

REPORT

ACCESS OF *GOL*
IN PUBLIC LIBRARIES

**Prepared for
Industry Canada**

**Prepared by
Canadian Library Association
*with the assistance of***

**Maureen Cubberley, Senior Partner and Stan Skrzyszewski, Senior Partner
*ASM Advanced Strategic Management Consultants***

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1. INTRODUCTION

This research report on the Government's Online (GOL) Agenda is intended to

- determine what it means to offer government online (GOL) in a public library setting, and
- determine what if any models currently exist for the implementation of GOL within public library/community settings.

The information in the report will assist LibraryNet in its assessments of the role of libraries in the delivery of GOL, which in turn will assist the Government of Canada to determine the ways in which Government of Canada data is providing value to Canadians.

The report was prepared by the Canadian Library Association (CLA) with the assistance of ASM Advanced Strategic Management Consultants. It refers at times directly to work done by ASM on CLA's behalf.

The acronym GOL refers to the Government of Canada's plans and initiatives to move its most frequently used services on-line, and in doing so, to provide a new way of delivering high quality service to Canadians. The GOL agenda includes a commitment to providing on-line services when Canadians want the services and where they want them – from home, office, school, or in transit.

This strategy includes providing public access to the Internet, promoting Canadian content development, and encouraging the adoption and use of electronic commerce.

The GOL agenda involves more than creating web sites and digitizing information. It means a fundamental re-thinking of service delivery and the business model, the addition of new value-added online services and a determination of how the smart use of the Internet and information technologies can benefit the Canadian economy and society.

The Government of Canada has made a commitment and allocated finances to implement the Government On-Line strategy by 2005.

In other countries, the term 'eGovernment' is often used in place of 'Government On-Line'. In this report the terms 'Government On-Line' and 'eGovernment' are used interchangeably.

GOL and eGovernment are interpreted and implemented differently in different jurisdictions. For example, a SAP report identifies three 'flavours' or different approaches to implementing e-government. The three 'flavours' are:

- **e-services:** securing and providing government services by electronic means,
- **e-governance:** linking citizens, stakeholders and elected officials to participate in the governance of communities by electronic means,
- **e-knowledge:** developing the skills and the ICT infrastructure to exploit knowledge for competitive advantage.

2. BEST PRACTICES

ASM conducted a comprehensive review of the literature to determine which, if any, “Best Practices” regarding the implementation of Government Online exist nationally and internationally. There are a significant number of international studies on ‘best practices’ in e-government. These studies, some of which are reviewed in section 2.1 of this report, mention public libraries but there is no in depth treatment of public libraries as a source of GOL.

The report’s authors discussed the lack of detailed exploration of public libraries and GOL in the literature with Eric Stackhouse, Chief Librarian at Pictou-Antigonish Regional Library. Mr. Stackhouse is a leading advocate of library involvement with GOL. He advised us that

“Regarding the literature search, we found most information to be of a general nature (i.e., about the role of libraries, need for coordination etc.), in other words the “call to action” type of thing. What was amazing to us was the complete lack of anything concrete or “real” (other than the Service Canada model in Oxford County).

So in other words we didn’t find any models to speak of and we did look quite hard”.

In 2002, Heidi Julien and Michelle Helliwell completed a study that included a significant literature search, which covered the period from 1993 to 2001. From their literature review these researchers concluded that:

“Libraries seem to be attempting valiantly to fulfill the expectations made of them. Most are using the web to provide basic library information, most are providing access to the internet, to electronic reference services, and to other forms of IT in the library. In addition, most libraries are attempting to provide resources for economic and community development. The area that appears to remain the most challenging is developing clients’ information literacy skills”.

2.1 GOL BEST PRACTICES

This section reviews and analyzes several reports by major international consultancy firms that have surveyed major eGovernment initiatives and identified many GOL 'best practices'.

Accenture, an independent global consultancy with an e-government practice, has initiated a series of reports that reviews the progress being made with eGovernment initiatives. The 2000 report, entitled "Rhetoric vs. Reality – Closing the Gap" reviewed the progress being made by governments with eGovernment initiatives in 22 countries. The 2002 report is entitled "eGovernment Leadership – Realizing the Vision" and covers the same 22 countries, plus Denmark.

The Accenture study analyzed E-Government progress in 22 countries and grouped the countries under specific categories.

The top countries in both the 2001 and 2002 studies were classified as 'Innovative Leaders' and include:

- Canada
- Singapore
- USA

These three countries were selected as "Innovative Leaders" because they have developed a clear plan and structure within government for implementing an eGovernment agenda.

The 2000 report concluded that although progress is being made

"no nation has demonstrated the level of sophistication of Internet presence which is fast becoming the norm amongst leading private sector companies. Single sites, or portals, which allow citizens and businesses to seamlessly interact with several government departments at one visit, have not yet emerged as the dominant model. Agency silos continue to dominate as a result".

The conclusion of the 2000 Accenture report suggest that although specific best practices may exist, no overall GOL model has yet emerged. Accenture did award Canada the number one position in the world for progress in moving on-line, largely based on a "whole of government approach".

This recognition is based on:

- The centralization of responsibility for eGovernment in the Treasury Board which holds primary responsibility for driving the program and which relies heavily on cross-departmental task forces to co-ordinate and to communicate on action.

- The development of a comprehensive government portal that provides a single gateway to government services. (See www.canada.gc.ca).

The 2002 report stated that “Canada has achieved its leadership position largely due to its focus on the citizen in its eGovernment programs” and its recognition of the power of CRM in realizing the eGovernment vision.

Based on the Accenture evaluations, it may be advisable for the public library leadership in Canada to look at GOL implementation in Canada, Singapore and the USA for best practices and models. Since Canada is on the leading edge of developing GOL models, it may fall to Canadian public libraries to develop a model for the implementation of GOL within public library/community settings.

Booz Allen Hamilton (BAH), another independent global consultancy recently completed a report entitled “The World’s Most Effective Policies for the E-economy”. For this report the consulting firm developed a benchmarking framework to conduct an evaluation of the UK compared against G8 countries plus Australia and Sweden. One of the primary objectives of the study was to learn why countries have achieved superior performance in different areas of their e-economies.

Although the focus of the study is on the e-economy, the lessons learned are of use in determining success factors for GOL initiatives. The study concludes that:

“the US, the UK and Canada exhibit the strongest combination of the many factors contributing to a fertile environment for e-commerce... The citizens of the U.S., Sweden and Canada are the most involved in the e-economy, combining high levels of readiness with high uptake... Sweden, the US, Canada and Australia have the strongest e-Government development, driven by their early programme starts and sustained commitment”.

The BAH report identifies the following factors as being the most important in supporting an E-economy environment:

- Level of political leadership: For example, The Connecting Canadians program in Canada and setting up a dedicated, cross-governmental organization to drive the agenda
- Regulatory openness
- Innovation
- Capability
- IT skills in the population: strong ICT brain pool
- Cost and availability of access

The following policy themes had the most impact on E-economy effectiveness:

- ICT in education
- Stimulating investment

- Internet access price regulation: low cost of access especially to high speed access

The most successful approaches to eGovernment are characterized by:

- Strong government leadership
- A dual focus on:
 - Back office integration: robust, scalable back office systems
 - Front office service delivery

One of the chapters in the BAH report is entitled “The World’s Most Effective e-Economy Policies” and draws together 30 effective policies addressing the e-Economy framework. To be included in this list there had to be evidence of clear, direct, measurable impact of the policy on e-Economy development. A search for the phrase ‘public libraries’ resulted in identifying effective policies in Canada and Italy. A similar search for the phrase ‘public access’ did not provide any results.

The following government policies that are relevant to the role of public libraries with GOL were identified among the most effective.

- UK: National Grid for Learning
Funding for ICT equipment and Internet connections in schools
ICT training for teachers
- Sweden: ITiS programme - National Action Programme to bring ICT to all Schools
- Canada: Connecting Canadians
100% of schools and public libraries have been connected to the Internet since 1999.
Roughly 10,000 rural and remote communities have Community Access Points
5,500 Voluntary organizations have been connected to the Internet.
- Italy: Promoting the European Computer Driving License (ECDL)
Public sector staff is being trained for ECDL
7,000 schools equipped with equipment to provide e-learning programs towards the ECDL
Note: The International Computer Driving License (www.icdlcanada.com/) establishes standards for computer literacy. It is a qualification that verifies a person's competence, declares their computer skills and makes them readily mobile within a sector. ICDL allows self-taught users to have their skills certified and is open to anyone regardless of age, education, experience or background.
- Italy: Providing Content
Projects included online museums, digitalization of books and digitalization of audiovisual resources

Public libraries offer the new service of local book delivery following online requests

- Canada. VolNet
Training in basic Internet skills for use and web site publishing
10,000 voluntary organizations made use of the training and facilities to establish an on-line presence

SAP, another global consultancy, prepared a very detailed report entitled “Local e-government now: a worldwide view” that was published in September 2002. The report examines local e-government initiatives in 14 countries, including Canada. Levels of customer service, citizen engagement, and internal efficiency are evaluated in relation to electronic interactions with citizens, customers, other levels of government, and service agencies. Changes that are needed at the cultural, structural, procedural, and technological level for e-government programs to succeed are highlighted.

The SAP report is important for the purposes of this report because it focuses on local government, which includes public libraries.

The SAP report provides a wide-range of insights including:

The perceived wisdom, that most local authority web sites have failed to attract a substantial audience, has led authorities to review how they use the Internet and to shift their focus to Intranet developments, to customer segmentation and servicing, and to information and content management.

In conclusion, the SAP report recommends:

- Involving everyone in developing the vision
- Focusing on what matters most to citizens in determining access priorities
- Collaborating and redesigning to achieve better outcomes
- Searching for innovation

The major structural and systemic problems are identified as:

- A lack of standards and legal permissions to join-up information and services locally, between agencies and levels of government
- A lack of common infrastructure
- A need for support and co-ordination
- Concerns regarding privacy and data protection

In its analysis of local e-government, the SAP report identifies several library ‘best practices. For example, the report recognizes:

- Belo Horizonte (Brazil) for creating ICT laboratories for the education system which include e-learning functionalities (multimedia databases and virtual libraries)

- Santo Andre (Brazil) for providing a city web site that includes links to ‘virtual libraries’”
- Tampere (Finland) for providing over 100 public and free access points located in libraries, post offices and university buildings.
- Lestijärvi (Finland) for providing access to e-services by installing and providing free access to PCs in libraries, shops, gas stations and other points in the community.
- Ennis (Ireland) for being selected as Eircom’s information age town and model for Ireland. As part of this initiative an ICT training centre was established in the library.
- Dunedin (New Zealand) for developing a municipal e-council model and a ‘Citizen Direct’ plan. The Dunedin model aims at transformation and integration. The library manager was directly involved on the project team.
- Tameside (UK) for its use of “SMS (short message service) for the relatively high volume activity of notifying arrival of library book orders”.

It is important to note that e-government ‘best practices’ and libraries as identified by SAP include both access, services and content. The role of libraries in e-government extends beyond providing access.

The World Markets Research Centre produced the Global E-Government Survey in 2001. In this report, the World Markets Research Center examined

“the features that are available online at national government web sites. Using a detailed analysis of 2,288 government web sites in 196 nations, we measure the information and services that are online, chart the variations that exist across countries, and discuss how e-government sites vary by region of the world”.

The more important findings in the report are:

- English has become the language of e-government. Some 72% of national government web sites have an English version, while only 28% do not.
- 45% of sites are multi-lingual, meaning that they offer two or more languages.
- 6% of web sites feature a one-stop service “portal” or have links to a government portal.
- 8% offer services that are fully executable online.
- The most frequent services involve ordering publications online, buying stamps and filing complaints.
- 71% of web sites provide access to publications and 41% have links to databases.
- 6% show privacy policies, while 3% have security policies.
- Only 2% of government web sites have some form of disability access (i.e., access for persons with disabilities).
- Countries vary enormously in their overall e-government performance based on our analysis. The most highly ranked nations include the US, Taiwan, Australia, Canada, the UK, Ireland, Israel, Singapore, Germany and Finland

A search of the report under the terms 'library' and 'libraries' yielded no results.

2.2 SPECIFIC EXAMPLES OF GOL BEST PRACTICES

This section provides information on many examples of GOL initiatives and where possible identifies 'best practices' associated with these initiatives.

Canada. Government On-Line (GOL) initiative

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

The goal of GOL is to achieve Government On-Line by 2005. The web site for the Government of Canada, Government On-Line initiative presents the following 'Guiding Principles':

- *Organizing services and information around the needs and expectations of citizens*
Government On-Line is working to make electronic government services:
 - *Accessible to all, easy to use and organized to meet Canadians' service priorities*
 - *Less time-consuming and costly to use*
 - *Higher quality and more comprehensive*
 - *Private and secure*
 - *Responsive to what Canadians' want*

- *Taking a whole of government approach so that the individual or business user is able to view the entire range of services offered regardless of the department, agency or other government institution that provides them.*

The Canadian GOL initiative is:

- Centrally coordinated, so as to achieve progress across the entire government
- Collaborative across departments and agencies, and across jurisdictions, involving the private and not-for profit sectors
- Transformative, by encouraging the re-engineering, consolidation and integration of services where appropriate
- Innovative, using proven best-of-breed technologies and private sector partnerships

The 'Governance' page of the web site describes Government on-Line (GOL) as multi-faceted, including not just technology issues, but also knowledge creation and service delivery. In recognition of this broad spectrum of issues, Treasury Board Secretariat expanded the mandate of the Chief Information Officer Branch (CIOB) in Spring 2002 to include the promotion of service improvement and innovation across all delivery channels.

Major challenges for the Canadian GOL model include:

- Ensuring a qualified, flexible public service, adapted to cyber-government
- Harmonizing the primary modes of service delivery amongst different departments
- Ensuring cooperation between the different departments within the concept of one-stop service
- Making Canadian citizens aware of "Government On-Line". GOL as a service title is not sufficiently descriptive and will need a detailed communication strategy in order to gain wide acceptance.

The *Annual Report on Canada's Progress -2002* reports that "the public's overall rating of the quality of the service or information they receive from their federal government has risen steadily every year, from 59% saying "good" in 1999 to 67% in 2002".

Government of Canada Site

<http://www.canada.gc.ca>

The Canada Site is the primary Internet portal for information on the Government of Canada, its programs, services, new initiatives and products, and for information about Canada.

The Canada Site uses three main gateways to grouping information and services for three main client groups (individuals, businesses and audiences abroad).

The Canadians Gateway provides access to services offered by dozens of different federal departments and agencies, and in some cases by other levels of government as well.

The Business Gateway provides one-stop access to business support programs offered by provincial and territorial governments as well as the Government of Canada.

The Non-Canadians Gateway now offers information and services in four additional languages: Spanish, German, Portuguese and Chinese.

Several common standards have been adopted for the GOL services and the Canada Site. These standards include:

- Common Look and Feel (CLF) standards (www.cio-dpi.gc.ca/clf-upe/index_e.asp)
Common Look and Feel standards are designed to ensure that all Canadians, regardless of their Internet ability, geographic location or demographic representation have equal access to information and services on Government of Canada Web sites. The 33 standards fall into a total of seven categories and are intended to ensure outcomes such as federal Web sites that accommodate assistive technologies such as text readers and voice activated devices; a clear on-line federal identity so that Canadians know they are dealing with the Government of Canada; standardized and timely responses to

citizen's e-mail enquiries; logical and consistent navigational formats; and, compliance with all relevant policies of Canada's *Official Languages Act*.

- **Privacy Impact Assessment**
To ensure that privacy protection is built into the development or redesign of services, the Government of Canada developed the Privacy Impact Assessment Policy. Privacy Impact Assessments (PIAs) are mandatory for the design or redesign of programs and services where there are potential privacy issues, such as those that may involve the increased collection, use or disclosure of personal information, the broadening of client populations, a shift from direct to indirect collection of personal information, and new data matching or increased reuse or sharing of personal information.
- **IT Security Standards**
IT security standards require departments to meet baseline security requirements, to engage in continuous security risk management and to assure continuous service delivery. This means not only erecting layers of protective mechanisms but also being prepared to detect, respond to and recover from attacks that might take place against those protective mechanisms.
- **Information Management Standards**
An Information Management (IM) Resource Centre Web site has been established (www.cio-dpi.gc.ca/im-gi/) for employees and business managers at all levels to provide a single point of access to IM instructional material, guidelines and standards, case studies and best practices.

The development of common standards for GOL by the Government of Canada means that public libraries seeking to be involved in an integrated way with GOL will also have to consider supporting these standards.

Canada – Service Canada

Service Canada (SC) is a collaborative, interdepartmental initiative, to explore options for delivering integrated, one-stop federal services. A multi-channel service delivery network was established to provide citizens with access to services in three ways: in-person using one of Service Canada's access centres, by telephone via the government's 1 800 O-Canada information line, or through the Canada Site on the Internet. It has also included projects designed to cluster services or test communication technologies that would improve service delivery. One of the pilots involved the Oxford County Library. This project is described in section 2.4 of this report.

Alberta – Service Alberta

<http://www.servicealberta.ca/pages/home.asp>

Service Alberta is the online site for access to Government of Alberta services and information. The Alberta Community Development Branch of the Alberta

Government, Alberta Public Library Electronic Network (APLEN) and Service Alberta are engaged in a cooperative project to use the 305 public libraries in the province as Service Alberta information centres. Further information on this project is included in Section 2.4 of this report.

New Brunswick - Service New Brunswick

<http://www.snb.ca/>

Service New Brunswick is the Government of New Brunswick's source of online information providing one-stop delivery of provincial government services. The web site includes a product (gBIZ) which enables electronic commerce.

Nova Scotia – Service Nova Scotia

<http://www.gov.ns.ca/snsmr/>

Service Nova Scotia is the Government of Nova Scotia's one-stop source for information and services including online information and services. The Pictou-Antigonish Regional Library is partnering with Service Nova Scotia to deliver GOL through public libraries. More information on this partnership project is provided in Section 2.4 of this report.

Ontario - Office of the Corporate Chief Information Officer

<http://www.cio.gov.on.ca/>

Ontario's e-government strategy is described in detail on this site. Information on the site states that:

Ontario's e-Government strategy is to use electronic tools to transform:

- *service delivery*
- *the internal management of government*
- *our management of broader public sector systems*
- *our interactions with citizens*

e-Government includes:

- *using a variety of electronic channels for direct service delivery (ESD)*
- *changing internal decision-making and program delivery processes*
- *transforming large public sector systems such as health, justice, resource management, transportation and education*
- *facilitating two-way citizen engagement (or "e-democracy" or "digital democracy")*

Although public libraries are mentioned as part of Ontario's e-government strategy, there is no detailed description of public library involvement in e-government in Ontario.

Ontario – Online Services Web Site

http://www.cbs.gov.on.ca/Online_Services/english/index.htm

The Government of Ontario has established a virtual service centre for online services to individuals. The Ontario Ministry of Consumer and Business Services

manages the Online Services Web site. The Web site supports online transactions as well as one-stop access to forms and general information. The purpose of the Online Service Selector is to provide a door through which individuals can quickly get straightforward information on commonly-asked-for government services and do transactions.

The Ministry of Consumer and Business Services also provides a system of more than 50 Government Information Centres that provide a wide range of general government information about all ministries at one location.

Information is also organized based on a system of 'life events'. Resources and services from several different ministries and levels of government have been gathered and focused under various 'life events', such as 'looking for a job' and 'having a baby'.

Australia – National Office for the Information Economy (NOIE)

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

NOIE co-ordinates the development of the Commonwealth Government's *Strategic Framework for the Information Economy*. This is Australia's peak policy document expressing national goals and objectives in the information economy. It includes strategies and action plans to achieve those goals, and also serves as a high-level vehicle for coordinating Commonwealth government action in this area.

New Zealand - E-government site

<http://www.e-government.govt.nz/>

This site is the primary site for official information about the e-government program in New Zealand. It is also the home for the first implementations of e-government operations, e.g. standards that have been developed and are now in use. This site is content-rich and includes a lot of information about the policies and standards that the Government of New Zealand has developed to guide their e-government agenda.

Singapore

<http://www.gov.sg>

The Government of Singapore is developing GOL sites that include interacting and transacting with online users. In order to enhance customer service and to encourage people to use the online services they are offering incentives such as free long distance minutes to people who are quick to file their income tax returns.

UK - Office of the E-Envoy

<http://www.e-envoy.gov.uk>

The Office of the e-Envoy (OeE) is leading the drive to get the UK online, to ensure that the country, its citizens and its businesses derive maximum benefit from the knowledge economy. To support this aim, the Office has three core objectives:

- to develop the UK as a world leader for electronic business

- to make all government services available electronically by 2005 with key services achieving high levels of use
- to ensure that everyone who wants it has access to the internet by 2005

The E-Envoy site is particularly useful because it provides access to a series of detailed policy frameworks, policies and technology standards related to GOL and a series of monthly and annual progress reports to the Prime Minister on the drive to get the UK online.

UK Online

<http://www.ukonline.gov.uk/>

UK online is a national campaign to get people, business and government online and to make the most of the Internet. The campaign has three aims:

- To ensure that everyone who wants it has access to the Internet by 2005. This aim is being met through a network of centres that offer access to the Internet and support and coaching to help people get the most out of the Internet. To aid in this effort all public libraries were connected to the Internet.
- To make the UK the best environment in the world for e-commerce by 2002 UK online for business offers expert and impartial advice to help businesses get online and make the most of information and communication technology (ICT).
- To make all government and public services available electronically by 2005. To build this electronic service capacity, the government committed to £ 1 billion (\$2.2 billion CAD) over three years.

UK Online was preceded by the creation of the People's Network. The People's Network is the term given to the national network for public access through public libraries - a network linking all 4300 public libraries throughout the UK. It recognized the importance of the existing network of public library buildings used by millions of people from all sectors in every community. In developing the People's Network a total of £ 170 million (\$375 million CAD) was invested into libraries:

- £ 100 million in infrastructure (PC, cabling, installation, furniture and equipment)
- £ 20 million to train 40,000 staff (European Computer Driver's License)
- £ 50 million in new digital content

The Government of the UK appears to have recognized the power of the public library to be at the heart of federal policy. Libraries were able to create 13 UK online centers for every option other than libraries (post offices, community centers, etc.). In addition, the necessary ICT skills and customer service systems were already in place. To reinforce these skills, the government provided funding of £ 450 (\$1000 CAD) to train every library employee in new ICT skills.

UK Government Gateway

<http://www.gateway.gov.uk>

The Government Gateway is a centralized registration service for e-Government services in the UK. Registering with the Government Gateway enables a user to sign up for any of the UK Government's services that are available over the Internet. When a user has completed the registration process, he or she will be able to use a single User ID or digital certificate to send and receive forms, such as Tax returns and VAT returns. Forms can be sent using appropriate Government web sites, portals or third party software packages.

US FirstGov: The U.S. Governments Official Web Portal

<http://www.firstgov.gov>

FirstGov.gov is a free-access web site designed to provide a centralized place to find information from U.S. local, state and federal government agency web sites. FirstGov is the official web portal for the U.S. government. Over 26,000 web sites have direct links to FirstGov.

The US FirstGov site is part of a plan to provide a single gateway to users of all US government services. It includes a user-centric focus. From a marketing perspective this entails reaching out to people on a personal basis and let them what you have to offer. US FirstGov has made a point of contacting what they describe as 'multipliers' that is people who will help others go online. A major 'multiplier' target is public librarians.

European Union

<http://europa.eu.int/ISPO/ida>

The Union launched the web-portal 'Public-Services.eu' in October 2002. This portal is an initiative of the EU IDA programme and is aimed at providing information and services to assist citizens and enterprises carry out cross-border activities with public administrations across Europe. This portal provides information and services to assist EU citizens, enterprises and entrepreneurs that need to interact with administrations in another country and to carry out cross-border activities. For example, citizens who wish to move to, or enterprises that would like to establish a subsidiary in, another European country

European Commission

A recent benchmarking study undertaken by Cap Gemini Ernst & Young (<http://www.cgey.com/news/2003/0206egov.shtml>) on behalf of the European Commission examined 20 basic public services, including public libraries in the 15 Member States, plus Norway, Iceland and Switzerland, between October 2001 and 2002. This study is part of the benchmarking program that evaluates the progress of the EU's eEurope initiative.

Key findings of the study are:

- 86 per cent of the 10,500 individual public services analyzed are now online (a growth of 12 per cent in one year);
- there has been a substantial increase (from 45 to 60 per cent) of sophistication in the provision of public services (the "sophistication "level

expresses the quality of the service: basic information, one-way interaction, two-way interaction and full electronic case handling);

- there are more sophisticated online services for businesses than for citizens;
- the most developed services are income-generating services (e.g. taxes and social contributions); other online public services are: registration (e.g. registrations for births, deaths, marriages, cars), returns (services provided by government to citizens and businesses in return for taxes and contributions, e.g. public procurement, public libraries, social security benefits, job search services, health-related services) and permits and licenses (e.g. building permit);
- Sweden and Ireland show the highest level of online sophistication.

Because the study is very recent, deals directly with E-Government and public libraries, and presents considerable detail on the methodologies used in the study it is particularly relevant to any further work that may be conducted by CLA and LibraryNet. For these reasons considerable detail on the report and on the methodologies used and an analysis of the results of the report are presented here. The full title of the report is:

*CAP GEMINI Ernst & Young's Overall report Oct 2001 – Oct 2002
Online availability of public services: How does Europe progress?
Web based survey on electronic public services*

Cap Gemini Ernst & Young (CGE&Y) prepared the report in January 2003 for the European Commission DG Information Society. This survey is part of the benchmarking program that assesses the progress of eEurope. The objective of eEurope is to provide a favorable environment for private investment and for the creation of new jobs, to boost productivity, to modernize public services, and to give everyone the opportunity to participate in the global information society.

The indicator analyzed in the CGE&Y study focuses on the supply side of e-government that is the provision of online front-end public services. It measured the availability of the public services on the Internet and the level of online sophistication of the delivery process. This report describes the progress that has been measured between the first and third surveys.

The European Commission defined a common list of twenty basic public services for which online sophistication was to be benchmarked. Twelve of these services are aimed at individual citizens (Government to Citizens); eight others are aimed at business (Government to Businesses). The basic public services are listed in the chart on the next page.

Citizens	Businesses
Income Taxes	Social Contribution for Employees
Job Search	Corporate Tax
Social Security Benefits	VAT
Personal Documents	Registration of a New Company
Car Registration	Submission of Data to the Statistical Office
Application for Building Permission	Custom Declaration
Declaration to the Police	Environment-related Permits
Public Libraries	Public Procurement
Birth and Marriage Certificates	
Enrolment in Higher Education	
Announcement of Moving	
Health-related Services	

In order to measure the level of online availability of the basic public services, the European Commission worked out a four-stage framework:

- Stage 1 - Information
- Stage 2 - One-way Interaction
- Stage 3 - Two-way Interaction
- Stage 4 - Full electronic case handling.

The CGE&Y team defined the four stages as follows:

Stage 1- Information:

The information necessary to start the procedure to obtain this public service is available online.

Stage 2 - One-way Interaction:

The publicly accessible web site offers the possibility to obtain in a non-electronic way (by downloading forms) the paper forms to start the procedure to obtain this service. An electronic form to order a non-electronic form is also considered as stage 2.

Stage 3- Two-way Interaction:

The publicly accessible web site offers the possibility of an electronic intake with an official electronic form to start the procedure to obtain this service. This implies that there must be a form of authentication of the person (physical or juridical) requesting the services in order to reach stage 3.

Stage 4- Full electronic case handling: The publicly accessible web site offers the possibility to completely treat the public service via the web site including decision and delivery. No other formal procedure is necessary for the applicant via "paperwork".

The four stages were used to create a scoring framework. For each public service included in the survey the scoring framework was re-fined.

The survey-process developed by the CGE&Y-team contains 4 modules:

- Screening the governmental structure of the participating countries
- Sampling of the multiple service providers
- Identification of URL's
- Web-based survey and scoring of the web sites

The results of this survey using the methodology described above indicated an overall average score of 60% for the 20 public services in the 17 countries when Switzerland is excluded. This demonstrates a considerable increase of 15%-points compared to the first measurement in October 2001. On average the web-enabling of public services in Europe reaches a level somewhere between one-way interaction (downloadable forms) and two-way interaction (electronic forms) while in the first measurement one year ago only the level somewhere between information and one-way interaction was attained. This means that eGovernment in Europe was in 2001 already developed beyond the phase providing information and that in 2002 the interactivity with the users was strengthened.

For any future CLA/LibraryNet studies and for the development of a public library role in GOL it is important to note that the CGE&Y indicates a continuing improvement in the nature and type of GOL services and in the level of the sophistication of the users of GOL services. Libraries involved in any facet of GOL must recognize that it will evolve quickly into a sophisticated service with high user expectations. During the short study period in the CGE&Y study Public services for citizens moved from the information stage to the level of one-way interaction (downloadable forms) while the public services for businesses almost reached the level of two-way communication (electronic forms).

In order to identify common trends within groups of related services, CGE&Y clustered the 20 public service categories into four types of services:

- Income-generating services: Financial flows from citizens and businesses to the government:
 - Income taxes
 - Corporate taxes
 - VAT
 - Social contribution for employees
 - Customs declaration)

- Registration: Services related to recording object- or person-related data in official registers with respect to administrative obligations:
 - Birth and marriage certificates
 - Registration of a new company
 - Car registration
 - Announcement of moving
 - Submission of data to statistical offices
- Returns: Public services given to citizens and businesses in return for taxes and contributions:
 - Social security benefits
 - **Public libraries**
 - Public procurement
 - Job search services
 - Declaration to the police
 - Health related services
- Permits & Licenses: Documents delivered by governmental bodies, which allow you to drive, to travel, to build a house, etc.:
 - Personal documents
 - Application for building permission
 - Enrolment in higher education
 - Environment related permits

The overall cluster average for the “returns” cluster was 53%, which is below the overall survey average of 60%. Also the growth rate of 13%-point over the last year ends below the overall survey growth rate of 15%-point. The assumption can be made that European governments have given less priority to enhancing the online sophistication of these services available for citizens and businesses in counterpart of their tax contribution.

The high-scoring service in the cluster is “job search services” with a score of 90%. In addition this service is also the best performing service of the overall survey. The low-scoring service within the cluster is health-related services with a score during the third measurement of 14%. The explanation here is that the research definition of the service – the standard procedure to obtain an appointment at a hospital – seems less relevant as indicator for the development of eGovernment in this sector.

The highest growth rate was achieved by the “Public libraries” with a growth rate of 20%-points between the first and the third measurement.

CGE&Y created an analysis framework based on the observation that the best results were achieved by centrally coordinated public services that have limited complex procedures (such as job search, VAT and income taxes) and that the services with the lowest scores are typically coordinated by local service providers and have more complex procedures (such as application for building permission and environment related permits). This finding suggests that public libraries as services that are

coordinated by local service providers may have lower take-up than centrally coordinated services.

The analysis of the results of the survey conducted by CGE&Y serves as an explanation-framework on how public service providers can progress to a higher level of eGovernment or GOL sophistication. Two main enablers were distinguished for making progress:

- Coordinated eGovernment solutions or making the delivery process more centralized
- Extensive back-office reorganizations or simplifying the procedure to obtain the service

The study concluded that the organization of the service provider – either centralized or decentralized – together with the delivery approach of complex or simple services – are key determinants for the position of online sophistication. Each service and service organization needs a specific approach, combining citizen access channels (e.g., portals) and back-office reorganization.

2.3 AN E-GOVERNMENT LEADERSHIP MODEL

CGE&Y identified lessons learned from the European Commission study and translated them into a model with important enablers for the further development of eGovernment. These enablers are clustered into the following categories:

- Leadership
- Organization
- Culture
- Technology

Accenture in a recent study identified the following five common characteristics shared by eGovernment leaders:

- Vision and Implementation
- Citizen-Centric: An intentions based approach
- Customer Relationship Management
- Volume and Complexity
- Portals – Single Interaction Points

CGE&Y recommends that a successful eGovernment strategy should contain all elements of its model in a balanced way. Because of the similarities and complementarities of the two models, the following model is based on the CGE&Y framework but incorporates elements of the Accenture model. This composite model provides a good leadership model for a GOL public library strategy.

The **Leadership** element includes:

- Vision: The vision on eGovernment must be articulated early and must move beyond the concept of “bringing public services online”. The vision must be

integrated in most eGovernment strategies. eGovernment must be seen as global governmental change program.

- **Commitment:** Strong political commitment at all levels of government is necessary to ensure the presence of the eGovernment vision program as a priority on the political agenda. High-level political leaders must publicly announce their involvement towards eGovernment programs.
- **Policy:** The translation of the vision in a regularly updated strategic plan for the development and implementation of eGovernment is a key success factor for further improvement. Secure funding of the rollout of eGovernment strategies is an essential element of this planning.

The **Organization** element includes:

- **Process:** Profound back-office re-organization of all administrative and decision-making bodies involved in the provision of a certain service needs to be envisaged.
- **Management:** Appropriate high-level program-management is a key success factor for the implementation of eGovernment program. It includes:
 - ✓ The definition of precise goals, scope, objectives and ground rules of each project
 - ✓ A detailed overall workplan and underlying project plans and clearly defined deliverables and accountability
 - ✓ Risk management defining the possible risks and planning the possible recovery actions
 - ✓ Monitoring, control and project-change systems, including customer relationship management. This includes minimizing duplication, streamlining systems and profiling customer behavior to predict likely future requirements.
 - ✓ Measurement of outcomes and progress.
 - ✓ Change management techniques to lead the transformations of government service delivery to success.
 - ✓ A central agency and the building of bridges between different bodies. Government Web site proliferation is one of the major inhibitors of successful eGovernment implementation.
- **Skills:** A specific approach towards different customer-groups: citizens, businesses, and civil servants. The measurement and enhancement of the e-skills of each of these customer-groups is crucial. An e-capability-development plan based on a skill gap analyses for each of these stakeholders should be an integrated part of the national and regional eGovernment policies.

The **Culture** element includes:

- **Customer orientation/ customer centric:** The new eGovernment concept should be built around the central positioned customer (citizen, business or civil servant). What does the citizen want to do, not what does the government want to deliver.
- **Communication:** Communication and marketing efforts are essential to promote the eGovernment initiatives towards the users.

- Partnership: The efficiency of implementation will be accelerated by the introduction of models of larger partnerships.

The **Technology** element includes:

Security: Customers will only make use of the online offer if complete security is guaranteed. The five most important requirements for secure Internet applications are: authentication, authorization, privacy guarantees, integrity and incontestability.

Connectivity: Connectivity for eGovernment services is the availability of these services for the end-user with an acceptable performance level.

Infrastructure: The infrastructure needed to provide eGovernment services include: hardware, middleware & software, including an infrastructure that will support complex services and interactive transactions.

Single interaction points or portals: People want to visit single points of entry in order to access all government information and services.

2.4 LIBRARY GOL BEST PRACTICES

The benchmarking study undertaken by Cap Gemini Ernst & Young (CGE&Y) on behalf of the European Commission identified public libraries as one of the basic public services that should be offered through eGovernment initiatives.

Public libraries were identified as GOL service providers based on dispersed service provision and simple procedures. The study pointed out that public libraries are mostly organized on a local basis with a straightforward service provision. The study recommended that service providers in the “dispersed service provision/simple procedures” category should take advantage of centralized online initiatives offering the users a single point of contact. Specifically the study recommends that these providers consider the following strategies:

- Each of the regional/local service providers can build its own front office application by adhering to best practice examples of peer service providers and by taking advantage of knowledge sharing in the domain. A single access point is then created as a portal web site where the “customer” is re-directed to his local provider.
- A single point of access can also be designed as a fully developed virtual counter, where the “customer” can apply for the service. In this case, the service application needs to be forwarded to the back-office system of the local service provider who will be responsible for the further treatment of the request.

Specifically for public libraries, the report recommended the following eGovernment strategies:

- Central portal sites giving access to performant online application of local libraries, allowing the users to consult the catalogues and to reserve information carriers in those libraries.

- Centralized virtual libraries, with linked catalogues and the possibility to reserve and pick up information carriers in each related local library.

The conclusion of the CGE&Y study also presented a best practice for every service. The best practices were chosen at random on the basis of a list of high scoring applications. For public libraries the best practice was identified as the ALEPH network. The ALEPH network comprises a common catalogue of the national library of Luxembourg and of associated libraries. Currently the network consists of about twenty libraries resulting in a catalogue of more than 400,000 entries, but it has all potential to grow both in terms of associated libraries as in terms of catalogue entries (as for the moment electronic catalogues are not yet available for all associated libraries).

The application offers the possibility to search/browse through the database of catalogue entries by author, title and subject. For each entry, the user can display a file with detailed information about the piece of work and the library(ies) where it is available.

A function is provided to make reservations for borrowing a piece or receiving a photocopy of it. Registered users can request to see the details of his/her account concerning payment of transaction such as reservations and photocopies. This function also allows a user to keep his address information up to date.

The following URLs were also provided as representing further public library best practices within the EU.

Austria: <http://www.feldkirch.at/rathaus/bibliothek/bestellung>
 Finland: <http://www.lib.helsinki.fi/finelib/>
 Italy: <http://www.legnano.org/reteciv/biblio/>
 Netherlands: <http://www.bibliotheeksite.nl/alblasserdam/>
 Norway: <http://www.drammen.kommune.no/bibliotek>
 Spain: <http://www.bibliotecaregional.carm.es>
 Sweden: <http://194.16.202.10/opac/sv/>
 Switzerland: <http://kbipac.gr.ch/flmono.htm>
 Luxembourg: <http://www.aleph.etat.lu:4505/ALEPH>

The 'best practices' identified in this section point to public libraries as a source of e-content and information. Public libraries are understood to part of the GOL or eGovernment service. These best practices suggest that public libraries should deliver their key services through web sites and online services and strategies should be integrated into all public library planning. Public libraries have a role to play as a content and service provider in eGovernment initiatives. This includes:

- Providing access to online library catalogues and databases
- Providing reference service online
- Answering questions on government programs and services

The Pictou-Antigonish Regional Library

<http://www.parl.ns.ca/>

Public Libraries in Nova Scotia are involved in two pilot projects related to federal GOL: Online EI registration, and a business information portal. In the first instance, the partner is HRDC. Policies are in place for both library staff and HRDC staff as to respective roles and responsibilities. The library provides access but not assistance in actual completion of forms, which is the role of HRDC; the library and HRDC do joint promotion.

In the second instance, the Pictou-Antigonish Regional Library is partnering with LibraryNet, Service Nova Scotia and Industry Canada (CAP) on a pilot project focusing on Business@Your Library. The web site for the Pictou-Antigonish Regional Library includes "The Business Room". This page has information on starting your business, operating your business and growing your business and it provides a link to <http://businessgateway.ca/> BusinessGateway.ca is a one-stop online resource for business information and services. Provided by the Government of Canada, in co-operation with the Province of Nova Scotia, it brings together information and resources from many departments and agencies.

According to Eric Stackhouse, Chief Librarian the keys to success with GOL/public library partnerships are:

- Linking the project to community and economic development objectives. There has to be some clear common objective shared by the government and the library system.
- Ensuring that the government services gain visibility in the community by partnering with the public library. The GOL service must be clearly signed and include supporting print material.
- Involving the community in the project. The Pictou-Antigonish Regional Library includes volunteer advisory committees. These committees can help to assess community needs and to develop effective program responses to these needs
- Ensuring that the library staff is given appropriate training and that the roles of all partners are clearly defined and understood.

Service Nova Scotia Kiosks are now being piloted at two branch libraries.

Discussions are now underway between Service Nova Scotia and the Pictou-Antigonish Regional Library to determine whether the model developed by the library is transferable and whether the Business@Your Library concept can be offered at the provincial level.

Ontario Public Libraries

The Municipal Information Systems Association in its report "City Hall Online: A Progress Report on Municipal e-Government in Ontario" provides an extensive review of e-government developments at the municipal level in Ontario. The report makes several general references to library activity online. The report makes specific reference to the projects that involve public libraries:

- Waterloo Region Education and Public Network (WREPNet)
WREPNet is a high-speed, fiber-optic community information network created in Waterloo Region by a partnership of 10 public-sector organizations and five private-sector technology partners. It now connects 227 sites in local elementary, secondary and post-secondary schools, municipal offices, libraries and other public organizations throughout Waterloo Region – making it the largest community network project of its kind in the world.
- The City of Mississauga's "e-City" Initiative which includes:
 - Online Library Catalogue
 - Patrons can search library catalogue via the Internet
 - List checked-out books
 - List overdue items and outstanding fines
 - Renew books
 - IVR system for overdue book notification
 - Automatically calls patrons and alerts them to overdue books
- The Ontario Public Library Network
The Ontario Public Library Network consists of 1,100 access points for electronic service delivery. Ontario public libraries are providing access to provincial government services such as Ontario Business Connects at Nepean, Mississauga and Pickering libraries. Other Ontario public libraries are providing municipal government services (for example, North Bay through the Virtual City Hall).

Middlesex-London: mycommunityinfo.ca

<http://mycommunityinfo.ca/>

Mycommunityinfo.ca provides access to community and government information in the City of London and Middlesex County. MyCommunityInfo.ca consists of a web site and service desks throughout Middlesex-London, where person-to-person help finding information is available. The County of Middlesex, the City of London and the Ontario Ministry of Consumer and Business Services sponsor mycommunityinfo.ca. Its clients include Employment Resource Centres in Middlesex - London and the County of Oxford.

A primary focus of mycommunityinfo.ca is a staff development program aimed at initiating human networking among the staff from the different physical sites, providing an overview of the project, and providing an introduction to current information needs, services and policies of the different information provider involved in the project.

North Bay Public Library – North Bay Virtual City Hall

<http://www.city.north-bay.on.ca/vch/>

The Library in conjunction with the City of North Bay and the Ontario Ministry of Citizenship, Culture, and Recreation has recently launched a Virtual City Hall. The

Virtual City Hall site includes by-laws, council minutes and agendas, a listserv forum for public discussion and customer services, facts, forms and staff contact names, and offers the capability to interact with municipal government on a 24 hour, 7 day a week basis.

The North Bay Public Library is also working on the Access Blue Sky Community Portal that will provide one place to look for information on the Blue Sky Region.

Australian Public Libraries

The Libraries Working Group of the Cultural Ministers Council developed a report entitled “*2020 Vision: Towards the Libraries of the Future*” that analyzed the opportunities and challenges and outlined a vision for the impending development of Australian public libraries. The vision includes:

- Rapid increase in the use of telecommunications to obtain and deliver services electronically
- Closer work with local communities particularly through the facilitation of access to local heritage and history

At a recent National Public Libraries Forum meeting (May 2000) in Australia, the delegates agreed to:

- A coordinated approach to attracting government/corporate funding – libraries should become more involved with projects for local, state and Commonwealth governments to support government online initiatives.
- A closer relationship with the education sector, including an active promotion of the lifelong learning concept.

The Forum also agreed that there was a national agenda for public libraries and there was also the recognition that there were many areas in which cooperation could take place nationally. A key concern was the need to support economic and community development through a strong, viable public libraries network. This network could be brought about by the cooperation of all stakeholders, improved telecommunications and relevant content.

Services Tasmania Online

<http://www.servicetasmania.tas.gov.au/>

The State Library of Tasmania (SLTAS) played a major role in the development of the government online project *Services Tasmania Online*. In a response to an email Lloyd Sokvitne, Senior Manager at the State Library stated “that it has been a very good example of the benefits of using the skills of librarianship to develop and manage a discovery portal for access to online government services. It is also a good example of a partnership between library services and government as a whole”.

The site provides a link to an 'Ask a Librarian' service which enables users to chat online with a reference librarian Monday to Friday, 9 am to 7 PM. This is a pilot collaborative service provided by Australian national, state and territory libraries.

Dunedin, New Zealand

http://www.cityofdunedin.com/city/?page=sites_dpl

The SAP study identified the City of Dunedin in New Zealand as an e-government model worthy of emulation. The Dunedin Public Library was actively involved in the Dunedin 'Citizen Direct' project and maintains an excellent library web site as part of this initiative. This site is a substantial source for library and community information.

Ennis, Ireland

<http://www.ennis.ie/>

The SAP study also identified the Town of Ennis in Ireland as a case study site and provided information on their "Information Age Town" initiative. The De Valera Library in Ennis is part of the Clare County Library system. Eircom (Irish telecom) is funding the "Information Age Town" initiative in order to determine what would happen and how people would use services in a town that was saturated with 21st century telecommunications technology. In a press release County Librarian Noel Crowley said, "this is one of the most exciting projects in library services anywhere. In effect the new web site will allow the book borrower to bring the library home". On the library web site you can search the Library Catalogue, check to see what books you have on loan, renew them etc. Clients can place reservations on books via the Internet. The library communicates with its customers directly via email.

The mission statement for the library system states:

"Clare County Library Service is a publicly funded resource to be used for information, learning, culture and the imagination thereby improving the intellectual and cultural quality of life of the community, and is crucial in achieving equality of access to the benefits of the information society".

The Irish Department of the Environment and Local Government consider the De Valera Library as representative of the future of technology in public libraries in Ireland.

Public Libraries and Public Access Points

Besides providing e-content and training, another role for public libraries in eGovernment initiatives is that of providing public access to the eGovernment or GOL service. Several governments, including the Government of Canada and the provincial governments have identified public libraries as public access points to GOL services.

Providing public access to the Internet and to the Web involves providing:

- Computers and (high speed) access to the Internet

- Assistance to people in using and navigating the Web
- Training in basic computer and Internet skills and in basic information literacy
- Links to government web sites and other information-based web sites

Oxford County Library

<http://www.ocl.net/>

Oxford County Library, in partnership with the County of Oxford and two local offices of Human Resources Development Canada, became a 27-month pilot location for "Service Canada", an alternative service delivery approach to offering federal government information through a community network of access centres. The federal government provided funding for staff wages, training, promotion, and overhead.

Fourteen sites in Oxford County acted as Service Canada Access Centres including eleven branches of Oxford County Library. All sites were equipped with computer workstations and software that met the technical specifications detailed by Treasury Board. All library sites provided path-finding service to the public in accessing government information on income security, job search, business start-ups, export information, etc.

All the library sites provided all the service offerings as required under the contract including:

- 1-800-O-Canada via public access telephone
- Canada.gc.ca via public access computer workstations with printer
- Publications and forms as required and as provided from time to time during the contract period
- Path-finding assistance
- Test bed for public acceptance and use of refurbished web site of Canada Customs and Revenue Agency
- Access via the Internet to employment opportunities, supplemented with support and training for youth and adults
- Community outreach
- Ongoing partnership development

Staff training and development was an important component of the pilot. One library and one government staff member received "train the trainer" training in Ottawa and subsequently trained all service delivery staff. CAP youth assisted in providing training to replacement staff, including summer CAP placements. Staff who completed the 3-day Service Canada Training Course received certificates and pins from the Member of Parliament and the Warden of the County at a special awards dinner. Staff members were given shirts bearing a Service Canada Oxford. These forms of recognition were important for gaining the support of branch library staff for the project.

During the pilot project, 7,250 government inquiries were recorded at Oxford County Library branches. The pilot terminated at the end of March 2002. It was

deemed very successful according to established performance measures and winning the Ontario Ministry of Culture's award for innovation.

Alberta Public Library Electronic Network (APLEN)

<http://www.thealbertalibrary.ab.ca/aplen.cfm>

Service Alberta is the online site for access to Government of Alberta services and information. The Alberta Public Library Electronic Network (APLEN) is a public library initiative that resulted in a province-wide, sustainable electronic network connecting Alberta's libraries. In cooperation with the Alberta Community Development Branch of the Alberta Government, APLEN has initiated a collaborative project with Service Alberta to use the 305 public libraries in the province as Service Alberta information centres. The first phase of this project is to develop and deliver a training program that will provide public librarians with the skills to use the Internet effectively as a source of information and to train librarians to support the Service Alberta information centres. A target date of 2005 has been set to complete the training of librarians. A training curriculum is under development.

United Kingdom - The People's Network

<http://www.peoplesnetwork.gov.uk>

The People's Network is a project that has connected all public libraries in the UK to the Internet, as part of the Government's commitment to give everyone in the UK the opportunity to get online. The People's Network project covers two separate programs: one to install the network and the other to train library staff in how to use it, and support others in their use.

Prime Minister Tony Blair in his speech on the occasion of the launching of UK Online proclaimed that "We're connecting all our public libraries to the Internet with Lottery funding - the single largest investment in the library network since its creation 150 years ago". This is the type of federal support public libraries in Canada would like to see from the Government of Canada.

The latest development at The People's Network is a partnership with learndirect to provide learning online and information services. The partners have jointly launched an information initiative for public libraries in England. The new facility available on the People's Network web site enables all public libraries to introduce their users to learndirect and the many online learning opportunities it provides. This project firmly links public libraries with the life-long learning agenda established by the government of the UK.

A progress report - "The People's Network: A turning point for public libraries", issued in December 2002 reports that the installation of public access Internet terminals in public libraries across the United Kingdom is now complete. Over 30,000 terminals have been installed in approximately 4000 libraries, offering more than sixty million hours of free Internet access per year. The report claims that the new Internet terminals have encouraged new users, 27% of whom had never used the Internet

before. Over 14,000 people signed up for online training courses.

The report also states that “while there is not yet enough data to extrapolate these reports to a national picture, they offer encouraging evidence of the ways in which the People’s Network is meeting the needs of less advantaged sectors of society”.

3. PERCEPTION OF LIBRARIES’ ROLE AS GOL SOURCE

ASM conducted a review of the literature, nationally and internationally, to determine what information exists regarding the public’s perception of public libraries’ role as a source of government online information (GOL). The literature search was followed by direct personal contacts with librarians and researchers in Canada and internationally who have been involved in analyzing the public’s perception of public libraries’ role as a source of government online information (GOL). This section of the report is based on this literature search and the follow-up interviews.

3.1 THE STATE OF INTERNET CONNECTIVITY AND ACCESS IN CANADA

In order to create a context for perceptions of the libraries’ role as a GOL source it is important to determine the state of Internet connectivity and access in Canada. There are many sources of information on Internet use in Canada.

Sherry Barmania of Media Metrix Canada reports that “recent surveys suggest that over 60 percent of all Canadian adults have access to the Web”.¹ Paula MacKinnon reports that “More than two-thirds of Canadians are online – 99% of youth – and 80 percent of those online have access from home. Yet the cost of a computer and Internet access remains beyond the means of many Canadians. ... There are no widely used Canadian search engines”²

In another article from *Information Highways* magazine Media Metrix reports that in 2001 “Internet use kept growing, at a rate of 18 percent over the previous year” and “Joe Greene, vice-president of telecommunications and Internet research at IDC, predicts that by 2005, 80 percent of Canadian households will have access”.³

¹ Sherry Barmania, “Internet Use in Canada in Review,” *Information Highways* (January-February, 2001).

² Paula MacKinnon, “Bridging the Canadian e-content gap,” *Information Highways* (January-February, 2002): 26.

³ Jane Aspinall, “Internet@work: What matters and what’s next,” *Information Highways* (January – February 2002): 15.

Ipsos-Reid publishes a Canadian Internet Fact Page on its web site.⁴ The fact page reports that:

- 15.1 million Canadian adults access the Internet from home
- One-half (48%) of Canadian adults with a home Internet connection have a broadband connection
- 30% of all Canadians access the Internet from home with a high-speed Internet connection
- 75% of all Canadians have access to the Internet
- 63% of Canadian adults access the Internet from home
- DSL providers have 42% of the broadband market

Statistics Canada, in its publication *The Daily* for July 25, 2002, reported on the Household Internet Use Survey for 2001. The survey results indicated that Internet use from home increased significantly in 2001, but the rate of growth is easing off. More than 5.8 million households, or 49% of all 12 million households, had at least one member that regularly used the Internet from home in 2001, up 1.1 million (+23%) from 2000. This was somewhat less than the gain of 1.4 million (+42%) from 1999 to 2000. In 2001, 7.2 million households had at least one member who used the Internet regularly, either from home, work, school, a public library or other locations. This group represented 60% of all households, up from 51% in 2000.

The firm Ekos Research, based on its Spring and Summer 2002 surveys, reported that Canadians, especially young Canadians, are becoming more accustomed to seeking services and information through the Internet. The findings of the surveys Ekos Research are summarized in the following chart.

Internet Use in Canada	
Canadians with Internet access at home	64%
Young Canadians (under 25) with Internet access	89%
Small Canadian firms using Internet	77%
Large enterprises using Internet	almost 100%
Government and the Internet	
Canadian Internet users who visited a Government of Canada Web site in past 12 months	64%
Canadians looking for information on government services who use the Internet	83%
Satisfaction with overall quality of Government of Canada Internet information	71%
Number who consider greater emphasis on government use of information technology a move in the right direction	81%

⁴ See <http://www.ipsos-reid.com/ca/>

From these reports it is clear that more than 60% of Canadians can access the Internet, including GOL services from their homes or from their places of work. That means that when public libraries consider their involvement in delivering GOL services their target market will be somewhat less than 40% of the Canadian population. This represents a significant number of people who do not have direct access to the Internet and the Web and who will require some form of public access in order to use GOL services.

The Second Report of the GOL Advisory Panel concluded, “while the use of the Internet is expanding rapidly in Canada, there are still significant numbers of people and some businesses that will also use other methods to contact government such as telephone, in-person, or mail. In fact, using the Internet may present some barriers to people with low literacy skills or those who are not fluent in either of the official languages”.⁵ Therefore, many of the people who may wish to use their public library in order to access GOL services may be doing so not only from economic reasons but for a significant number it will be primarily a skills issue.

3.2 PERCEPTIONS

Governments view GOL initiatives as a means of transforming the way they provide information and services. The Government of Canada has identified GOL as a major change initiative and the ‘beginning of an agenda to offer citizens and businesses faster, more convenient and seamless electronic access to services and programs” (Results for Canadians, p. 28).

These projected transformations and changes are based on the way information and communication technologies are changing the ways in which we learn, work, spend our leisure time, access information and interact with one another. Information and communication technologies are also changing and transforming the ways in which public libraries provide their services. If government online (GOL) services are to be offered effectively in a public library setting, this will also require significant change and transformation in the public library approach to providing access to government information.

A report prepared by Treasury Board summarizing the key findings from Service Canada pilots, states that “community networks have been an effective service delivery model”. Public libraries were one of the public access sites covered by the community network model. The report further states:

⁵ “Transforming Government to Serve Canadians Better,” Second Report of the GOL Advisory Panel, December 11, 2002.

“Locating access centres in libraries and community centres rather than government offices creates a more comfortable and relaxed environment for citizens that may feel some anxiety about the official business of government.

Locations staffed by librarians bring a certain professionalism to the access centre, as by the nature of their work, they are skilled in helping clients search for and find the information they need.

Service providers in these locations also have a knowledge and expertise about a variety of information and services available over the Internet”.

The report concluded, “the community network model is a strong service delivery model. However, Service Canada can benefit from this model only when the financial, management, and compliance issues have been resolved”. So although public libraries are recognized as a good way to deliver GOL, this report stops short of a strong endorsement of public libraries as a delivery mechanism mainly because of government regulations and procedures that prevent the government from developing full partnerships with public libraries.

The conclusions of this Treasury Board report are reinforced in another report “*Executive Summary of Evaluation Report: Rural Resources Partnership For Oxford County Library & HRDC*”, produced by the School of Rural Extension Studies and Faculty of Environmental Design and Rural Development, University of Guelph which states:

“This evaluation confirms that communities accept the delivery of government services through public libraries. This is attributed in part to the trust that communities have developed with their librarians and a general perception that the OCL is an effective information provider”.

There are two more conclusions to be drawn from these reports. One is that public libraries are seen in this report only as delivery mechanisms and are not seen as an integral part of GOL, that is as a public information source in their own right. Secondly, there is no mention of GOL as transformative. Service Canada seems to have focused solely on the delivery systems and not on the transformation of government services that fully developed GOL can deliver.

Ulla de Stricker reports that at present, “public libraries are involved in GOL through (1) providing Internet access; (2) assisting customers to find and use government information sites; (3) providing computer and information literacy training; and (4) carrying out GOL pilot projects”. This description of current GOL activities in public libraries in Canada does not indicate any of the significant change or transformation that GOL or eGovernment initiatives require or can bring about. To be a transformative player in eGovernment initiatives public libraries themselves will have to adopt an eLibrary transformative vision. The perception within the public library community appears to be that public libraries can play a role in the delivery of GOL,

but public libraries do not perceive themselves as integral to the GOL service. This perception needs to change.

The *UK Report* prepared for LibraryNet states:

“In Canada, there is no widespread perception that public libraries, in concert with other types of libraries, form an existing network of community-based service organizations that can help the federal government with lifelong learning, access to government services (including online services), and economic development.

Industry Canada has recognized that the public library network across the country is a logical partner to ensure all Canadians have public access to the Internet. However, public access to the Internet is just one element of the UK national branding. Public libraries in the UK are included in key lifelong learning agendas as well as the technology based program development.”

If this perception is correct (and the fact that there are no references to public libraries on the GOL Canada site seems to confirm it), public libraries from across Canada are going to have to coordinate their efforts and make their case to the Government of Canada. Some guidance as to how this may be done is provided in section 3.3 of this report.

It is important to note that the public libraries in the UK were able to position themselves with their government through involvement in lifelong learning and social inclusion agendas.

The *LibraryNet UK* report goes on to state:

“At the same time that the case is being made to the federal government, a case must be made to public libraries and library boards across Canada. Public libraries are local entities that must meet the needs of the residents they serve. Unless these public libraries are part of a larger coalition of libraries as is the case in some libraries or they have a provincial library system as is the case in other libraries, they may not be thinking about the role they could and should be playing: partnering to provide proactive lifelong learning opportunities, to support economic development, and to develop information technology skills in a systematic way.”

This statement clearly points out that unless there is some form of a national coalition of public libraries in Canada, public libraries will be unable to play a significant role in any national agenda initiative, including GOL.

If public libraries continue to be absent from Canada’s national agendas then Dinesh D’Sousa assessment of public libraries will continue to represent the base case scenario. In his book *The Virtue of Prosperity* in a section dealing with access to the Internet and the Web, D’Sousa states:

“Obviously just about everyone who wants access can have it. Even if a person doesn’t have the money, he or she can use the computer at school or work or, in the worst case, go to the public library.

*There is a digital divide, but it is not in gaining access to computers or the Internet. The real divide is that some people and some groups know how to use these tools to get information and put it to use, and others are not as adept in doing so”.*⁶

For some the perception of the worst case means having to go to the public library for Internet access.

There is considerable evidence that such perceptions can be changed, and that public libraries can be involved in transformative change. A report, prepared in the UK entitled “*VITAL issues: the perception, and use, of ICT services in UK public libraries*” states that:

“ICT (information and communications technology) facilities for public use in UK public libraries are set to expand rapidly in the next few years, providing a network of access to learning opportunities and services. Government policies to tackle issues of social exclusion and to stimulate the uptake of lifelong learning have prioritised the role of public libraries in being one of the key delivery points for ICT access”.

At a recent conference organized by Pulman, Europe’s network for excellence for public libraries, museums and archives, held in Portugal in March 2003, Erkki Liikanen, EU Commissioner for Enterprise and the Information Society said that “libraries are ideally placed to serve the needs of citizens wishing to participate more actively in the information society... they are now increasingly able to provide guidance and mediated access to the vast array of digital information resources which exist at local, national and global levels”.

A funding proposal prepared by an Ontario County Library states that the proposed project would build on “the findings of the County Library’s first foray into integrating state-of-the-art electronic web-based resources with traditional library-based in-person service for the purpose of delivering government services”.

The proposal speaks to the issues of the transformative effect of information and communications technology on service delivery and the transformation in libraries that will “create a synergistic opportunity to expand the reach and quality of service delivery for the Government of Ontario without creating a new infrastructure and without having to hire hundreds of new staff and train them how to deliver quality service”.

⁶ Dinesh D’Sousa, *The Virtue of Prosperity* (New York: The Free Press, 2000), 92.

The proposal introduces many of the concepts that could serve as the basis for a national public library vision – a vision that would speak to the transformative capability of public libraries in helping governments to transform the nature of their relationships with citizens by using the well-established strengths of the public library system.

3.3 STRATEGIES FOR PUBLIC LIBRARIES AND GOL

If public libraries are to work to change perceptions regarding public library capacities and to position public libraries to play an effective role with GOL the public library community will have to adopt and implement a targeted strategic plan and vision. Since GOL is also described as eGovernment, the public library community in Canada should consider an eLibrary vision and strategies in order to be positioned as effective GOL service providers and as GOL delivery systems. Based on the available information on eGovernment initiatives and on public library involvement in these initiatives in other jurisdictions a public library GOL strategy should include the following elements.

A. The Leadership Element - Establish GOL Public Library Leadership

A.1 Leadership Group: Create a GOL Public Library Leadership Group using the LibraryNet Advisory Board as a catalyst. The Leadership Group could form the basis of a larger coalition of public libraries in Canada that could develop both a public library-based GOL and an e-Library agenda for Canada.

Public libraries in Australia recently came together to form an organization known as Public Libraries Australia. It was formed to aggregate the political, service and infrastructure capacity of Australia's 1,510 public libraries. Public Libraries Australia will support and represent public libraries on a national basis. It is envisaged that PLA will initially:

- provide advocacy and support for public libraries
- act as a single contact point for public libraries from which national bulk purchase deals can be negotiated
- harness the significant purchasing power of public libraries (1,510 libraries across Australia) to deliver excellent deals to members
- lobby the national government for recognition and funding of public libraries

The SAP report states that for local e-government initiatives, “peer-led approaches would seem to have much to offer in changing individual attitudes, in raising awareness of the opportunities for new structures and systems and in changing the organizational mindset”. In other words, public libraries will have to provide their own e-library and GOL leadership if they are to successfully complete an e-library transformation.

A.2 Vision: A national vision for public libraries and on GOL must be clearly articulated and must move beyond the concept of “bringing library services online”. The vision must be integrated into a broader eLibrary vision. The public library community in Canada has to develop the “libraries and GOL” vision as part of a broader eLibrary plan. The vision should be expressed in a visionary blueprint for action. This development of this vision must be initiated by the library community in partnership with the Government of Canada (GOL).

A strengthened LibraryNet with a new mandate or the e-Business Round Table could serve as a model for formalizing a government-library partnership. Creating an e-Library Round Table would be a good place to start.

A national public library agenda and vision is possible even in countries where the responsibility for public libraries rests with a provincial, state or local authority. For example, the May 2000 meeting of the National Public Libraries Forum in Australia agreed that there was a national agenda for public libraries that included a role for public libraries in a GOL environment. Some of the work done in Australia could serve as a model for developing a Canadian national public library agenda.

In a submission from “Public Libraries Australia” to the “Senate Inquiry into the Role of Libraries in the Online Environment”, the following description of the role of public libraries in the dissemination of government information was provided:

The establishment of a national electronic network through public libraries clearly presents an enormous opportunity for the Federal Government to disseminate information to its constituents. There is the further opportunity for the establishment of interactive government agencies in libraries as evidenced by the very successful co-location of Regional Transaction Centres (RTCs) and Community Technology Centres (CTCs) in libraries.

Even in the absence of the immediate development of an electronic network, public libraries have the capacity to disseminate information on a national basis as evidenced by the Australian Bureau of Statistics e-LEP (electronic Library Extension Program; eLEP provides library staff with the training and skills required to assist people to access ABS information at public libraries.

The critical importance of the development of a vision and strategic plan to drive public library involvement in GOL is clearly outlined in the following excerpt from a report entitled “VITAL issues: the perception, and use, of ICT services in UK public libraries”.

“With the publication, in 1997, of the vision statement, New Library: the People’s Network (LIC, 1997), a new era of coordinated, strategic ICT provision was ushered in. The report was published by the then Library and Information Commission, (a body established by the UK government in 1995), and was followed up a year later by Building the New Library Network (LIC,

1998), which set out detailed plans for implementing the vision, It concentrating on three main areas: content, training, and infrastructure. Government support for the vision was evidenced through a favourable formal response (DCMS 1998), and, more significantly, the allocation of funding”.

Another UK report entitled “Framework for the Future: Libraries, Learning and Information in the Next Decade” produced by the UK Department for Culture, Media and Sport, describes a long-term strategic vision for the public library service in the UK developed through a major consultation process with the public library community. The plan is intended to give the public library community a “shared sense of purpose. It concentrates on libraries’ roles in developing reading and learning, digital skills and services, community cohesion and civic values.”

One of the stated objectives in the report directly relates to GOL. The report points out that the new strategic framework will require:

“Greater recognition by central and local government of the role of the public library service as a delivery agent across a range of local government services and objectives. To achieve this library services should focus on the key areas identified in this framework and develop national services available in every library but which are adaptable to local needs and circumstances... DCMS and Resource will work with local authorities to identify good practice and encourage continuous improvement. DCMS will lead action in all these areas with the help of a small task force consisting of key stakeholders.”

The work described in these UK reports demonstrate that it is possible for a national government to work with public libraries to develop a national vision and strategies to guide the development of public library services and GOL services in public libraries.

A.3 Commitment: Strong political commitment from the Government of Canada and the public library community is necessary to ensure that GOL is on each party’s agenda. Ulla de Striker’s report to LibraryNet concludes that there is “an urgent need to put on a formal footing the relationship between the federal government’s Government OnLine (GOL) initiative and public libraries”. The national campaign for UK Online (see page 14) can serve as a model for government-public library cooperation.

A.4 Funding: Public libraries can only undertake a significant role in GOL services and delivery as part of a broad eLibrary initiative if the appropriate resources are made available. The Government of Canada must take on a developmental role by providing sufficient financial support to assist public libraries with their GOL role. The financial support given to public libraries by the Government of the United Kingdom in support of the UK Online initiative serves as a model for how national governments can fund national public library initiatives.

Funding could be flowed through a series of partnership agreements between the federal government and the provinces or through an independent central funding agency.

B. The Organization Element – Develop National eLibrary Coordination

B.1 Inclusion: All public library sites should be involved in the delivery of a level of GOL services appropriate to the capabilities of the site.

B.2 Management: Appropriate program-management is a key success factor for the implementation of GOL. It includes:

- Clear designation of roles and resources
- Detailed overall work plan and underlying project plans and clearly defined deliverables and accountability
- Monitoring, control and project-change systems, including customer relationship management. This includes profiling client usage to predict likely future requirements.
- A certification process that will set a GOL service standard and measure outcomes and achievements.
- Knowledge management techniques to assist the transformation of government service and information delivery.
- A central library agency to coordinate GOL activities in public libraries, to build bridges between government agencies and perhaps to administer federal funds in support of GOL in public libraries.

B.3 Training: Training and skill development programs for library staff will be required in:

- GOL concepts, services and technologies
- Developing and maintaining library web sites that will effectively interface with government online sites. Public libraries will need staff with the skills and competencies required to develop, manage and operate sophisticated web sites.
- Knowledge management: Knowledge management is an important skill set that librarians bring to any GOL initiative. However, the best way to exploit the knowledge management skills of librarians in order to improve GOL has yet to be fully explored.
- Adult education skills in order to provide basic training in computer and Internet skills and in basic information literacy to the general public.

The “Guide for small and medium sized public libraries - Providing a complete Business Information Service: Using Local Resources and BusinessGateway.ca” is an excellent example of the type of training resources that are required to help public library boards and staff.

B.4 Common Public Library Web Site: There should be one common public library web site that enables public access to GOL services. If public libraries are to provide

public access computers that will provide access to GOL services they must have the same look and design no matter what public library they are located in. All public library web sites could provide a link to a shared public library GOL web site.

B.5 Staff Resources: Provide the necessary staff resources and staff resources to provide GOL services. It will be particularly important to have staff available to assist people who may not have the capabilities or skills to use GOL services. Public libraries should be actively engaged in helping to overcome the digital divide if GOL is to become a practical reality. Providing GOL services in public libraries will involve significant new costs.

B.6 Central Coordination: Public library GOL services will require central coordination, based on a centralized secretariat, common policy framework and principles. Public library GOL should have a common and simple look; that is, it should be based on national branding rather than local branding.

C. The Culture Element – Change Relationships and Orientation

The relationships between public libraries and their communities should be changed and the expectations of what the community currently expects of the public library should also be changed. The library-community relationship will have to become much more interactive.

C.1 Client orientation/ Citizen centric: The GOL concept is built around the centrally-positioned citizen. If public libraries are to become part of the GOL initiative they will also have to adopt a 'citizen focus'. The service must respond to the need of the citizen. This means that the service must be integrated and seamless.

C.2 Communication: The role of public libraries with GOL must be effectively communicated to the government and to the public. The public library community must effectively communicate the benefits of involving public libraries in GOL to federal politicians and civil servants. The key benefit is the availability of thousands of public libraries that can serve as GOL outlets in every corner and every constituency of Canada.

The communication plan should include ongoing consultation between governments, the public library community and the public at large.

C.3 Information: A national web site that would provide 'one-stop shopping' of information for and about public libraries and GOL should be established. The web site would include news updates, best practices, links to important web resources and research.

C.4 Partnerships: Establish partnerships between public libraries and government. Such a partnership would enable governments to take advantage of existing library infrastructure, services, and expertise. The Government of Canada in "*Results for Canadians: A Management Framework for the Government of Canada*" has identified knowledge partnerships with involvement in the design, planning and delivery stages as 'critical to success'.

The system of Memorandum of Understandings between the federal government and the provincial governments that was used to deliver the Community Access Program and which included significant public library involvement provides one possible partnership model.

D. The Technology Element – Develop Significant Online Presence

D.1 Online Web Presence: Develop significant online web presence as part of the transformation to an eLibrary environment. Public libraries must develop web sites that provide interactive services and not just service and program descriptions. A state of the art GOL library kiosk must provide:

- online transactions, including completing registrations, paying taxes and fees and receiving refunds
- online purchasing services
- client relation management capacities
- security (authentication)

D.2 An Integrated and Seamless Approach: Provide public access to library web sites that include comprehensive, integrated and seamless links to government services and information. A partial or selective approach to government information and services will not work if public libraries are to provide GOL services.

D.3 Minimum GOL Standards: Adopt minimum standards for the provision of GOL and for library web sites that provide the linkages to GOL, including standards to access in both official languages, for citizen-friendly web design and plain language, and to ensure access for special needs clients. Public libraries in the UK have adopted two IT related standards one relating specifically to the provision of online catalogues (OPACs) on web sites and the other being a figure for total number of computer workstations required in a public library (0.7 per thousand population) including OPACs.

D.4 Complete security for clients: The five most important requirements for secure Internet applications are: authentication, authorization, privacy guarantees, integrity and incontestability. A good example of new privacy systems is the 'Platform for Privacy Preferences Project (P3P)' developed by the World Wide Web Consortium which provides a simple, automated way for users to gain more control over the use of personal information on web sites. Another example is found on the U.S. FirstGov site, which provides a "Privacy and Security Notice http://www.firstgov.gov/About/Privacy_Security.shtml.

D.5 Infrastructure: The infrastructure public libraries need to provide GOL services include computers and high speed Internet connectivity that will provide an acceptable performance level that will support complex services and interactive transactions.

4. ONLINE SURVEY METHODOLOGIES

ASM reviewed the literature and consulted with public librarians and representatives of companies that are involved with Internet, Web and eGovernment metrics on acceptable and reliable survey methodologies. The purpose of the review and consultation was to provide LibraryNet with recommendations for a potential future survey to measure use of access to government on-line information in Canada's public libraries.

The Booz Allen Hamilton benchmarking report, in its review of eGovernment, states "few governments have particularly effective approaches to measure the impact of their policies... Australia is one of the few making significant progress to measure the impact of its initiatives".

Ulla de Striker reported that there are:

"...few metrics for GOL in public libraries (in Canada). The records of reference questions related to government information, the number of requests for assistance for access to government web sites, and the number of hits on government databases are not available.

There are no statistics concerning the use of government information as public libraries do not question what people do when visiting the library".

De Striker also observed that a uniform methodology for measuring GOL impact, without causing undue strain on already strained staff resources, was required. Following the implementation of methodologies for measuring GOL impact, the "...logical next step would be an in-depth onsite study at selected libraries to observe 'in the field' what GOL related activities take place, and to assess the overall effect on work loads and skill requirements".

In order to identify effective GOL metrics it may be best to look to companies that conduct Internet usage studies. There are several companies that have been involved in measuring the progress and success of eGovernment initiatives. Benchmarking is the most commonly used measurement technique among the large consulting firms.

The Accenture Model - Benchmarking

In order to complete their annual surveys, researchers at Accenture "behaved as citizens and businesses" and turned to the Internet in an attempt to fulfill service needs that might typically be provided by national governments. More than 165 national government services across nine major service sectors were investigated. The nine service sectors researched were Human Services, Justice & Public Safety, Revenue, Defense, Education, Administration, Transport, Regulation and Democracy and Postal.

Accenture used two measures in its 2001 and 2002 studies to determine the eGovernment maturity of the countries covered in the study. The two measures are:

- Service Maturity
- Delivery Maturity (Renamed and redefined as Customer Relationship Management in 2002)

‘Service Maturity’ measures the level to which a government has developed an online presence including:

- The number and percentage of government services that are available online
- The level of completeness with which each service is offered

Accenture defined three types of online service maturity:

- Publish – Passive/Passive relationship. Neither the user nor the agency communicates with one another beyond what is published on the web site.
- Interact – Active/Passive interaction. The user can communicate electronically with the agency, but the agency does not necessarily communicate with the user.
- Transact – Active/Active interaction. The user must be able to communicate electronically with the agency and the agency must be able to respond electronically with the user.

The three types of online service maturity are similar to the four-stage framework developed by Cap Gemini Ernst & Young for the European Commission (Stage 1 – Information, Stage 2 - One-way Interaction, Stage 3 - Two-way Interaction, Stage 4 - Full electronic case handling). The similarities suggest that some basic eGovernment measurement models are evolving.

‘Delivery Maturity’ measures the sophistication of delivery mechanisms such as single point of entry, design by customer intention, customer relationship management techniques, portal capability and additional value-added services.

‘Customer Relationship Management’ includes five measures. These measures are:

- Insight: Does the web site remember that I have interacted with it before start to customize my service?
- Interaction: Can I access multiple related government sites through the one web site?
- Organization Performance: Is this site organized around my needs?
- Customer Offerings: Does this site help or advise me based on my needs or circumstances?
- Networks: Is it possible for me to access other value-added non-governmental web sites from this service?

The Cap Gemini Ernst & Young Model (CGE&Y) - Benchmarking

The CGE&Y model was described in detail in section 2 of this report. A brief synopsis is presented here for comparative purposes. The similarities between the Accenture model and the CGE&Y model are striking.

The CGE&Y model measures the availability of public services on the Internet and the level of online sophistication of the delivery process using a four-stage framework:

- Stage 1 - Information
- Stage 2 - One-way Interaction
- Stage 3 - Two-way Interaction
- Stage 4 - Full electronic case handling

The four stages were used to create a scoring framework for use in scoring the results of a survey process. The survey-process developed by CGE&Y contains 4 modules:

- Screening the governmental structure of the participating countries
- Sampling of the multiple service providers
- Identification of URL's
- Web-based survey and scoring of the web sites

The measurement tools developed by Accenture and CGE&Y could be adapted for eLibrary requirements and the survey process developed by CGE&Y could also be adapted for library survey use as follows:

- Screen the structure of the participating libraries, that is, identify which libraries are parts of larger regional, county or provincial services which may provide upper-tier web services.
- Develop a sample of representative public libraries
- Identify the URLs for the sample
- Conduct a web-based survey of the sample library web sites and score the web sites

The Booz Allen Hamilton Model - Benchmarking

Building on the work of the Information Age Partnership (IAP), Booz Allen Hamilton (BAH) developed a benchmarking framework to conduct an evaluation of the UK compared against G7 countries plus Australia and Sweden. The final benchmarking framework preserves the concept of an ICT adoption ladder - readiness, use and impact. It also applies to the three primary economic actors: government, business and people.

In order to assess international performance, indicators have been selected for each area of the framework. These indicators have been combined into 12 performance indices that enable areas of strength and weakness to be identified in each country.

In order to identify effective policies, desk research and interviews were conducted in each country to map e-policies against the same benchmarking framework. This

enabled the linking of areas of strong performance within the framework, established by performance index rankings, directly to policies.

The major methodology metrics included:

- The gathering of over 150 statistical indicators of performance, over 100 of which were incorporated in the performance model. Sources range from published reports to primary research through interviews by BAH. The comparable indicators consisted of elements such as, the World Bank's 'Knowledge Assessment Methodologies, and the UN's 'Networked Readiness Index'.
- Conducting policy interviews in the nine countries with the departments and policy makers driving the e-agenda. Over 100 interviews were conducted in total.

The SAP Model – Case Studies

The SAP model used to develop the report "Local e-government: A worldwide view" is based on a collaboration of professional associations, local government training and development organizations, local authorities, municipal companies and academic institutions in 14 countries including Canada. Case studies were completed from specific areas within each country. The studies selected are 'exemplar' case studies representing local e-government experience in the specific country. For Canada, the two case studies involved Cape Breton and New Brunswick.

Criteria for selection included a range of size and type of approach taken to local e-government, including customer service, citizen engagement and internal efficiency.

The project research officers collected relevant material for each case study using a template from an earlier local e-government report. The template was used as a guide. The template consists of a series of questions under the following broad headings: vision, leadership, management and infrastructure.

The World Markets Research Centre Model – Web Site Analysis

For the Global E-Government Survey, the World Markets Research Center studied

".... The features that are available online at national government web sites. Using a detailed analysis of 2,288 government web sites in 196 nations, we measure the information and services that are online, chart the variations that exist across countries, and discuss how e-government sites vary by region of the world".

World Markets looked for material that would aid an average citizen logging onto a governmental site. This included:

- contact information that would enable a citizen to find out who to call or write to at an agency to resolve a problem;
- material on information; services and databases;
- features that would facilitate e-government access by special populations such as the handicapped and non-native language speakers;

- interactive features that would facilitate outreach to the public;
- visible statements that would reassure citizens worried about privacy and security over the internet.

Specifically, World Markets evaluated web sites by looking for the presence of 28 features dealing with information availability, service delivery and public access.

Government of Canada - GOL Model

Accenture reports that “prior to 2001, the Canadian Government relied on various international benchmarking initiatives to measure its progress. In late 2001, the Treasury Board of Canada launched a public reporting process, which involves both departmental and government-wide reporting. In addition, the online Citizens’ Panel enables the government to collect valuable information to help it to better understand current perceptions and future expectations of government online”.

The Canadian approach is based on a performance measurement framework for GOL initiatives, which encompasses three main outcomes - citizen/client-centred government; better more responsive service; and, capacity for on-line service delivery. For each one of these outcomes, specific indicators have been developed, as follows:

Citizen/client centred government	Better, more responsive service	Capacity for on-line delivery
Convenience	Critical mass of services	Security
Accessibility	Take-up	Privacy
Credibility	Service transformation	Efficiency
	Citizen/client satisfaction	Innovation

Work is now underway to develop performance measures for these indicators, including a Common Measurements Tool (CMT) that will provide a consistent approach to be utilized across departments and agencies, for collecting client satisfaction information no matter which delivery channel is used. These tools will assist departments and agencies in meeting GOL goals and delivering on the vision of improved, citizen-centred integrated services, including by facilitating efforts to identify priority areas for further investment. The first version of the CMT is available online through the Institute for Citizen-Centred Services, an intergovernmental research body dedicated to promoting excellence in public sector services and delivery channels (<http://www.iccs-isac.org>).

The Common Measurements Tool (CMT) is a client satisfaction survey tool that has been developed for public servants. The CMT will serve to identify client satisfaction,

expectations, priorities for improvement, and client service standards. The CMT is based on five dimensions of service: responsiveness, reliability, access and facilities, communications, and cost.

The Canada Site occasionally makes use of an on-line survey to elicit feedback, whether for general views on the Canada Site, or in reference to a specific element or new feature (for example the Customization Survey). The Canada Site also employs qualitative research to obtain user feedback. Users of the site are also invited to send their views via the "Tell Us What You Think" survey at http://canada.gc.ca/comments/survey_e.html. Comments may also be made via e-mail through the "Questions and Comments" form at http://www.canada.gc.ca/comments/cform_e.html.

The Canada Site employs statistical analysis to track page accesses and standard Web site metrics. The Canada Site does not currently employ commercial Web metrics solutions. Metrics are obtained as required from custom developed applications. If CLA/LibraryNet were to proceed with the planned 'GOL in Public Libraries' it would be advantages to develop the metrics in cooperation with Canada Site personnel.

The Government of Canada's centrally coordinated public opinion research on Canadians' priorities and government service expectations, including on-line services (called the "Listening to Canadians" surveys) is available on-line (www.communication.gc.ca).

Government of Ontario

http://www.cio.gov.on.ca/scripts/index.asp?action=31&P_ID=441&U_ID=0&OP_ID=2

The Government of Ontario has developed a broad 'performance measurement framework for e-government and electronic service development (ESD). To measure performance the Ontario Government will use a range of qualitative and quantitative methods. An outline of the framework provided on the web site follows:

"Regarding ESD performance, we are using three key measures:

- *customer satisfaction with electronic services*
- *recognition of Ontario as a world leader in ESD and*
- *better government through use of information and information technology (I&IT)*

For each key measure, the primary data collection method has been determined and key criteria have been selected:

- *Customer satisfaction (annual customer survey to measure accessibility, timeliness and responsiveness)*
- *Ontario as world leader (third party benchmarking to measure service breadth, service depth and take-up rates)*
- *Better government (internal metrics to measure efficiency, effectiveness and relevance)"*

Progress in ESD implementation will be evaluated by:

- *“establishing baseline performance data from across the Ontario Public Service (OPS)*
- *launching a co-coordinated OPS-wide process of data collection and analysis on customer satisfaction levels”*

Oxford County Library – Citizen’s Panel

The Service Canada pilot project involving the Oxford County Library included a customer satisfaction survey. A copy of the survey is included in Appendix B. The library provided a book prize as an incentive to increase survey returns. The book prize significantly increased the return rate and increased interest in the project.

The pilot was to have included a local evaluation component that did not come to fruition because of uncertainties over ongoing funding. Plans were in place to establish a citizens’ panel that would provide ongoing feedback on the quality and relevance of the service being provided. The use of a “mystery shopper” was also being considered.

Service New Brunswick – Incentives

<http://www.snb.ca/>

Service New Brunswick uses product (gBIZ) to conduct electronic commerce. Within gBIZ are products that can be measured by reports that are generated by the software. Stand alone applications and PDF documents have reporting modules, while WebTrends software is used to measure usage of content pages and PDF forms.

The Service New Brunswick web site provides a link to a customer survey and although it was not available at the time we checked it was interesting to note the following message:

“Thank you for your interest in Service New Brunswick. Please come back and visit this page soon and participate in our next Customer Survey. Names of participants will be entered in a contest to win a \$200 voucher towards a New Brunswick Day or Multi-Day Adventure package”.

Australia

The Australian Government has developed a Government Online Survey to report on its progress towards placing government information and services online. All government departments and agencies take part in the survey and provide information against five key measures contained in the Government Online Strategy. A copy of the survey is available at

<http://www.govonline.gov.au/projects/strategy/GovernmentOnlineSurvey.htm>

In a response to an email Lloyd Sokvitne, Senior Manager at the State Library of Tasmania and a partner in Service Tasmania Online stated “At this stage we don't

have any surveys that measure the attitudes of the community or the effectiveness of the web site, or that track the physical role that public libraries play in the community's access to online government services. This is a hard area to get concrete information on and if you find any good sources, we wouldn't mind hearing from you".

United Kingdom

In the United Kingdom, the benchmarking report, "Consultation with Citizens and Government", outlines the various approaches to measuring progress laid out by the e-Envoy.

The recent progress report on the People's Network - "The People's Network: A turning point for public libraries", was based on the results of the NETbase survey. The NETbase Survey is administered by the People's Network team at Resource: The Council for Museums, Archives and Libraries on a quarterly basis.

Other Methods

The measurement and analysis methodologies identified by the large consulting firms outlined in the previous section all deal with measuring impacts. They are sophisticated measurement systems that measure more than the activity on a web site or the satisfaction level of a customer using a GOL service. There are other less complex measurement tools that are also in regular use.

Web Traffic Analysis Software

Web audience measurement and analysis software has made it possible to understand and interpret Web usage and trends - to know how the Web site is being used, who is using it and why. Web measurement involves calculating Web traffic numbers.

A successful survey to measure the use of GOL in public libraries will require that public libraries install web site traffic measurement software to measure and analyze web traffic. There are many web analysis software packages available. For example, WebTrends (<http://www.netiq.com/webtrends/default.asp>) one of the more popular web traffic analysis software, is in use in many of the sites examined in this report (e.g., Service New Brunswick, Pictou-Antigonish Regional Library) and Websense (<http://www.websense.com/>) is being used by the Oxford County Library.

Web traffic software should be installed on public library web sites and programmed to report on items relevant to GOL use, such as:

- General statistics: Number of visitors
- Top visited pages
- Top file downloads
- Location and origins of users

On-Screen Pop-up Surveys

Michael Messinger, Director of Marketing and Communications for FirstGov, the US Government's Official Internet Portal provided the following information in a response to an email inquiry regarding the use of pop-up surveys.

“In general and for good reason I am totally against the use of pop ups on web sites, especially public services sites like the FirstGov.gov government portal but with one exception.

I use the pop -up methodology in connection with our use of the American Customer Satisfaction Index (ACSI) survey on our site. This was only done after almost seven months of doing the same survey as an opt-in. We also ran both methods at the same time for about three weeks to measure the public’s reaction and be able to draw on some data. Dealing specifically with the use of the pop-up for our on line survey, we have not experienced any negative reaction from the public. There is nothing else on our site that pops up so the visitors never get bombarded with pop-ups as you do going to a commercial site.

We also found that the data collected from the pop-up survey was a better sampling and more accurate as to a measurement of one’s experience on the site (customer satisfaction) than when a person... uses a survey more as a complaint mechanism. So in this case, the pop-up was a more accurate controlled sampling of users to measure customer satisfaction.

Our online survey is managed by a company called ForeseeResults (www.foreseeresults.com) if you want to lean more about their methodology. They are a great team to work with and really have a true sense of measuring customer experience on the web.

On Line Surveys

The U.S. FirstGov site includes a link to a “Customer Satisfaction Survey” on its home page. A copy of the survey is included in Appendix B

The models for e-government metrics that have been developed by consulting firms and government agencies and are identified in this report can be adapted to public library needs. Future library studies should consider identifying the service maturity of Public eLibrary services in Canada. This would include using surveys, web site analysis software, direct web site analysis, benchmarking and case studies to identify:

- the number of libraries that have web sites
- the number of visits to library web sites
- the services that are provided on library web sites
- the number and capability of library catalogues on web sites
- the depth or level of completeness with which each online service is offered

- the design and ease of use of the web site, including portal capacity and any value-added services
- the level of satisfaction of clients visiting library web sites
- the number of PC hours booked in public libraries

A rating scale covering each of the above elements could be developed to provide an overall rating for Public eLibrary services.

5. CONCLUSION

This report demonstrates that there is significant activity worldwide in developing and implementing GOL and eGovernment programs. Almost every country has initiated some form of GOL activity. These national initiatives are being studied and analyzed by all of the major international consulting firms. Many of these firms have developed methodologies and approaches to measuring the progress and impact of GOL initiatives. Most of these methodologies involve benchmarking, case studies, and web site analysis.

Public Libraries are involved in GOL activities around the globe. In some countries, including Australia and the United Kingdom, public libraries are directly involved as major players in GOL activities. In these countries, the public libraries have worked with the national governments to develop GOL visions and strategies. The GOL strategies are comprised of training programs, marketing and branding initiatives, public access systems and high-speed access. Funding from the national government supports these initiatives.

Canada has also developed a sophisticated GOL vision and strategy and is now in the process of implementing these strategies. Canada has been identified by several international consulting firms as a leader in GOL implementation. GOL implementation in Canada thus far has included pilot projects that have involved public libraries in the delivery of GOL.

The 'Connecting Canadians' agenda has resulted in every public library being connected to the Internet, and most public libraries have public access terminals.

What is still missing in Canada is a national plan, including a national vision and corresponding set of strategies, that integrates public libraries across Canada into a GOL agenda. It is in the best interest of the public library community in Canada to rise to this challenge and begin to define a national eLibrary agenda that includes a clearly defined role for public libraries as an integral part of GOL, and specifically in the delivery of GOL. Given the mandate of public libraries to serve the public interest, playing a central role in GOL is not only in their best interest, but also their responsibility.

APPENDIX A: BIBLIOGRAPHY

BIBLIOGRAPHY ON GOVERNMENT ONLINE AND E-GOVERNMENT

Accenture. *eGovernment Leadership: Realizing the Vision*, April 2002.
http://www.accenture.com/xdoc/en/industries/government/eGov_April2002_3.pdf

Accenture. *Rhetoric vs. Reality – Closing the Gap*, 2001.
<http://www.accenture.com/xdoc/en/industries/government/2001FullReport.pdf>

Booz Allen Hamilton. *World's most effective policies for the e-Economy*, 2003.
[http://www.e-envoy.gov.uk/oeo/oeo.nsf/sections/esummit-benchmarking/\\$file/indexpage.htm](http://www.e-envoy.gov.uk/oeo/oeo.nsf/sections/esummit-benchmarking/$file/indexpage.htm)

British Council. *Developments in Electronic Governance*, London: The British Council.
<http://www.britishcouncil.org/governance/edigest.htm>

Brophy, Peter. *The People's Network: A Turning Point for Public Libraries – First Findings*, The People's Network, December 2002.
<http://www.resource.gov.uk/documents/pnreport.pdf>

Canada. *Government On-Line: Annual Report on Canada's Progress – 2002*, Prepared for the 36th Conference (2002) of the International Council for Information Technology in Government Administration (ICA), September 2002.
http://www.gol-ged.gc.ca/pub/ica02/ica02-tb_e.asp

Canada, Treasury Board. *Results for Canadians: A Management Framework for the Government of Canada*. (2000?)

Canada, Treasury Board. *Study of Service Canada In-person Service Delivery Models - Summary of Key Finding*, February 2001.

“CAP GEMINI Ernst & Young. *Overall report Oct 2001 – Oct 2002, Online availability of public services: How does Europe progress? Web based survey on electronic public services*, January 2003.
<http://www.cgey.com/news/2003/0206egov.shtml>

City Hall Online: A Progress Report on Municipal e-Government in Ontario, Municipal Information Systems Association, Spring 2002.
http://www.misa.on.ca/files/news/MEST_Report_eng.pdf

Coghlan, Sam. *Report on Oxford County Library Involvement in Implementation of Service Canada Community Network in Oxford County*, March 29, 2001.

Coles, C. "IT in public libraries seeking out the user's perspective" in *Library and Information Research News (LIRN)*, 22 (70), 1998, 35-42.

De Stricker, Ulla. *The Impact of GOL on Public Libraries: Findings from a Probe*, A report prepared for LibraryNet and Industry Canada, February 8, 2003

The Dual Digital Divide: The Information Highway in Canada, Public Interest Advocacy Centre (PIAC), Ottawa, 2000.

E-Govt Act Passed, But ALA is Wary, Library Journal, December 24, 2002
<http://libraryjournal.reviewsnews.com/index.asp?layout=articleArchive&articleId=CA267142&display=searchResults&stt=001>

Eve, Juliet and Peter Brophy. "VITAL issues: the perception, and use, of ICT services in UK public libraries," *LIBRES: Library and Information Science Research, Electronic Journal*, 2000 Volume 10 Issue 2; September 31.
<http://aztec.lib.utk.edu/libres/libre10n2/vital.htm>

Fekete, Jason. *GOL strategists suggest giveaways to lure users*, September 27, 2002.
<http://itbusiness.ca/index.asp?theaction=61&lid=1&sid=50751>

Guha, Amab. "Government Online: Reflections on Access," *Information Highways*, Volume 8, Issue 4, May - June 2001.

Holmes, Douglas. *Egov: E-business Strategies for Government*, Nicholas Brealey Publishing, 2001.

Julien, Heidi and Michelle Helliwell. "Libraries as Instruments of Information Policy: The Role of Canadian Public Libraries in Connecting Canadians". In *Beyond the Web: Knowledge and People*, 111-120. Proceedings of the 29th Annual Conference of the Canadian Association for Information Science, May 27-29, 2001.
<http://ln-rb.ic.gc.ca/e/advocacy/julein.html>

Liddle, D. "Best value – the impact on libraries: practical steps in demonstrating best value". *Library Management*, 20 (4), 1999, 206-212.

Liff, S., Steward, F. and Watts, P. "Public access to the Internet: new approaches from Inter cafés and community technology centres and their implications for libraries", in *New Review of Information Networking*, Vol. 5, 1999, 27-41.

Providing a complete Business Information Service, Using Local Resources and BusinessGateway.ca, Guide for small and medium sized public libraries, (DRAFT), Prepared by LibraryNet, Industry Canada and the Pictou-Antigonish Regional Library,

December 2002.

Public Libraries Australia. *Submission to Senate Inquiry into the Role of Libraries in the Online Environment*, Submission by Lynne Makin and Robert Knight.

Riley, Thomas B. *International Tracking Survey Report, Number 6, Final Report – Change Management and E-Commerce and International Privacy Issues and the Relation to E-Government*, Commonwealth Centre for Electronic Governance, December 2002.

Report on the National Public Libraries Forum, Council of Australian State Libraries and State Library of South Australia, May 11-12, 2000.

SAP. *Local e-government now: a worldwide view*, Published by Improvement and Development Agency (UK) and the Society of Information Technology Management, September 2002.

<http://www.locregis.net/aaa/LEGNUK.PDF>

Stratford, Jean Slemmons and Juri Stratford. "Computerized and Networked Government Information," *Journal of Government Information* 28 (2001) 297-301.

UK Report, LibraryNet, April 2002.

<http://librarynet.ca/e/about/U.K.%20Report.htm>

United Kingdom, Department for Culture, Media and Sport, *Framework for the Future: Libraries, Learning and Information in the Next Decade*, February 2003.

http://www.culture.gov.uk/heritage/pl_framework.html

United Kingdom, Office of the e-Envoy. *International Benchmarking Report 2001*

<http://www.e-envoy.gov.uk/publications/reports/benchmarkingV2/intro.htm>

United Kingdom, Office of the e-Envoy. *UK Online Annual Report 2002*.

[http://www.e-envoy.gov.uk/oeo/OeE.nsf/sections/reports-annrep-2002/\\$file/download.htm](http://www.e-envoy.gov.uk/oeo/OeE.nsf/sections/reports-annrep-2002/$file/download.htm)

United States General Accounting Office, GAO Accounting and Information, Management Division, "Measuring Performance and Demonstrating Results of Information Technology Investments," March 1998.

<http://www.gao.gov/special.pubs/ai98089.pdf>

World Markets Research Centre. *Global E-Government Survey, 2001*, September 2001.

http://www.worldmarketsanalysis.com/e_gov_report.html

XML in Libraries, Edited by Roy Tennant, Neal-Schuman Publishers, 2002

Web Sites

Association of Municipal Managers, Clerks and Treasurers of Ontario (AMCTO)
Municipal e-Government Resource Centre

<http://egov.amcto.com/home.asp>

The AMCTO Municipal e-Government Resource Centre has been established through a partnership between the Association of Municipal Managers, Clerks and Treasurers of Ontario (AMCTO) and the Ministry of Municipal Affairs and Housing, Government of Ontario, Canada. Through the site, users are able to: find links to existing municipal sites and sites in other jurisdictions; identify best practices and innovative initiatives in e-government; access a document library that reflects current e-government research, experience and best practices; and exchange information, get advice and ask questions through the e-government discussion forum.

Balanced E-Government - a project by the Bertelsmann Foundation

<http://www.begix.de/en/index.html>

Centre for Digital Government

<http://www.centerdigitalgov.com/>

The Center for Digital Government is a national research and advisory institute providing government, industry and education leaders with decision support, research and educational resources to help them effectively incorporate new technologies in the 21st century.

Centre for Research in Library and Information Management (Cerlim)

<http://www.cerlim.ac.uk/>

Cerlim was established in 1993 to undertake research with a practical focus to support operational work in all kinds of library and information services. CERLIM is situated within the Department of Information and Communications at Manchester Metropolitan University

Center for Technology in Government:

<http://www.ctg.albany.edu>

CIO Government Review (formally Lac CarlingReview)

<http://www.itworldcanada.com/lac/>

CIPFA e-Government Forum

<http://www.ipf.co.uk/egovernment/egovforum/>

An independent body that promotes the development of best practice in the formulation and implementation of e-Government through sharing information, ideas & experiences in a consultative and open style.

Commonwealth Centre for E-Governance

<http://www.electronicgov.net>

The Commonwealth Centre for Electronic Governance (CCEG) is a think tank operating under the auspices of an e-Governance program of the Commonwealth Secretariat in London, UK. The purpose of the Commonwealth Centre for Electronic Governance is to provide insight and knowledge on the changing nature of governments in our growing technology infrastructures

Development Gateway: E-Government

<http://www.developmentgateway.org/node/130619/>

The Development Gateway is an interactive portal for information and knowledge sharing on sustainable development and poverty reduction. The Gateway also offers information and links on e-government.

EgovLinks

<http://www.egovlinks.com>

Electronic Government Forum

<http://www.electronic-government.com/>

The Electronic Government Forum is an electronic meeting place for those responsible for e-Government initiatives. It is a web-enabled meetings forum, to encourage new ideas, exchange good practice and demonstrate innovations.

Government Online International Network

<http://www.governments-online.org>

Government Technology: Solutions for State and Local Government in the Information Age

<http://www.govtech.net>

Hillwatch.com: E-Government Resources

http://www.hillwatch.com/e_government/egovresourceshome.htm

E-Government Resources provides useful links to Canadian federal and provincial e-government resources, international think tanks and research sites on e-government issues, resources on electronic commerce policy issues, digital democracy sites plus a selection of publications that cover these areas

Of special interest is the “e-Impact Report: A balanced scorecard approach to measuring and improving your return on web investments”.

International Council for Information Technology in Government Administration

<http://www.ica-it.org>

The International Council for Information Technology in Government Administration (ICA) is a non-profit making organization established to promote the information exchange of knowledge, ideas and experiences between IT authorities on all aspects of the initiation, development and implementation of computer-based systems in and by government.

The International Teledemocracy Centre

<http://itc.napier.ac.uk/>

The International Teledemocracy Centre aims to develop and apply advanced information and communication technology to enhance and support the democratic decision-making process.

The ITC promotes the application of Information and Communications Technologies (ICT) by governments and parliaments worldwide. ITC is part of the Faculty of Computing and Engineering at Napier University. The site includes an e-democracy toolkit.

Knowledge – UK Improvement and Development Agency

E-Government ToolKit

<http://eshw01.idea->

knowledge.gov.uk/80256c1a00482311/httppublicpages/25659618b9fe115880256c7500393384?opendocument

The toolkit provides building blocks for the successful implementation of e-government in local authorities.

Public Libraries Australia

<http://www.nla.gov.au/apln>

This site includes information on the history of Public Libraries Australia as well as reports, minutes and information on the structure of the organization.

The Pulman Network of Excellence

<http://www.pulmanweb.org/news/PULMANconference.htm>

The PULMAN Network of Excellence was launched under the European Commission's research programme for a User-Friendly Information Society (DG Information Society). Europe's public libraries and cultural organisations have a vital role to play in the development of an e-Europe. The PULMAN Network will stimulate and promote sharing of policies and practices for the digital era, in public libraries and cultural organisations which operate at local and regional level.

Service Tasmania Online – Papers and Presentations

<http://www.service.tas.gov.au/papers/>

Papers from EGOV conferences assess the state of the art in E-Government and provide guidance for research & development.

The US Council for Excellence in Government – eGovernance

<http://www.excelgov.org/displayMainSection2.asp?Keyword=preHomePage>

APPENDIX B: EVALUATION FORMS/SURVEYS