

EGovernment:

**An assessment and comparison of
electronic Births, Deaths and Marriages information and
services provision between countries.**

By

Louise Erena Hamill

Submitted to the School of Communications and Information Management,

Victoria University of Wellington

In partial fulfilment of the requirements for the degree of

Master of Library and Information Studies

19 February 2001

h
AS741
VUW
A55
H217
E

Table of Contents

Abstract	3
Introduction	4
Problem statement	5
Literature review	7
Research objectives	16
Research questions	17
Parameters of study	18
Population and sample	19
Methodology	22
Results	25
Conclusion	47
Bibliography	49
Appendices:	
Appendix A - Definition of keywords, terms and concepts	55
Appendix B - Questions derived from evaluative criteria to assess EBDM	56
Appendix C - List of documents to be examined	58
Appendix D - EBDM Assessment	61
Appendix E - Policy Document Assessment	62
Appendix F - EBDM Homepages (November 2000 to February 2001)	63

Abstract

The extent to which countries have developed eGovernment, and the policies to implement and control the development of eGovernment, requires consideration. Whilst eGovernment exists in some form in many countries there has been little examination of its implementation and management, and how it compares between countries. This research is a contribution to the emerging eGovernment theory.

There has been a proliferation in the print media of articles on the benefits and possibilities of eGovernment. Where eGovernment exists, consideration needs to be made of the reality as opposed to government and media hype and enthusiasm.

This research examines eGovernment in a number of countries by focusing on a core government service, the agency responsible for births, deaths and marriages. Selected countries are compared and the electronic Births, Deaths and Marriages service provided by each country is related to the policies and standards they have in place for the development and control of eGovernment.

Results show that eGovernment is still primarily an information medium. EGovernment, as seen through EBDM, has made little progression in terms of service provision. The development of eGovernment policy within government and the development of technology and customer service expectations in the business environment will contribute to the development of eGovernment customer service.

Introduction

EGovernment, alternatively referred to as government online and electronic service delivery, encompasses a large and wide-ranging amount of information, including government information, services, and structure.

This research aims to examine eGovernment in a number of countries by focusing on government services as embodied by the births, deaths and marriages agency. This will be referred to in the remainder of the research as eGovernment: Births, Deaths and Marriages (EBDM).

The research will compare selected countries and relate the EBDM service provided by each country to the policies and standards they have put in place for the development and control of eGovernment.

In examining EBDM in a number of countries, this study will attempt to answer the question of whether EBDM in each country fulfils its policies and standards, whether EBDM fulfils the requirements of users, and how EBDM compares between countries.

Problem Statement

The extent to which countries have developed eGovernment, and the policies to implement and control the development of eGovernment, requires consideration. Whilst eGovernment exists in some form in many countries, its implementation and management, and how it compares between countries, has not been examined.

Where eGovernment exists, consideration needs to be made of the reality as opposed to government and media hype and enthusiasm. There has been a proliferation in the print media of articles on the benefits and possibilities of eGovernment. How does the reality compare to the hype? How far has the implementation of eGovernment progressed?

EGovernment, as a whole, is too broad and complex to examine easily. However, by selecting a single aspect of government, as it exists in eGovernment, it may be possible to perceive how eGovernment is developing and working within different countries.

The aspect of eGovernment that this research will examine is the births, deaths and marriages registry (BDM). This aspect was selected as one that is common and consistent between countries and one that a large proportion of the population has cause to deal with at one time or another.

It was felt that BDM was a service that would place demands on a government, in terms of service, thus being more likely to be advanced in terms of eGovernment.

Does eGovernment, as embodied in the Births, Deaths and Marriages registry of selected English-speaking countries (United Kingdom, Canada, Australia and New Zealand which emerged as useful comparisons in the literature review), fulfil the aims and requirements of government policies and meet the information requirements of citizens?

Literature Review

General

Matthew Symonds states in *The Economist* that, overall, governments have come late to the Internet. Governments have seen their role as one of creating and fostering the electronic environment rather than actively developing and using information technology for their own ends. This may be due to governments having had little motivation to make the move to an electronic environment as they hold a monopoly on the majority of information and services in which they deal. Governments are also covered by the sheer enormity and complexity of managing the transition to eGovernment of numerous governmental agencies that communicate little with each other.

Symonds perceives that attitudes within governments are changing as the benefits of eGovernment are recognised. EGovernment can meet the rising expectations of customer service through availability, convenience, fast delivery, customer focus and personalisation, while possibly reducing government costs and stretching tax revenue further.

This article also looks at the management of the move to eGovernment and recommends that projects be managed in small sections. Four steps are proposed for the progression to eGovernment,

1. Governmental departments and agencies use the Internet to provide information about themselves;
2. These informational sites develop into two-way communication tools;

3. The sites move towards allowing a 'formal quantifiable exchange of value to take place'. The payment of fines, or the renewal of licences for example.
4. A portal which integrates all government services, and which provides an effective way of locating services based on need and function rather than department or agency.¹

Peter Hernon, in his article "Government Information Policy in New Zealand: Businesslike but evolving?" sees the New Zealand government as maintaining a tight hold on information, allowing access on request and availability, but doing little to disseminate information. Hernon is concerned with access to and freedom of information, areas that this research is not examining, but he also discusses the lack of, and need for, a government-wide information policy.

In a statement regarding information policy principles, which are as applicable to electronic information provision as they are to 'hard-copy' information provision, Hernon states,

"Information policy principles play an important function in articulating the role of government in managing information life cycles, the value of government information, and the roles of the private sector and other stakeholders in providing access to published government information. The problem will be to identify a range of principles applicable across departments that generate a widespread willingness to share published information,

¹ Symonds, M. "Government and the Internet." *The Economist* (June 24, 2000): 6, 9.

that lead to improved public access, and that guide the delivery of public and private sector information services to the public."²

"At the Dawn of e-Government. The Citizen as Customer", a study by Deloitte Consulting and Deloitte & Touche, defines eGovernment as "the use of technology to enhance access to and delivery of government services to benefit citizens, business partners and employees."³

Deloitte Research perceives technology and the complexity of governments' as an obstruction to the development of eGovernment. Current technology is often not able to support the improvements that need to be made for the transformation to eGovernment. Governments have recognised these problems and, as the focus of customer service moves towards the Internet, government sites are moving from one-way information sources to transaction-processing commerce centres. Deloitte Research found that 68% of governments are increasing information technology spending over the next two years.⁴

The Deloitte research describes six stages of eGovernment and eight actions that may be made on the road to eGovernment.

Six Stages

1. Information publishing/dissemination.

² P.Hernon, "Government Policy in New Zealand: Businesslike but evolving?" *Government Information Quarterly* 13, 3 (1996): 215-229.

³ Deloitte Research. *At the Dawn of e-Government: the Citizen as Customer*. Deloitte Consulting and Deloitte & Touche, 2000: 1.

⁴ Ibid., 10.

2. "Official" two-way transactions - exchange of information and money between individuals and individual departments.
3. Multi-purpose portals - single point of entry.
4. Portal personalisation - variety of services through a single website with a customised portal.
5. Clustering of common services - groups of transactions rather than groups of agencies.
6. Full integration and enterprise transformation - full service centre.

Eight Actions

1. Define a vision and a business case for eGovernment.
2. Build customer trust with privacy, security and confidentiality.
3. Plan technology for growth and customer-friendliness.
4. Manage access channels to optimise value.
5. Weigh in-sourcing versus outsourcing.
6. Establish investment plans that work within funding cycles.
7. Understand the impact of fees for transactions.
8. Include a strong change management program.⁵

The results of research by V. Jupp of Andersen Consulting⁶ examine whether the rhetoric of eGovernment matches the reality. The status of eGovernment in 20 countries from the position of both citizens and businesses is examined to assess this.

⁵ Deloitte Research. *At the Dawn of e-Government: the Citizen as Customer*. Deloitte Consulting and Deloitte & Touche, 2000.

⁶ Andersen Consulting was renamed Accenture as of January 2001. Its website is now located at <http://accenture.com>

Each of the 20 countries was assessed for Internet maturity, the extent to which they 'publish, interact and transact', and placed into one of four groups. The research found that of none these four groups (Early Leaders, Visionary Followers, Cautious Implementers and Slow Starters) were approaching Internet maturity. The Early Leaders group have not yet realised more than 20% of the potential of online service delivery⁷, and while most governments are focused on the electronic environment as a vehicle for publishing and information dissemination, development is slow in the move towards interaction and transaction capabilities.

This research, like the Symonds article, notes the lack of an imperative forcing governments into the online environment in the same way that business has been forced to adapt and reiterates the Symonds article with regard to the managing of eGovernment projects in small sections.⁸

Jupp concluded that some progress has been made, but that there are extensive opportunities that can only be harnessed through a whole of government approach, as opposed to one that follows a structure of individually developed departments and agencies.

The selection of the four countries to be examined in this research was influenced by the results of the research carried out by Andersen Consulting. The four countries selected are taken from the top two groups discussed by Andersen Consulting. Australia and Canada were taken from Early Leaders. The other two countries in this group were excluded because English is not their main language

⁷ V. Jupp, "Implementing eGovernment - Rhetoric and Reality." *Insights for Government Executives* 2, (June 2000). Andersen Consulting <http://www.ac.com>, 1.

(Singapore), or their governmental structure would complicate comparison, such as in the USA where there are multiple levels of government.

The United Kingdom and New Zealand belong to the Visionary Followers group. The five other countries in this group also do not have English as their main language (France, Germany, Hong Kong, Spain and Norway).

Rowena Cullen and Caroline Houghton examine New Zealand government websites. The objectives of their research were to assess the effectiveness of government websites in providing government information, and whether there was equitable and appropriate access to that information for all citizens. They found a lack of policy to guide the development of government information on the Internet. They also found sites performed badly when assessed on their provision of a clear statement of purpose, on statements on confidentiality, privacy, liability and copyright, on use of meta-data, on contacts for feedback and update of information, on access for disabled users, on assurances of accuracy and currency, and on navigability of the site.

Cullen and Houghton conclude that there is a strong need for government policy before any further moves towards a total electronic government environment.⁹

Denise Montgomery, in a *New Zealand Netguide* article entitled "Yes Minister, you've got email", looks at the status of eGovernment in New Zealand. It concludes that New Zealand eGovernment currently extends as far as providing information, but little further. The Minister of State Services defends this lack of

⁸ Ibid.

progress as caution, believing that most government agencies are not yet ready for eGovernment. Montgomery goes on to discuss Jupp's research, and what is, and soon will be, possible in New Zealand's eGovernment with increased funding and the establishment of an e-Unit for overall development, control and help.¹⁰

Mark Story's *Management* article, "Fingertip Control", looks at New Zealand's eGovernment situation and at the Deloitte Research study. The New Zealand government has established an e-Unit and has a budget for eGovernment of \$15 million over the next four years. The e-Unit is part of the State Services Commission and its major role is the development of eGovernment strategy, data management policies, standards and guidelines, and helping other government agencies embrace its eGovernment vision. It is hoped that this will help New Zealand reduce the two year gap which Deloitte's research suggests exists between New Zealand and Australia, Britain and Canada. Story goes on to discuss obstacles to eGovernment and proposed solutions, including financing and legislation such as the Electronic Transactions Bill.¹¹

The literature suggests that although awareness of and a desire for eGovernment exist, the reality needs considerable work. EGovernment requires policy and guidelines for eGovernment before too much is developed, as well as an integrated and whole-of-government approach, in order to succeed.

⁹ Rowena Cullen and Caroline Houghton. *Democracy On-Line: an Assessment of New Zealand Government Websites*. Research Report, Victoria University of Wellington, 2000.

¹⁰ Montgomery, D. "Yes Minister, you've got email." *New Zealand Netguide* 42 (August 2000): 64-73.

Evaluative Criteria

The criteria included in the methodology of this research have been derived from a number of sources, all of which use a similar set of evaluative aspects.

Eschenfelder et al use the criteria proposed in their 1997 Government Information Quarterly article to examine United States government websites. The criteria they use are divided into two areas: information content criteria (orientation to website, content, currency, services, accuracy and privacy) and ease-of-use criteria (quality of links, accessibility, design and navigability).¹²

Alastair Smith, in two publications, organises his criteria slightly differently. His criteria are divided into seven areas with sub-sections:

Scope - breadth, depth, time, format

Content - accuracy, authority, currency, uniqueness, links to other resources,
quality of writing

Graphic and multi-media design

Purpose - audience

Reviews

Workability - user friendliness, required computing environment, searching,
browsability and organisation, interactivity, connectivity

Cost.^{13 14}

¹¹ Story, M. "Fingertip Control." *Management* (September 2000): 16-21.

¹² Kristin R. Eschenfelder, J.C. Beachboard, C.R. McClure and S.K. Wyman. "Assessing U.S. Federal Government Websites." *Government Information Quarterly* 14, 2 (1997): 173-190.

¹³ A. Smith, *Criteria for evaluation of Internet Information Resources*. (1997.)
<http://www.vuw.ac.nz/~agsmith/evaln/index.htm>

Rowena Cullen and Caroline Houghton in their assessment of New Zealand government websites use very similar criteria to Eschenfelder et al and Smith, and a similar structure to Eschenfelder et al: information content (orientation to website, currency, bibliographic control, services and privacy) and ease of use (quality of links, feedback mechanisms, accessibility, design and navigability).¹⁵

Cullen and Houghton, and Eschenfelder et al use their criteria to assess government websites, and Smith uses his to assess Internet sites in general. Through a combination of these criteria, it will be possible to assess EBDM sites.

The evaluative criteria to be used in this research follows the structure of Eschenfelder et al and Cullen and Houghton, eg information content and ease of use, and incorporates Smith's additional criteria.

¹⁴ A.G. Smith, "Testing the Surf: Criteria for evaluation of Internet Information Resources." *The Public-Access Computer Systems Review* 8, 3 (1997). <http://info.lib.uh.cdu/pr/v8/n3/smit8n3.html>

¹⁵ Rowena Cullen and Caroline Houghton. *Democracy On-Line: an Assessment of New Zealand Government Websites*. Research Report, Victoria University of Wellington, 2000.

Research Objectives

This study will determine:

1. Whether the EBDM activities of the respective countries meet stated aims and policies for the implementation of eGovernment.
2. What EBDM information and services are provided by the United Kingdom, Canada, Australia and New Zealand.
3. Whether the Andersen Consulting research groupings of Early Leaders and Visionary Followers are reflected in an examination of the selected countries EBDM sites/pages.
4. How EBDM information and services compare between the United Kingdom, Canada, Australia and New Zealand.
5. Whether the United Kingdom, Canada, Australia and New Zealand have a stated eGovernment policy and control framework through the examination of government documents and publications.
6. Whether eGovernment is an effective option for births, deaths and marriages (BDM) information and services provision.

Research Questions

1. Do the EBDM activities of the respective countries meet the stated policies and standards for the implementation of eGovernment?
2. What EBDM information and services are provided by the United Kingdom, Canada, Australia and New Zealand?
3. Are the Andersen Consulting research groupings of Early Leaders and Visionary Followers reflected in an examination of the selected countries EBDM sites/pages?
4. How do EBDM information and services compare between the United Kingdom, Canada, Australia and New Zealand?
5. Is there stated policy and standards for the implementation and management of eGovernment?
6. Is eGovernment is an effective option for BDM information and services provision?

Parameters of Study

This research will examine eGovernment information and services provision by the governments of the United Kingdom, New Zealand, Canada (in the two provinces of Saskatchewan and Ontario) and Australia (in the two states of Tasmania, and New South Wales) [see Population and Sample]. It will examine government aims and policies regarding eGovernment, and how this compares to what has been implemented.

This research will not examine issues of copyright, freedom of information, or of equitable and appropriate access for all citizens. Although these issues are of importance in the implementation and development of eGovernment they are not pertinent to the consideration of the extent to which the governments of the selected countries have developed eGovernment and eGovernment policies, and whether the implementation of eGovernment fulfils said policy as well as meeting the information requirements of citizens.

Population and Sample

The number of governments engaged in eGovernment is significant, however there is a wide range in terms of implementation. V.Jupp in the Andersen Consulting study looked at twenty countries and divided them into four groups: Early Leaders (Australia, Canada, Singapore and the USA), Visionary Followers (France, Germany, Hong Kong, New Zealand, Norway, Spain and the United Kingdom), Cautious Implementers (Italy, Japan, Netherlands and South Africa), and Slow Starters (Belgium, Brazil, Ireland, Malaysia and Mexico).¹⁶ The last two of these groups were excluded from the study population, as they have not progressed far enough to compare eGovernment sites and policies. Of the countries included in the first two groups a number were excluded as not having English as their main language.

The Deloitte Research study narrowed the population further. It looks at five countries: Australia, Canada, New Zealand, the United Kingdom and the United States.¹⁷ These five are all from the top two Anderson Consulting groupings, and with the exception of the United States which was consequently excluded from the population, had comparable systems and structures of government.

The population that this study will consider is eGovernment in the United Kingdom, Canada, Australia and New Zealand. Although the style and method of government of countries is not a basis of comparison for this research, it does affect the sample. Both the United Kingdom and New Zealand have a centralised national

¹⁶ V. Jupp, "Implementing eGovernment - Rhetoric and Reality." *Insights for Government Executives* 2, (June 2000). Andersen Consulting <http://www.ac.com>, 2.

¹⁷ Deloitte Research. *At the Dawn of e-Government: the Citizen as Customer*. Deloitte Consulting and Deloitte & Touche, 2000, 1.

government. Canada and Australia, on the other hand, have both a centralised national government and provincial or state government. Consequently, consideration of eGovernment in Canada and Australia will look at national government in terms of national legislation and policy regarding eGovernment, and at two provinces or states in each country for their legislation, policy and implementation regarding eGovernment.

Consideration was made of selecting the provinces or states on comparable populations, but this was not possible as provincial and state populations varied extensively. The most populous province or state has been selected from each country (Ontario and New South Wales) and a substantially smaller province or state from each country (Saskatchewan and Tasmania). Both of these smaller provinces or states are close to a twelfth the size of the largest ones.

Australia - <http://www.govonline.gov.au/>

Tasmania - <http://www.tas.gov.au/>

Population 471 900

Website Births, Deaths and Marriages, Department of Justice and
Industrial Relations, <http://www.justice.tas.gov.au/bdm/index.htm>

New South Wales - <http://www.nsw.gov.au/>

Population 6 341 600

Website New South Wales Registry of Births, Deaths and Marriages,
<http://www.bdm.nsw.gov.au/>

Canada - http://www.gol-ged.gc.ca/index_e.asp

Saskatchewan - <http://www.gov.sk.ca/>

Population 1 019 478

Website Saskatchewan Health - Vital Statistics,
http://www.health.gov.sk.ca/ps_vital_statistics.html

Ontario - <http://www.gov.on.ca/>

Population 11 000 000

Website Births, Deaths and Marriages, Ministry of Consumer and
Commercial Relations,
<http://www.ccr.gov.on.ca/mccr/english/births&marriages.htm>

New Zealand - <http://www.nzgo.govt.nz>

Population 3 842 262

Website New Zealand Births, Deaths & Marriages Office, Department
of Internal Affairs, <http://www.bdm.govt.nz/>

United Kingdom - <http://www.open.gov.uk>

Population 59 200 000

Website Births, Deaths and Marriages Registration, National Statistics,
<http://www.statistics.gov.uk/nsbase/registration/introduction.asp>

Methodology

The methodology used in assessing EBDM in the study's chosen countries and provinces/states is derived from Rowena Cullen and Caroline Houghton (2000), Rowena Cullen and Dan Dorner (1999), Kristin Eschenfelder and John Beachboard (1998), and Alastair Smith (1997). The criteria are divided into two areas of concern, information content and ease-of-use.

Information Content

Scope	Orientation to web-site Help and instructional facilities Information provision-Legal statement, implications and obligations; Privacy
Content	Currency Accuracy Services

Ease of Use

Accessibility	
Navigability	Searching Movement within site/page
Quality of links	
Design	Language Graphics
Feedback mechanisms	

Specific questions will be asked under each heading to assess how each EBDM site/page meets the criteria. For each question, each site/page will be rated on a scale of zero to five.

- 5 = meets criteria in an exemplary manner
- 4 = meets criteria in a basic manner
- 3 = meets most criteria (some extremely well)
- 2 = meets some criteria in a basic form
- 1 = meets a few of the criteria
- 0 = meets none of the criteria

For the purposes of this project, an 'exemplary' manner is defined as meeting the criteria in a manner that is illustrative or fit to be imitated. The criteria used for assessing EBDM pages/sites are provided in Appendix B.

Results will be displayed in the form of a comparative table.

The criteria aim to determine how well each of the EBDM sites carries out eGovernment. Whether there is any guidance from government on the development and implementation of eGovernment will be determined through an examination of material published by individual governments. The material will be examined for policies, aims and standards that address important aspects of eGovernment as determined in the background material examined in the literature review. The material to be examined is listed in Appendix C.

The results of this examination will be shown in a table indicating each aspect each countries policy documents assess. The aspects to be examined are:

- Customer service/accessibility** (whether provision of or access to information and services is addressed; includes statements regarding the importance of customer service);
- Privacy** (privacy of information disclosed or exchanged between the

government and the customer);

-**Security** (security of information, sites and data exchange);

-**Statement of purpose** (vision statement; whether the rationale behind providing electronic information and services is addressed);

-**Communication/information exchange** (whether development of eGovernment to a level of two-way communication, electronic payments etc is addressed);

-**Legal aspects** (copyright, liability etc); and

-**Structure/format** (how eGovernment is to develop - whole of government portal versus individual portals).

Results

EBDM Site Assessment

Q.1 Clear statement of the scope and aim of the site are provided.

Overall, the EBDM sites did poorly in this area. In the case of New South Wales, New Zealand and Saskatchewan, the purpose statement concerned the agency itself, rather than the site. Both Ontario and the United Kingdom made statements that, although brief, address the purpose of the site.

Ontario - "This is the place to get information about birth, death and marriage certificates from the Ontario Registrar General."¹⁸

United Kingdom - "These pages give you information about how to register a birth or death in England and Wales, how to go about getting married, how to obtain certificates and how to use the services at the Family Records Centre."¹⁹

No EBDM outlined what information and services were available on their sites.

Q.2 Instruction and help facilities are provided.

All the EBDM sites failed in this area. None provided instruction on the use of the site.

¹⁸ Births, Deaths and Marriages, Ministry of Consumer and Commercial Relations,
<http://www.ccr.gov.on.ca/mccr/english/births&marriages.htm>

¹⁹ Births, Deaths and Marriages Registration, National Statistics,
<http://www.statistics.gov.uk/nsbasc/registration/default.asp>

The United Kingdom, Tasmania, Saskatchewan, New Zealand and New South Wales all had no help facility. Ontario had a link to an agency help facility that did provide some guidance including popular links.

Q.3 Provision of legal information.

The sites varied extensively in their provision of legal information. New Zealand provided no statements whatsoever whilst New South Wales limited its legal information to a statement regarding crown copyright. Tasmania and Saskatchewan met the criteria in a basic manner, providing statements on copyright, privacy and access policy.

Ontario and the United Kingdom met the criteria in an exemplary manner with Ontario in particular standing out. This EBDM site had legal statements clearly positioned at the bottom of every page.

Q.4 Content matches scope and aim of site.

This criteria was not applicable in the cases of Tasmania, New South Wales, Saskatchewan and New Zealand, given their lack of a statement regarding scope and aim (see Q.1).

Both Ontario and the United Kingdom EBDM sites match their aim and scope statements, although these statements are only to a basic level.

Q.5 Content is organised around user needs.

All EBDM sites met this criteria in an exemplary manner with the exception of New South Wales. Whilst the remainder of the sites used headings and divisions such as 'registering a birth/death/marriage' and 'adoption information', the New South Wales site was more ambiguous and basic in its divisions. These include 'certificates' and 'registrations'.

Q.6 Site is written in clear and consistent language that matches the expected audience.

Overall the EBDM sites performed well in this area with the language being straightforward and easily understood. The United Kingdom site was more formal and official than the others were, but still within the bounds of audience appropriateness. There appeared to be an assumption across the sites that the audience would be comfortable enough with the electronic environment to understand terms such as 'sitemap'.

Q.7 Address of contact person and last update of information appear at the bottom of pages with substantive content.

Most sites met this criteria well. Tasmania, Ontario and the United Kingdom provided the appropriate information at the bottom of substantive pages, although the United Kingdom's only contact was either a feedback link or a contact for copyright permission. New South Wales provided a last update

date and a telephone number and e-mail address for each area, but not at the bottom of the page. Whilst New Zealand provided a last update date, the only contact provided was a 'Contacting Us' link on the sidebar, which proved to be the addresses and details of the agency's offices. Saskatchewan provided no last update date, but did provide contact details in the side bar.

Q.8 Content is complete.

All the sites failed to meet this criteria with no statements regarding the completeness of their sites. There was also nothing, however, to indicate that the sites were still under construction.

Q.9 Content is up-to-date.

All the sites met this criteria, with the exception of Saskatchewan which only provides a copyright date, providing statements on when the site and pages were last updated, and all appear to have been updated within the last year.

Q.10 Accurate information.

All the sites appeared to meet this criteria in an exemplary manner with links and other information appearing to be accurate and consistent. The EBDM sites did not cite any bibliographic references.

Q.11 Headings and titles relate to content.

Again, the sites met this criteria well. New South Wales' headings on individual pages often differ from those on the homepage. For example, the heading 'Changing Names' on the homepage is 'Changing Your Name' in the individual page, 'Getting Married' becomes 'Registering a Marriage', and 'Family History' becomes 'How do I trace my family tree?' Nonetheless, the differing headings still reflect the content accurately.

Q.12 Terminology and layout are consistent within the heading throughout the site.

All the EBDM sites performed well here apart from Tasmania which, although the terminology remained consistent, performed poorly through unpredictable changes in colour, size and boldness of headings and text. For example, the page relating to obtaining copies of birth certificates has text that varies between blue, purple, pink and red. There is bold, italic or normal text, and sometimes bold and italic combined. The font size is consistent in this case, but the font itself changes three times.

Q.13 Spelling, grammar and language standards and inconsistencies.

All sites met this criteria, except New Zealand which fell slightly short of fully meeting the criteria with cumbersome grammar and language. In the section regarding birth certificates and adoption, for example, a paragraph states, "

When a person has been legally adopted, the birth certificate that Births, Deaths and Marriages normally issues will be the post-adoptive birth certificate, which shows the details of the adoptive parents. If you are adopted you may wish to apply for a copy of your original, pre-adoptive birth certificate - the certificate which shows the details of your birth before you were adopted."

Q.14 Provision of services.

As customer service providers the EBDM sites performed badly in this area. The sites all serve as information providers rather than service providers. Most of the sites provide application forms that can be downloaded and printed, and New Zealand allows for applications for certificates to be made by e-mail, fax and in-person with the appropriate payment.

Q.15 Promotion of service and information services.

Despite the lack of electronic services all the EBDM sites meet this criteria well in terms of making it clear what services and information the BDM agency itself provides, and how to access those services and information, including costs and administration requirements.

Q.16 No dead links.

Performances were varied in this area with the United Kingdom, Ontario, Saskatchewan and Tasmania being exemplary. New South Wales had a number of dead links whilst New Zealand had one.

Q.17 Relevant information about the nature of the links is provided.

Nearly all of the EBDM sites failed this criteria entirely by not providing any information about the nature of the links within the sites. New Zealand did well by providing information about the size of PDF documents linked to.

Q.18 Links are provided to mentioned documents.

All sites met this criteria apart from Saskatchewan which, for instance, mentioned the *Vital Statistics Act 1995*, but failed to provide any link to it.

Q.19 Links connect at an adequate speed.

All sites met this criteria by connecting and downloading within 30 seconds. Speed was affected only by external influences such as modem size and server problems.

Q.20 URL/Website address.

Tasmania (<http://www.justice.tas.gov.au/bdm/index.htm>) - The address is not an obvious one, but does not include any odd numbers or symbols. The customer has to know that BDM comes under the jurisdiction of the Department of Justice and Industrial Relations.

New South Wales (<http://www.bdm.nsw.gov.au/>) - It may be possible to guess at this address if the customer knows the appropriate abbreviation of BDM.

Saskatchewan (http://www.health.gov.sk.ca/ps_vital_statistics.html) - This address does not mention BDM and could be difficult to get right with the underscores and letter mixes. The customer also has to know that BDM comes under Health and under Vital Statistics.

Ontario (<http://www.ccr.gov.on.ca/mccr/english/births&marriages.htm>) - This address also does not mention BDM and has odd letter combinations. The inclusion of 'english', due to the bilingual nature of Canada that provides information in both English and French, could also cause confusion. The customer has to know that BDM comes under the Ministry of Consumer and Commercial Relations.

New Zealand (<http://www.bdm.govt.nz/>) - It may be possible to guess at this address if the customer knows BDM is the appropriate abbreviation.

United Kingdom (<http://www.statistics.gov.uk/nsbase/registration/introduction.asp>) -

There is no mention of BDM in this address. The customer has to know that BDM comes under National Statistics, which is also not clear from the address.

Q.21 Graphics and colour.

Nearly all of the EBDM sites meet the criteria in an exemplary fashion with consistent use of logos and colour, and there were no impediments to downloading. The exception was Tasmania with its previously mentioned excessive use of varied colour, font, size and text.

Q.22 Screen is uncluttered.

Again, all the sites met this criteria well, although New South Wales and the United Kingdom included too much information on each of their pages. It requires approximately 20 separate screens to scroll through all the information in the United Kingdom's 'Registering a Birth' page. Likewise New South Wales requires the user to scroll through approximately 13 separate screens. The other sites separated their information up more with links.

Q.23 Homepage is short and simple.

Most of the sites met this criteria well, but the excess of information on the pages of the United Kingdom and New South Wales makes them less

effective, as does the repetition of some headings on the New Zealand EBDM site.

Q.24 Format is appropriate to subject matter and functionality.

Tasmania, New South Wales, Saskatchewan and Ontario EBDM sites met the criteria quite well, however both New Zealand and the United Kingdom's format is somewhat cumbersome with too many links and headings, and which, in the case of New Zealand, are available only at the bottom of the page.

Q.25 Use of bold, Italics, blinking and other attention getting devices is limited.

All of the sites met this criteria with the exception of Tasmania which makes excessive use of bold to emphasise areas of apparent importance.

Q.26 Navigation options are distinct and spelled out.

New South Wales met this criteria in the best manner of all the sites with good searching capabilities and navigation. Saskatchewan, the United Kingdom and New Zealand had site searching capabilities and top-of-page navigation. Tasmania and Ontario both had site search capabilities, but no navigation.

Q.27 Feedback mechanisms.

New South Wales met the criteria in an exemplary manner with an ideas generator which provides a form to allow the customer to provide specific, practical ideas for improving service, and a link for more urgent inquiries which leads to a number of e-mail addresses depending on the inquiry.

Ontario likewise did well with a webform to provide feedback to the Ministry of Consumer and Commercial Relations, and a toll-free number and number to the General Inquiry Unit.

Tasmania and Saskatchewan both provide contact details, but Tasmania does not provide an e-mail address, and neither offers the opportunity to feedback.

The United Kingdom provides the opportunity for feedback, but only in relation to the Ministry site, and New Zealand provides 'contacting us' details and a non-working e-mail link.

Discussion

Ontario and the United Kingdom met the EBDM assessment criteria the best with scores of 110 and 104 respectively out of a possible 135. They were followed by New Zealand with 92 and both Tasmania and New South Wales with 89. Saskatchewan performed the most poorly with 84. The results of the criteria assessment are displayed in Appendix D.

The areas in which the sites generally performed poorly were statements as to the aim and status of the site; the provision of services; the provision of information on how to use the site, find help, navigate, and on other sites the EBDM site linked to;

and a URL that identifies the organisation and is unlikely to be mistyped or confused. There were exceptions in these poor performance areas with the United Kingdom and Ontario providing a basic scope and aim statement, and New Zealand providing more services than the other countries by allowing some electronic transactions. New Zealand also provided information about links, and had a URL that was reasonably identifiable and unlikely to be confused, as did New South Wales. New South Wales also had good navigation functions.

The EBDM sites generally performed well in the criteria regarding the appearance of the site. The sites were on the whole uncluttered, made consistent use of headings, layout and colour, did not resort to extensive use of attention getting devices, were accurate in terms of language, links and information, and indicated how up-to-date the site was. Tasmania was the exception to this with excessive use of colour, fonts and text appearance. New South Wales had problems with dead links and Saskatchewan did not indicate when pages were last updated.

Several of the criteria reflected quite diverse situations, particularly the provision of legal information and feedback mechanisms. The United Kingdom, Tasmania, Ontario and Saskatchewan all performed well here, but New South Wales and New Zealand were at the other end of the scale with ratings of 1 and 0 respectively. Likewise New South Wales, Ontario and the United Kingdom all provided good feedback mechanisms while Tasmania, Saskatchewan and New Zealand failed to do so.

Other areas that reflect a diverse spread of ratings were the provision of contact details, the provision of links to mentioned documents, and format being appropriate to subject matter and functionality.

Policy Document Assessment

Policy documents from each of the four countries, Australia, Canada, the United Kingdom and New Zealand, were examined to determine whether important aspects of eGovernment have been addressed. These aspects are:

- Customer service/accessibility** (whether provision of or access to information and services is addressed; includes statements regarding the importance of customer service);
- Privacy** (privacy of information disclosed or exchanged between the government and the customer);
- Security** (security of information, sites and data exchange);
- Statement of purpose** (vision statement; whether the rationale behind providing electronic information and services is addressed);
- Communication/information exchange** (whether development of eGovernment to a level of two-way communication, electronic payments etc is addressed);
- Legal aspects** (copyright, liability etc); and
- Structure/format** (how eGovernment is to develop - whole of government portal versus individual portals).

The results of this examination are displayed in Appendix E.

It was initially intended to examine policy documents at the provincial and state levels for Canada and Australia, and at the national level for all four countries. However, the examination had to be restricted to the national level as there was a lack of documents at provincial and state levels. There may not be a lack, but this research was unable to locate any documentation.

There was also difficulty in locating policy documents at the national level. None of the EBDM sites provided any acknowledgment or link to supporting policy documents, and many of the policy documents found do not apply specifically to eGovernment but to government activities in general.

The examination of the policy documents indicates that all aspects considered to be of importance to eGovernment are covered in each country. New Zealand, the United Kingdom and Australia each have at least one major document addressing all or most of the important aspects. There are also other documents that variously cover some of the aspects. Canada did not appear to have one overriding document like the other countries, but its individual documents also addressed all the important aspects.

Australia

Seven Australian documents were examined. *Government Online - The Commonwealth Government Strategy* and *A Strategic Framework for the Information Economy. Identifying Priorities for Action* both outline strategic priorities and progress to date including legislation and programmes such as the Privacy Act 1988 and Trials in Innovative Government Electronic Regional Services. Both documents emphasise the importance of privacy, security of online services in encouraging

public and governmental use. They also discuss the benefits of the online environment in terms of cross-agency services, that is, a whole-of-government or single-point-of-entry portal or government site which is organised in terms of services rather than a hierarchy or departmental structure. *Government Online* also looks at the exchange of information and at two-way transactions such as electronic payments.

Guidelines for Commonwealth Information Published in Electronic Formats

looks at the purpose of the information or site, how it should be presented from appearance to structure, accessibility, legal aspects, security and privacy. This document does not take an overall view of eGovernment, but is a systematic type guide to providing information in an electronic format.

The Australian Communications-Electronic Security Instruction 33 (ACSI 33)

looks at various aspects of electronic security. There are four levels of security of information from top level national information security to general information security. ACSI aims to provide guidance to those Australian Government agencies wishing to protect their information systems. ACSI 33 consists of 14 handbooks, each of which addresses a different aspect of information security. Webmail Security, for

- a. To protect the integrity of information submitted to, contained within or retrieved from the web site
- b. To protect the confidentiality of identified information by restricting access on a need-to-know basis
- c. To protect the availability of the system by controlling access to critical system functions "²⁰

Guidelines for Federal and ACT Government World Wide Websites concentrates on privacy, security and the legal aspects of eGovernment, and aims to assist agencies in adopting best privacy practice and complying with the Privacy Act 1988. The guidelines include one advising that, "Agency websites should incorporate a prominently displayed Privacy Statement which states what information is collected, for what purpose and how this information is used, if it is disclosed and to whom and addresses any other relevant privacy issues."²¹

The *Online Information Service Obligations* aim to ensure information is accessible to the public by outlining the minimum set of information which must be provided on departmental and agency websites such as "directories of services and organisation, including contact details", and "information needed by the public and organisations to facilitate their understanding of entitlements to government assistance and the requirements of government which affect them."²²

²⁰ *Web Security, Handbook 10*. Australian Communications-Electronic Security Instruction 33 (ACSI 33), <http://www.dsd.gov.au/infoscc/acsi33/HB10.html>

²¹ *Guidelines for Federal and ACT Government World Wide Websites*.
http://www.privacy.gov.au/issues/p7_2.html.

Trials of Innovative Government Electronic Regional Services (TIGERS) is a project aimed at making "Commonwealth, State and local government services easier to find and use through the application of new technology and management arrangements." One aspect of the project looks at linking appropriate online services through a single point of entry. It also looks at improving customer service through utilising Internet, telephone and over-the-counter methods to complement each other.

New Zealand

Six New Zealand policy documents were examined. The prime document is one that is still in the formulation process. It is included here as *Submission document on Guidelines for the use, management and design of New Zealand public sector websites*, however an updated consultation draft of this document was released on 5 February 2001. This is available at http://www.govt.nz/egovt/policies_and_guidelines/web-guidelines/e-government-web-guidelines-consultation-draft-printable.htm. The guidelines aim to "promote excellence in public sector sites, through good management and good design. Sites that comply with the guidelines will be rich in authoritative content, well designed, linked to other sites with relevant government information and accessible by a very wide audience."²³

This document addresses the purpose of eGovernment, the structure/format of the site from design to the minimum homepage requirements, legal issues including accuracy of information and copyright, privacy and security. Although this document is still

²² Online Information Service Obligations. <http://www.dofa.gov.au/ausinfo/oiso.html>.

²³ Submission document on: Guidelines for the use, management and design of New Zealand public sector websites - GOVIS Webdevelopers Forum
http://www.govis.org.nz/information/webside_guidelines.doc

under development, it addresses the important aspects of eGovernment well, with the exception of Communication/Information Exchange.

These guidelines have been developed from and built upon the *Policy Framework for New Zealand Government-held Information*, which addresses accessibility of Government-held information and privacy, security and legal issues. It states that information should be available easily, widely and equitably, and that certain information should be increasingly available on an electronic basis. This information includes, "all published material or material already in the public domain; all policies that could be released publicly; all information created or collected on a statutory basis (subject to commercial sensitivity and privacy considerations); all documents that the public may be required to complete; corporate documentation in which the public would be interested."²⁴

The guidelines are reinforced by an eGovernment vision statement, "New Zealanders will be able to gain access to government information services, and participate in our democracy, using the Internet, telephones and other technologies as they emerge."²⁵

New Zealand Government Information Systems, Policies and Standards, New Zealand Data Management Standards and New Zealand Data Management Policies also address security, privacy, accessibility, and data integrity for communication/information exchange.

²⁴ *Policy Framework for New Zealand Government-held Information.*

http://www.ssc.govt.nz/documents/policy_framework_for_Government_.htm

²⁵ E-Government - A Vision for New Zealanders. <http://www.govt.nz/cvision/index.php3> [4 September 2000].

United Kingdom

Five documents were examined for policy in the United Kingdom. The prime policy document is *e-government. A strategic framework for public services in the Information Age*. This document aims to provide strategic direction and a framework for planning and action rather than proposing technical solutions which the Central IT Unit believes is impossible as the business of government is too varied and complex. The Unit believes e-business methods can be used as a means of meeting the Government's targets for electronic service delivery, electronic procurement and e-commerce. The policy document goes on to outline a vision statement and strategic building blocks for achieving e-government. The only aspect this strategy does not address is that of legal aspects.

e-gov. Electronic Government Services for the 21st Century. A Performance and Innovation Unit Report was published after the previous policy document and is much more extensive in its coverage. It places a strong emphasis on the need to focus on customer service and customer needs. It looks at all the aspects of eGovernment from this position.

The other policy documents examined for the United Kingdom provided little in the way of policy. *Government Online* was an international project that ran from 1995 to June 1999 looking at eGovernment within and between countries.

Information Sharing Within and Between Governments: Study Group Report is a survey of concerns by the International Council for Information Technology I Government Administration (ICA). This survey looked at data sharing and data

management, single-point-of-entry, and intra-governmental information sharing. It found that the focus of government information sharing was customer services and that the barriers to this were security, privacy and accessibility issues.

Electronic Government. Information Technologies and the Citizen proved to be a general document that focused on eGovernment as a tool for encouraging democratic participation rather than as a broader tool for customer service.

Canada

The four policy documents examined for Canada were less comprehensive than those for the other three countries were.

Federal Government Information Policy: An Introduction is a 1995 article that briefly looks at the then existing policies and legislation in place for the protection of information in general. The documents this article examines address the aspects of accessibility, privacy and security of information, and communication and information exchange.

Government On-line: Serving Canadians in a Digital World is the most comprehensive of the Canadian documents, addressing all aspects of eGovernment except legal aspects. Its focus is on accessibility and customer service, and it provides an action plan with targets and a strategy.

Strategic Directions for Information Management and Information Technology: Enabling 21st Century Service to Canadians is a general strategic

document with no solid policy. However, it does provide a clear and simple vision for eGovernment, "By placing citizens and businesses at the centre of activity, the federal government is organizing processes and services around their needs and expectations. It has embraced a vision of electronic service delivery that would offer Canadians services at the right time and place, a vision that would enable individuals and businesses to interact securely with government in a convenient, accessible way."²⁶

The *Government of Canada Public Key Infrastructure Initiative* looks at eGovernment privacy, security and other legal aspects involved in information and data exchange and two-way communication.

Discussion

All four countries examined customer service or accessibility issues in half or more of the policy documents examined, reflecting the impetus behind eGovernment. Privacy and security were likewise addressed in half or more of the policy documents examined for New Zealand, Canada and Australia. In the United Kingdom's five policy documents privacy and security were each addressed twice.

The aspects of Statement of Purpose and Communication/Information Exchange were addressed in less than half of the policy documents of the United Kingdom, New Zealand and Australia. Canada, on the other hand, did well with two and three documents out of four respectively.

²⁶ Strategic Directions for Information Management and Information Technology: Enabling 21st Century Service to Canadians. http://www.tbs-sct.gc.ca/Pubs_pd/ciopubs/TB_OIMP/sdimit_e.html

All four of the countries performed poorly in the addressing of legal aspects. The United Kingdom addressed this aspect in one out of five documents, New Zealand in two out of six, Canada in 1 out of four and Australia in three out of seven.

The aspect of Structure/Format was addressed in over half of the United Kingdom and New Zealand policy documents, but in under half of the Canadian and Australian documents.

Conclusion

EBDM in the four countries researched reflects the organic nature of the development of electronic services. Most governments' agency sites were developed independently before the government stepped in to formalise eGovernment by providing an overlying structure. This natural progression is reflected in the lack of overruling policy documents for eGovernment. Although there was a policy document for each country that contained all aspects of importance, there was no policy specifically for the guidance of eGovernment. Most policy covers the management of information in general or electronic information, but not in the context of eGovernment.

EGovernment, as seen through EBDM, is primarily an information medium and has made little progression in terms of service provision. This reflects the findings of Andersen Consulting, which found a governmental focus on publishing and dissemination rather than on interaction and transaction, and Deloitte Research which placed all four countries examined in their first stage of eGovernment, that of 'information publishing/dissemination'.

The future of eGovernment is in the provision of electronic transaction facilities, the ability to update personal information and other interactive functions as electronic verification techniques and privacy and security procedures are developed and put in place. These technologies and procedures, such as passwording and PIN numbers, exist in areas such as banking and these need to be transferred into the eGovernment environment.

BDM is a core government function or service. Other core areas of government such as tax and social services should be included in further research. Both these areas have the capacity for a high demand for interactive services and offer government the opportunity to reduce costs and increase efficiency in terms of staffing, time and customer service.

Further research into eGovernment should also examine other countries such as European Union groups or selected states in the United States of America.

Bibliography

A Strategic Framework for the Information Economy Identifying Priorities for Action. December 1998 [Online]. Available: http://www.noie.gov.au/projects/information_economy/strategic_framework/dec98_strategy.htm [12 January 2001].

Australian Communication-Electronic Security Instruction 33 (ACSI 33) [Online]. Available: http://www.dsd.gov.au/infosec/acsi33/acsi_index.html [24 January 2001].

Caffrey, L. *Information sharing within and Between Governments: Study Group Report*. London: Commonwealth Secretariat, 1998.

Cullen, Rowena and Caroline Houghton. *Democracy On-Line: an Assessment of New Zealand Government Websites*. Research Report, Victoria University of Wellington, 2000.

Cullen, R. and D. Dorner, "Government Information Online", *Librarianship and information work worldwide*. London: Bowker-Saur, 1999.

Deloitte Research. *At the Dawn of e-Government: the Citizen as Customer*. Deloitte Consulting and Deloitte & Touche, 2000.

e.gov. Electronic Government services for the 21st Century. A Performance and Innovation Unit Report, [Online] September 2000. Available:
<http://www.cabinet-office.gov.uk/innovation/2000/delivery/e-gov.pdf>
[November 2000].

E-government. A strategic framework for public services in the Information Age, [Online] April 2000. Available: <http://www.iagchampions.gov.uk/Strategy.htm>

E-Government - A Vision for New Zealanders. Available:
<http://www.govt.nz/evision/index.php3> [4 September 2000].

Electronic Government. Information Technology and the Citizen, [Online].
Available: <http://www.parliament.uk/post/EGOV.HTM#contents> [14 November 2000].

Eschenfelder, Kristin R., J.C.Beachboard, C.R.McClure and S.K.Wyman. "Assessing U.S. Federal Government Websites." *Government Information Quarterly* 14, 2 (1997): 173-190.

G7 Democracy and Government On-Line Services. Contributions from Public Administrations around the World, [Online].
Available: <http://www.open.gov.uk/govonline/front.htm> [November 2000].

Government of Canada Public Key Infrastructure Initiative [Online].
Available: http://www.cio-dpi.gc.ca/pki-icp/initiatives_e.asp [23 January 2001].

Government Online [Online].

Available: <http://www.open.govt.uk/govonline/golintro.htm>

Government On-Line: Serving Canadians in a Digital World [Online].

Available: http://www.gol-ged.gc.ca/pub/serv-can/serv-canpr_e.asp [14 November 2000].

Government Online: The Commonwealth Government's Strategy [Online].

Available: <http://www.govonline.gov.au/projects/strategy/GovOnlineStrategy.htm> [14 November 2000].

Guidelines for Federal and ACT Government World Wide Websites [Online].

Available: http://www.privacy.gov.au/issues/p7_2.html [24 January 2001].

Guidelines for Commonwealth Information Published in Electronic Formats [Online].

Available:

http://www.dofa.gov.au/infoaccess/guidelines/guidelines_for_commonwealth_in.html
[24 January 2001].

Hernon, P. "Government Policy in New Zealand: Businesslike but evolving?"

Government Information Quarterly 13, 3 (1996): 215-229.

Jupp, V. "Implementing eGovernment - Rhetoric and Reality." *Insights for*

Government Executives 2, (June 2000). Andersen Consulting <http://www.ac.com>

Modernising Government White Paper - Executive Summary, [Online] 2000.

Available: <http://www.cabinet-office.gov.uk/moderngov/whtpaper/summary.htm> [27 November 2000].

Modernising Government White Paper - Action Plan, [Online] 2000. Available:

<http://www.cabinet-office.gov.uk/moderngov/action/intro.htm> [27 November 2000].

Montgomery, D. "Yes Minister, you've got email." *New Zealand Netguide* 42 (August 2000): 64-73.

Nelson, M. *Federal Government Policy: An Introduction* [Online]. Available:

<http://www.usask.ca/library/gic/v1n3/nelson/nelson.html> [14 January 2001].

New Zealand Government Data Management Policies, Version 1.1, July 2000.

Available: http://www.govt.nz/egovt/policies_and_guidelines/data-management-policies.htm [10 January 2001].

New Zealand Government Data Management Standards, Version 1.1, July 2000.

Available: http://www.govt.nz/egovt/policies_and_guidelines/data-management-standards.htm [10 January 2001].

New Zealand Government Information Systems Policies and Standards, Version 0.8 of 11/5/00. Available:

http://www.govt.nz/egovt/policies_and_guidelines/is-policies-standards.htm

Online Information Service Obligations [Online].

Available: <http://www.dofa.gov.au/ausinfo/oiso.html> [24 January 2001].

Policy Framework for New Zealand Government-held Information [Online].

Available:

http://www.ssc.govt.nz/documents/policy_framework_for_Government_.htm

[7 November 2000).

Smith, A. *Criteria for evaluation of Internet Information Resources*. (1997.)

<http://www.vuw.ac.nz/~agsmith/evaln/index.htm>

Smith, A.G. "Testing the Surf: Criteria for evaluation of Internet Information Resources." *The Public-Access Computer Systems Review* 8, 3 (1997).

<http://info.lib.uh.edu/pr/v8/n3/smit8n3.html>

Story, Mark. "Fingertip Control." *Management* (September 2000): 16-21.

Strategic Directions for Information Management and Information Technology:
Enabling 21st Century Service to Canadians [Online].

Available: http://www.tbs-sct.gc.ca/Pubs_pd/ciopubs/TB_OIMP/sdimit_e.html

Submission document on: Guidelines for the use, management and design of New Zealand public sector websites - GOVIS Webdevelopers Forum [Online].

Available: http://www.govis.org.nz/information/website_guidelines.doc

Symonds, Matthew. "Government and the Internet." *The Economist* (June 24, 2000): 3-26.

TIGERS [Trials of Innovative Government Electronic Regional Services] [Online]. Available: <http://www.govonline.gov.au/projects/services&innovation/tigers.htm> [24 January 2001].

Appendix A: Definition of Keywords, Terms and Concepts

Births, deaths and marriages	The registry that holds the required registrations of births, deaths and marriages within a country or region/state.
Citizens	Native or inhabitant of a country or region/state.
EBDM	eGovernment: Births, Deaths and Marriages - the electronic provision of Births, Deaths and Marriages information and services.
Efficient	Producing effect; competent, capable.
eGovernment	Information, services and functions of government provided electronically using the Internet.
Sufficient	Adequate; enough; competent; fit; able.

Appendix B: Questions derived from evaluative criteria to assess EBDM

- Q.1 A clear statement of the scope and aim of the site are provided.**
Purpose of the site is stated; services and information provided are described.
- Q.2 Instruction and help facilities are provided.**
Instructions on the use of the site; easily accessible and useable help facility.
- Q.3 Provision of legal information.**
Clear and explicit statements are made regarding copyright, user liability, use of information provided to the site, and how citizens' privacy rights are protected.
- Q.4 Content matches scope and aim of site.**
- Q.5 Content is organised around user needs.**
- Q.6 Site is written in clear and consistent language that matches the expected audience.**
- Q.7 Address of contact person and last update of information appear at the bottom of pages with substantive content.**
- Q.8 Content is complete.**
As indicated by a statement of status.
- Q.9 Content is up-to-date.**
As indicated by a statement of status.
- Q.10 Accurate information.**
Cited bibliographic references, links and other information are accurate.
- Q.11 Headings and titles relate to content.**
Clearly phrased, descriptive and understandable; each page clearly titled.

Q.12 Terminology and layout are consistent within the headings throughout the site.

Q.13 Spelling, grammar and language standards and inconsistencies.

Q.14 Provision of services

Q.15 Promotion of services and information provision.

Q.16 No dead links.

Q.17 Relevant information about the nature of the links is provided.

Warning statement if the link takes the user to a large document or image;
statement if there is restricted access to a link.

Q.18 Links are provided to mentioned documents.

Q.19 Links connect at an adequate speed.

Q.20 URL/Website address

Full name of website organisation is provided in the title, heading,
document address, graphical link and/or URL in order that the source is
recoverable; URL not likely to be confused or mistyped.

Q.21 Graphics and colour.

Do not slow downloading; lead user through information appropriately.

Q.22 Screen is uncluttered.

Q.23 Homepage is short and simple.

Q.24 Format is appropriate to subject matter and functionality.

Q.25 Use of bold, Italics, blinking and other attention getting devices is limited.

Q.26 Navigation options are distinct and spelled out.

Back/forward/return-to-top/return-to-bottom/home; search facilities.

Q.27 Feedback mechanisms.

Provision; operational status.

Appendix C: List of documents to be examined

Australia

A Strategic Framework for the Information Economy Identifying Priorities for Action. December 1998

[Online]. Available:

http://www.noie.gov.au/projects/information_economy/strategic_framework/dec98_strategy.htm

[12 January 2001].

Australian Communication-Electronic Security Instruction 33 (ACSI 33) [Online].

Available: http://www.dsd.gov.au/infosec/acsi33/acsi_index.html [24 January 2001].

Guidelines for Federal and ACT Government World Wide Websites [Online].

Available: http://www.privacy.gov.au/issues/p7_2.html [24 January 2001].

Government Online: The Commonwealth Government's Strategy [Online].

Available: <http://www.govonline.gov.au/projects/strategy/GovOnlineStrategy.htm> [14 November 2000].

Guidelines for Commonwealth Information Published in Electronic Formats [Online].

Available: http://www.dofa.gov.au/infoaccess/guidelines/guidelines_for_commonwealth_in.html [24 January 2001].

Online Information Service Obligations [Online].

Available: <http://www.dofa.gov.au/ausinfo/oiso.html> [24 January 2001].

TIGERS [Trials of Innovative Government Electronic Regional Services] [Online].

Available: <http://www.govonline.gov.au/projects/services&innovation/tigers.htm> [24 January 2001].

Canada

Government of Canada Public Key Infrastructure Initiative [Online].

Available: http://www.cio-dpi.gc.ca/pki-icp/initiatives_e.asp [23 January 2001].

Government On-Line: Serving Canadians in a Digital World [Online].

Available: http://www.gol-ged.gc.ca/pub/serv-can/serv-canpr_e.asp [14 November 2000].

Nelson, M. *Federal Government Policy: An Introduction* [Online]. Available:

<http://www.usask.ca/library/gjc/v1n3/nelson/nelson.html> [14 January 2001].

Strategic Directions for Information Management and Information Technology: Enabling 21st Century Service to Canadians [Online].

Available: http://www.tbs-sct.gc.ca/Pubs_pd/ciopubs/TB_OIMP/sdimit_e.html

United Kingdom

Caffrey, L. *Information sharing within and Between Governments: Study Group Report*. London: Commonwealth Secretariat, 1998.

e.gov. Electronic Government services for the 21st Century. A Performance and Innovation Unit Report, [Online] September 2000.

Available: <http://www.cabinet-office.gov.uk/innovation/2000/delivery/e-gov.pdf>

[November 2000].

E-government. A strategic framework for public services in the Information Age, [Online] April 2000.

Available: <http://www.iagchampions.gov.uk/Strategy.htm>

Electronic Government. Information Technology and the Citizen, [Online].

Available: <http://www.parliament.uk/post/EGOV.HTM#contents> [14 November 2000].

Government Online [Online]. Available: <http://www.open.govt.uk/govonline/golintro.htm>

Modernising Government White Paper - Executive Summary, [Online] 2000. Available:
<http://www.cabinet-office.gov.uk/moderngov/whtpaper/summary.htm> [27 November 2000].

Modernising Government White Paper - Action Plan, [Online] 2000. Available:
<http://www.cabinet-office.gov.uk/moderngov/action/intro.htm> [27 November 2000].

New Zealand

E-Government - A Vision for New Zealanders. Available: <http://www.govt.nz/evision/index.php3> [4 September 2000].

New Zealand Government Data Management Policies, Version 1.1, July 2000.
Available: http://www.govt.nz/egovt/policies_and_guidelines/data-management-policies.htm [10 January 2001].

New Zealand Government Data Management Standards, Version 1.1, July 2000.
Available: http://www.govt.nz/egovt/policies_and_guidelines/data-management-standards.htm [10 January 2001].

New Zealand Government Information Systems Policies and Standards, Version 0.8 of 11/5/00.
Available: http://www.govt.nz/egovt/policies_and_guidelines/is-policies-standards.htm

Policy Framework for New Zealand Government-held Information [Online].
Available: http://www.ssc.govt.nz/documents/policy_framework_for_Government.htm [7 November 2000].

Submission document on: Guidelines for the use, management and design of New Zealand public sector websites - GOVIS Webdevelopers Forum [Online].
Available: http://www.govis.org.nz/information/website_guidelines.doc

Appendix D: EBDM Assessment

Country Question	United Kingdom	Canada- Saskatchew an	Canada- Ontario	Australia- Tasmania	Australia- New South Wales	New Zealand
Q.1	5	1	5	1	1	1
Q.2	0	0	0	0	0	0
Q.3	5	4	5	4	1	0
Q.4	5	N/A	5	N/A	N/A	N/A
Q.5	5	5	5	5	4	5
Q.6	4	5	5	5	4	5
Q.7	4	2	5	5	4	3
Q.8	0	0	0	0	0	0
Q.9	5	0	5	5	5	5
Q.10	5	5	5	5	5	5
Q.11	5	5	5	5	4	5
Q.12	5	5	5	2	5	5
Q.13	5	5	5	5	5	4
Q.14	1	1	1	1	1	2
Q.15	5	5	5	5	5	5
Q.16	5	5	5	5	2	4
Q.17	0	0	0	0	0	4
Q.18	5	N/A	5	5	2	5
Q.19	5	5	5	5	5	5
Q.20	2	2	2	3	4	4
Q.21	5	5	5	3	5	5
Q.22	4	5	5	5	4	5
Q.23	5	5	5	5	4	4
Q.24	3	5	5	5	4	3
Q.25	5	5	5	1	5	5
Q.26	2	2	2	2	5	2
Q.27	4	2	5	2	5	1
Total	104	84	110	89	89	92

Appendix E: Policy Documents Assessment

Countries and number of documents examined	United Kingdom (5 documents)	New Zealand (6 documents)	Canada (4 documents)	Australia (7 documents)
Aspects examined				
Customer Service / Accessibility	4	3	2	4
Privacy	2	3	3	5
Security	2	3	2	4
Statement of Purpose	1	1	2	3
Communication / Information Exchange	2	2	3	3
Legal Aspects	1	2	1	3
Structure / Format	3	3	1	3

**Appendix F: EBDM Homepages (November 2000 to
February 2001)**



**national
STATISTICS**

the official UK statistics site

■ themes ■ latest figures ■ uk in figures ■ StatBase® ■ DataBank



■ home ■ search ■ tour of the site ■ site map ■ births, marriages and deaths registration ■ census 2001 ■ social surveys
■ learning zone ■ bookshelf ■ services ■ other activities ■ about national statistics ■ methods & quality ■ recruitment ■ geography

● births, marriages and deaths registration

- introduction
- General Register Office
- certificates in England and Wales
- certificates overseas
- Family Records Centre
- local registration services
- adoptions
- registering a birth
- registering a death
- registering a still-birth
- getting married
- certificates in the rest of the UK and Ireland
- amending birth and death records

● introduction



These pages give you information about how to register a birth or death in England and Wales, how to go about getting married, how to obtain certificates and how to use the services at the Family Records Centre.

These services are provided or overseen by the General Register Office (GRO) which is part of National Statistics. Some of these services are provided in partnership with other organisations. Each country of the United Kingdom has its own GRO:



- General Register Office for England and Wales
- General Register Office for Scotland
- General Register Office for Northern Ireland

This page last revised: Friday, 27 October 2000

Feedback or Enquiries | Copyright | Terms and Conditions | Privacy Statement | Link to www.open.gov.uk

Reproduction of material on this Web Site must be sourced: © National Statistics 2001. For commercial reproduction, permission must be sought at all times. Please email: copyright@ons.gov.uk

PROGRAMS & SERVICES

SEARCH OUR SITE

Vital Statistics

The Vital Statistics Office administers and maintains a province-wide system for registering births, deaths, marriages, stillbirths and changes of name that occur in the province of Saskatchewan. The Office also issues certificates as legal proof of these vital events and provides statistical information for agencies and the public.

Office Hours: Monday to Friday, 8:30 a.m. to 4:30 p.m.

Saskatchewan Vital Statistics is not liable for the misinterpretation of any information contained on this web site.

CARING FOR YOUR GOOD

HEALTH

RELATED SITES

CONTACT US

[Birth Registration](#)
[Birth Certificates](#)
[Popular Baby Names](#)
[Marriage Registration](#)
[Marriage Certificates](#)
[Death Registration](#)
[Death Certificates](#)
[Change of Name Registration](#)
[Change of Name Certificates](#)
[Genealogy Certificates](#)
[Adoption Information](#)
[Vital Statistics Fees](#)
[Vital Statistics Application Forms](#)
[Directory of Out-of-Province Vital Statistics Services](#)



**Consumer
Information**

**Births, Deaths
and Marriages**

**Business
Information**

**News and
Publications**

Services

**About
the Ministry**

Related Sites

Births, Deaths and Marriages

[Forms](#) | [Births](#) | [Deaths](#) | [Marriages](#) | [Divorces](#) | [Change of Name](#) | [Adoptions](#) | [FAQs](#)
[Family Tree](#) | [Fees and Services](#) | [Acts and Regulations](#) | [General Information](#)

This is the place to get information about birth, death and marriage certificates from the **Ontario Registrar General**.

Lost Your Wallet?

Go to your nearest Government Information Centre and ask for the lost wallet information package. It's free and has useful information and forms for replacing ID commonly carried in a wallet, such as a health card or driver's licence. It will save you time visiting numerous government offices to get the same information.

More than 50 Government Information Centres are located in communities around Ontario. For your closest information centre location, visit the [Government Information Centres Web site](#) or call 1-800-267-8097 to get the address of the Centre nearest you. For general information on Ontario government services consult your blue pages.



This site maintained by the Government of Ontario

[home](#) | [central site](#) | [feedback](#) | [search](#) | [site map](#) | [français](#) | [help](#)
[Consumer Information](#) | [Births, Deaths & Marriages](#) | [Business Information](#) | [News & Publications](#) | [Services](#) | [About the Ministry](#) | [Related Sites](#)

Telephone Service: In Toronto call the General Inquiry Unit at (416) 326-8555 or 1-800-268-1142 from other parts of the province. Special electronic equipment for the hearing and speech impaired is available at (416) 326-8566.

Please send your comments, feedback and enquiries to: ccrinfo@ccr.gov.on.ca

© Copyright 2000 Queen's Printer for Ontario
Last Modified: 12/12/2000 09:58:13

This information is provided as a public service, but we cannot guarantee that the information is current or accurate. Readers should verify the information before acting on it. The Web sites linked to are created by or for organizations outside of the Ontario government, and those organizations are responsible for the information contained within their respective sites. These sites might not be available in French. Any specific comments or inquiries regarding those sites should be directed to the individual organization.



Tasmania

DEPARTMENT
of JUSTICE and
INDUSTRIAL
RELATIONS

Available

Services

JUSTICE Tasmania

Births, Deaths and Marriages

[Our Services](#)

[About Us](#)

[Service
Charter](#)

[Search our
Site](#)

[Contact Us](#)

About Us - General Information	Contact Us
Birth Certificates	Death Certificates
Marriage Certificates	Single Status Certificates
Identification Requirements	List of Fees and Extended Fee Sche
Registration of a Birth	Change of Name
Notes - Pre-registered Deed Poll of Change of Name	Application Form - Pre-registered D Certificates
Family History Information	Family History Indexes Available
Adoption Information	Registration/Certificate Amendment Additions
Access Policy	Legislation - (Act)
	Regulations
Links to other Births, Deaths and Marriages Web Sites	

This page has been produced by the Registration Services Division of the Department of Justice. Questions concerning its content may be directed to the Agency on ph 6233 3795, by mail to level 3, 15 Murray St HOBART, TASMANIA, AUSTRALIA, 7000.

This page was last modified on 17 November 2000.

The URL for this page is: <http://www.justice.tas.gov.au/bdm>

You are directed to a [disclaimer](#) and [copyright notice](#) governing the information provided.



NSW Registry of Births, Deaths and Marriages

REGISTRAR:
TREVOR STACEY



**NEW PRODUCT - MARRIAGE COMMEMORATIVE
CERTIFICATES NOW AVAILABLE !!!**

**GOT AN
IDEA ?**

Got an Idea or Suggestion ?

Go!

Javascript enhanced browsers

STREET MAP

Street Address:

NSW Registry of Births, Deaths and
Marriages

191 Thomas Street
Haymarket NSW 2000

Telephone
Calling from outside Australia

Email

Office Hours

Postal Address:

NSW Registry of Births, Deaths and
Marriages

GPO Box 30
Sydney NSW 2001

1300 655 236
+612 9243 8585 or +612 9243 8525

[please follow this link](#)

8.00 am to 4.30 pm Monday to Friday

WHAT'S NEW

SITE MAP

INDEXES

**REGISTRY
GST INFO**

The New South Wales Registry of Births, Deaths and Marriages records all births, deaths and marriages occurring in New South Wales and provides documentation to individuals to help establish a range of legal entitlements. The Registry collects statistical data for governments and other organisations and performs civil marriages.

[Overview.](#)

CHANGING NAMES

CERTIFICATES

GETTING MARRIED

FAMILY HISTORY

RE

[Text Version](#)

[Lawlink](#)

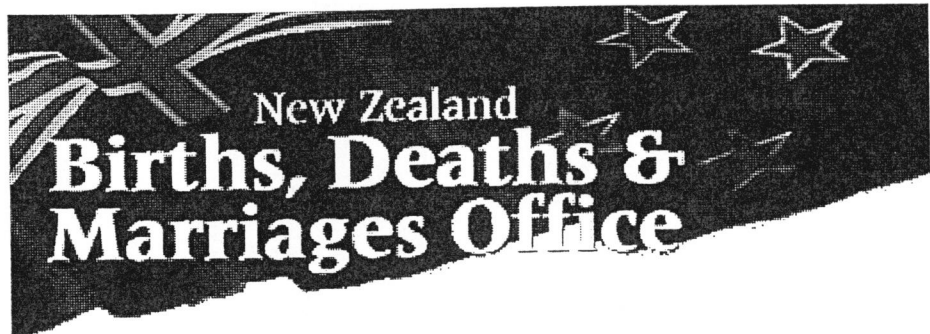
EMAIL

Most recently updated: 26 July 2000

© 1995-2000 New South Wales Registry of Births, Deaths and
Marriages

Births Deaths & Marriages

[Index Page](#)
[Getting A Certificate](#)
[Getting Married](#)
[Registration](#)
[Family History](#)
[To Change a Name](#)
[Birth Certificates And Adoption](#)
[What's New](#)
[Contacting Us](#)
[Forms](#)
[Millennium Birth Certificates](#)
[Fees](#)



The Births, Deaths and Marriages Office (BDM) register all births, deaths and marriages which take place in New Zealand, and provides access to this registered information through a variety of products and services. BDM also provides a number of other services, including changes of name by statutory declaration and appointments of marriage celebrants.

What's New

[blank](#)

[Getting a Certificate](#)

[blank](#)

[Getting Married](#)

Registration

[Family History](#)

[To Change a Name](#)

Forms

[Contacting Us](#)

Last updated:03/01/2001 12:25:07