy Guidance for Digital Content*⁴. The European Union (EU) earlier released its *Directive on the Re-use of Public Sector Information*⁵ (2003/98/EC). The Australian Federal Government is assessing the recommendations of the *Venturous Australia; Review of the National Innovation System* report which, amongst much else, recommends a National Information Strategy to optimise the flow of information in the Australian economy⁶.

There is also increasing international demand for governments to provide data in readily usable or re-usable formats. A US Open Government Working Group, comprising 30 invited attendees from influential US organisations, has released a set of principles for open government data⁷. In Canada, the Citizens for Open Access to Civic Information and Data group is advocating that all levels of government make 'civic' information and data accessible at no cost in open formats to their citizens. They believe "this is necessary to allow citizens to fully participate in the democratic process of an "information society"⁸.

New Zealand government agencies across the wider State Services are starting to open up their non-personal digital information and data. [Statistics New Zealand](#) is leading the way with its making information more freely available initiative. Some Crown entities, for example, [National Institute of Water and Atmospheric Research](#), and [Public Health Information Online](#) make digital data available. [The New Zealand Transport Agency](#) provides real-time traffic data free of charge for development by third parties. Organisations such as [TheyWorkForYou](#) are remixing publicly available information in ways that New Zealanders indicate they want.

1 http://www.ssc.govt.nz/Documents/policy_framework_for_Government_.htm; following Cabinet approval (CAB (97) M 15/4C (i) refers
2 http://www.aut.ac.nz/resources/research/research_institutes/ccr/wipnz_2007_final_report.pdf
3 <http://www.oecd.org/dataoecd/0/27/40826024.pdf>
4 <http://www.oecd.org/dataoecd/20/54/40895797.pdf>
5 http://ec.europa.eu/information_society/policy/psi/docs/pdfs/directive/psi_directive_en.pdf
6 http://www.innovation.gov.au/innovationreview/Documents/NIS_chapter%207.rtf
7 <http://wiki.opengovdata.org/index.php/OpenDataPrinciples>
8 <http://www.osbr.ca/ojs/index.php/osbr/article/view/514/473>

New Zealand Government Information Environment

Guidance for managing government-held information is provided by the Policy Framework for Government-held Information. Its principles cover availability, coverage, pricing, ownership, stewardship, collection, copyright, preservation, quality, integrity and privacy. The principles reflect the provisions of the Official Information Act 1982, Local Government Official Information and Meetings Act 1987, the Privacy Act 1993, Copyright Act 1994 and specific legislation such as the Statistics Act 1975.

The Policy Framework for Government-held Information is being applied at a strategic and policy level. It is referenced in the Health, Justice and Geospatial Sector information strategies and in agencies' Information Management strategies. The pricing principle is cited in Treasury's *Guidelines for setting charges in the public sector*⁹ and is well applied across Public Service departments. Public Service departments delivering information-based services are applying the stewardship principle. Examples are the Ministry of Health and Land Information New Zealand.

The *New Zealand Government Data Management Policies and Standards*¹⁰, released in 2000, supplement the Policy Framework for Government-held Information, in particular, the ownership and stewardship principles. This document was drawn up to assist agency chief executives and anyone with delegated custodial responsibilities for Crown owned data or document assets.

The Public Records Act 2005 establishes a framework for creating and maintaining public records¹¹. It guarantees the public's right to free inspection of open access records.

The E-government Strategy, Digital Strategy, Digital Content and draft Digital Continuity Strategies¹² set out visionary statements for, amongst much else, the management of New Zealand's digital content.

International Public Information Environment

Public information policy development at international and country levels has been active. In North America the focus has been on updating all-of-government best practice information management statements, whereas, at the international level, the OECD and European Union (EU) have released access, use and re-use of public information recommendations or directives. Licensing of public information has been a priority in Australia. There are also campaigns for governments to open up access to their non-personal data. This international activity is summarised below.

9 <http://www.treasury.govt.nz/publications/guidance/finmgmt-reporting/charges/charges-dec02.pdf>

10 <http://www.e.govt.nz/standards/e-gif/data-management/data-management-policies/index.html/view?searchterm=data%20management>

11 any information that is compiled, recorded or stored in any format

12 <http://www.e.govt.nz/about-egovt/strategy/nov-2006/>; <http://www.digitalstrategy.govt.nz/Digital-Strategy-2/>; <http://www.digitalstrategy.govt.nz/Resources/New-Zealand-Digital-Content-Strategy/>; http://continuum.archives.govt.nz/digital-continuity-strategy.html#DCS_draft_doc_2

Information Management

The US Federal Government sets out best practice advice for agencies, including minimising cost to the Federal Government, minimising the burden for citizens, maximising the utility of the information, and reducing paperwork.¹³ The Canadian Federal Government regularly updates its information management advice for agencies¹⁴.

Coverage

The OECD and the EU define public information very broadly. The OECD's definition is "information, including information products and services, generated, created, collected, processed, preserved, maintained, disseminated, or funded by or for the Government or public institution"¹⁵. The EU list below illustrates the breadth of its coverage and also its expectations for external uptake of this information.

Information type	Examples of added value service offered by private companies
Meteorological information	Weather forecast for mobile phones as a part of a wider package of information services. Insurance of crops based on historical meteorological data
Laws and regulations	Collection of legal texts in a specific area at European, national and local level with links to relevant case-law
Digital maps	Freight management service. System facilitating disaster management
Grant information	Comprehensive overview of European, national and local grants as part of a broader service to facilitate location decisions for companies
Tourist information from tourist boards	Mobile tourist service with description of main monuments, hotel information, etc.
Business statistics	Business consultancy service based on statistical analysis
Administrative information	Overview of administrative formalities as part of a service for transport companies
Images of artefacts in museums	Online course in history of art
Audio-visual material from public archives	Documentaries integrating historical material
Traffic data	Intelligent navigation systems helping you to avoid traffic jams

Access and Re-use

The OECD Council's *Recommendation for Enhanced Access and More Effective Use of Public Sector Information*¹⁶ and the *OECD Policy Guidance for Digital Content*¹⁷, adopted by OECD member countries in June 2008, cover access and re-use. These documents complement the European Union (EU)'s *Directive on the Re-use of Public Sector Information*¹⁸ (2003/98/EC, dated 17 November 2003).

They all open up, maximise access to and allow non-exclusive re-use of non-personal public information and digital content, and require this irrespective of a member country's funding model for developing and maintaining the information.

¹³ US Coordination of Federal Information Policy Act; commonly known as the Paperwork Reduction Act. US Code Title 44, Chapter 35; Office of Management and Budget circular A-130

¹⁴ http://www.informationmanagement.gc.ca/links-liens_e.asp?catid=5&topid=32

¹⁵ <http://www.oecd.org/dataoecd/0/27/40826024.pdf>

¹⁶ <http://www.oecd.org/dataoecd/0/27/40826024.pdf>

¹⁷ <http://www.oecd.org/dataoecd/20/54/40895797.pdf>

¹⁸ http://ec.europa.eu/information_society/policy/psi/docs/pdfs/directive/psi_directive_en.pdf

The United Kingdom leads the EU in implementing the Re-use Directive. This work is led by the Office of Public Sector Information¹⁹ which operates a mixed regime for charging and licensing re-use. Most material published on central government websites can be re-used free of charge under terms of a Click-use licence. The Information Fair Trader Scheme regulates trading activities of those parts of government that are designated as Trading Funds, such as the Ordnance Survey. The Information Asset Register lists government information assets, and work is underway investigating combining information and data using semantic web²⁰ technologies.

In the United Kingdom, the *Power of Information* report²¹ recommended an approach for the government to take up “opportunities that are emerging in terms of the creation, consumption and re-use of information”. In response the Cabinet Office committed “to unlock the value of the information we collect on behalf of citizens; to deliver better public services; and to support world-class innovation that underpins a growing part of our knowledge economy.”²² Other initiatives include a campaign for government to free up data²³, and mysociety.org²⁴, a project of the UK Citizens Online Democracy, which “builds websites that give people simple, tangible benefits in the civic and community aspects of their lives”, for example, [TheyWorkForYou](#).

The Australian Federal Government is assessing the recommendations of the *Venturous Australia; Review of the National Innovation System* report. Recommendation 7.7 recommends a National Information Strategy to optimise the flow of information in the Australian economy. Its aim would be to:

- utilise the principles of targeted transparency and the development of auditable standards to maximise the flow of information in private markets about product quality
- maximise the flow of government generated information, research, and content for the benefit of users (including private sector re-sellers of information)²⁵.

Open access

There is increasing international demand for governments to provide data in readily usable or re-usable formats. A US Open Government Working Group, comprising 30 invited attendees from influential US organisations, has released a set of principles for open government data²⁶. In Canada, the Citizens for Open Access to Civic Information and Data group is advocating that all levels of government make ‘civic’ information and data accessible at no cost in open formats to their citizens. They

19 <http://www.opsi.gov.uk/>

20 vision of information that is understandable by computers, so that they can perform more of the tedious work involved in finding, sharing and combining information on the web

21 The Power of Information: An independent review by Ed Mayo and Tom Steinberg commissioned by the Cabinet Office
http://www.cabinetoffice.gov.uk/~media/assets/www.cabinetoffice.gov.uk/strategy/power_information%20pdf.ashx

22 The Government’s Response to *The Power of Information*,
http://www.cabinetoffice.gov.uk/~media/assets/www.cabinetoffice.gov.uk/publications/reports/power_information/power_information_response%20pdf.ashx

23 <http://www.freeourdata.org.uk/index.php>

24 <http://www.mysociety.org/>

25 http://www.innovation.gov.au/innovationreview/Documents/NIS_chapter%207.rtf

26 <http://wiki.opengovdata.org/index.php/OpenDataPrinciples>

believe “this is necessary to allow citizens to fully participate in the democratic process of an "information society"²⁷.

Copyright and Licensing

The OECD and the EU require member countries to draw up licensing approaches which clarify copyright ownership and usage. The Queensland Government Information Licensing Framework, based on open access principles, is currently being tested within the statistical office in the Queensland Treasury.²⁸, an information-centric, highly transactional operating central government environment.

Pricing and Funding

Both the OECD and the EU require transparent and consistent pricing which they anticipate will encourage competition.

Revenues to the UK Government from the sale and licensing of public sector information are around £340 million per year²⁹. The Ordnance Survey estimates³⁰ that public sector information underpins £100 billion per year of economic activity in the UK and the total market for public sector information stands at £590 million per year. Yet, direct revenues from UK public sector information are considered to be only a fraction of the wider value that this information creates.

In 2008 Cambridge University investigated the impact of adopting different models for the provision of public sector information by trading funds³¹. It examined the costs and benefits for society, and the effects on government revenue of different charging policies, ranging from profit maximisation through to zero cost. The UK Treasury has commissioned a further report to analyse the argument that the wider economy would benefit from making government-collected raw data free for re-use to see how this would affect some of the biggest trading funds, including the Ordnance Survey, Met Office, UK Hydrographic Office and the Land Registry³².

In the US, government data collection is funded with money from the general budget, appropriated by Congress. The private sector is encouraged to use raw content to create new information services at no more than the cost of dissemination and without any government copyright restrictions. Application of this by information intensive industries, particularly in the geographic information and environmental services sectors, has led to increased tax revenues.³³

Adoption of EU Directive

The EU is now reviewing progress made by its member countries in adopting its 2003 Directive 2003/98/EC³⁴. All 27 EU Member States have transposed the Directive into

27 <http://www.osbr.ca/ojs/index.php/osbr/article/view/514/473>

28 <http://www.oesr.qld.gov.au/about-our-services/policy/gilf-project.shtml>

29 The Power of Information: An independent review by Ed Mayo and Tom Steinberg, http://www.cabinetoffice.gov.uk/~media/assets/www.cabinetoffice.gov.uk/strategy/power_information%20pdf.ashx

30 <http://www.ordnancesurvey.co.uk/oswebsite/aboutus/reports/oxera/index.html>

31 Models of Public Sector Information Provision by Trading Funds. Cambridge University, February 26, 2008. <http://www.berr.gov.uk/files/file45136.pdf>

32 <http://www.shareholderexecutive.gov.uk/publications/pdf/tradingfunds250608terms.pdf>

33 http://www.weather.gov/sp/Borders_report.pdf

34 http://ec.europa.eu/information_society/policy/psi/docs/pdfs/directive/psi_directive_en.pdf

their legislation, and the ePSIplus programme has recommended³⁵ to the European Commission Directive 2008 Review group that it considers:

- independent channels for redress for re-users³⁶
- how to stop persistent discriminatory practices in the licensing of data
- the creation of a suitable set of standards, an infrastructure and an action plan which brings about steadily improving discovery of access to the full range of public sector information
- the creation of practical initiatives to create ‘asset registries’, or other public sector information infrastructures supporting re-use
- ways of stimulating the private sector to act
- an intensification of work to establish and disseminate the economic case for low or no charges conclusively.

Promoting Government Data and Information Re-use

One of the reasons for developing the Policy Framework for Government-held Information in the 1990s was a concern “that a culture has evolved that locks government-held information away as a specific departmental asset”³⁷. The policy framework provided the initial guidance for Public Service departments to open up their non-personal information. Web technologies now offer greater opportunities. Publicly available information can be released easily and open authoritative data can be made available for use in new ways. People, businesses and civil society can re-use it to create new products and services.

There has been some recent policy analysis of government information and data re-use. The Treasury discusses the characteristics of knowledge in its paper *Innovation and Productivity: Using Bright Ideas to Work Smarter*³⁸. It notes that “these characteristics create the potential for markets on their own to fail to deliver the best outcome. First, knowledge can ‘spill over’ to those who did not create it, resulting in a social return to knowledge creation that is greater than the private return. Secondly, the non-rival nature of knowledge suggests it ought to be made widely available once it has been created”.

It concludes that “given these features, there is likely to be less investment in new knowledge and less spreading of it compared to what would be best for society as a whole”. It suggests there is “an important and potentially quite active role for government to create the best conditions for innovation, ranging from subsidising public and private-sector R&D, ensuring that institutions for intellectual property rights and higher learning work well, and encouraging strong links between private-sector firms that apply knowledge and public research organisations that create it”.

Agencies and sectors are seeking further advice covering:

35 http://www.epsplus.net/reports/epsplus_recommendations_to_the_ec_s_2008_review_of_the_psi_re_use_directive

36 In order to make a complaint about existing business arrangements with public sector bodies

37 Policy framework for Government-held information: criteria for stewardship; paper to Cabinet Strategy Subcommittee on Expenditure Control and Government Administration, c 29 June 1998.

38 <http://www.treasury.govt.nz/publications/research-policy/tprp/08-05>

- quantitative assessment of the potential to create value and growth in the New Zealand economy from opening up public information
- consequential pricing and funding issues
- clarification about Crown copyright and information licensing in a digital environment. They wish to know whether or how to apply licences such as Creative Commons across New Zealand's government-held information
- what machine-readable formats would facilitate re-use through the creation of new products and businesses by third parties

Another potential issue is that the scope of the Policy Framework for Government-held Information only applies to the 35 Public Service departments. Yet, much government-held data is created or managed across the wider State Services, State sector and public sector agencies. Examples are geospatial, meteorological and scientific data, managed by Crown entities, State-owned enterprises or local government. Extending the ambit of the framework to cover these agencies may need to be considered, given user demand to access and re-use their publicly-funded data.

This may also lead to a consideration of machinery of government matters. Section 107 of the Crown Entities Act 2004 provides the capability for the Minister of State Services and the Minister of Finance to jointly direct certain categories of Crown entities to comply with specified requirements for the purpose of both supporting a whole of government approach; and either directly or indirectly, improving public services. E-government is cited as an example. Section 7 of the State Owned Enterprises Act 1986 states that “Where the Crown wishes a State enterprise to provide [non-commercial] goods or services to any persons, the Crown and the State enterprise shall enter into an agreement under which the State enterprise will provide the goods or services in return for the payment by the Crown of the whole or part of the price thereof.”

Next Steps

A programme to promote and enable greater re-use of non-personal government information and data in New Zealand is proposed. This would involve working with suppliers and users to understand the issues they have experienced and how they are addressing them. These include pricing, funding, copyright, licensing, and information standards and presentation formats. The outcome of this work would be:

- an approach for opening up New Zealand's public information and data, and
- a report on the impact of this approach on the Policy Framework for Government-Held Information.