



Canada

Auditing Government On-Line:

The Canadian
Government
Experience

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Introduction

This lead paper presents a summary of the Canadian experience in auditing E-Government issues.

In this paper, we share our methodology and approach in auditing an area that is new for our Office and many other countries. We discuss our recent experience in auditing the Canadian e-Government initiative (Government On-Line) using concepts and approaches developed for this specific audit. We identified some good practices and lessons learned that, in our opinion, add value to those Supreme Audit Institutions (SAIs) that are planning similar audits in the future.

In our view, the discussion of this subject is very timely. In Canada, Government On-Line has been identified as a major initiative and very significant funding has been allocated to it. This lead paper and related country papers should form a basis for a most interesting and informative discussion at the Symposium on how best to audit government provision of electronic services to its citizen and businesses.

During the Moscow symposium, we would like if other SAI's could provide comments, questions, and new audit approaches on the following topics:

- Areas to examine during an e-Government audit
- Potential lines of audit enquiry and matters of potential significance
- Audit approaches for specific audit issues
- Current and future audit projects

What is Government On-Line (GOL) for Canada?

1.1 Definition

In the 1999 Speech from the Throne, the government of Canada stated: "By 2004, our goal is to be known around the world as the government most connected to its citizens, with Canadians able to access all government information and services on-line at the time and place of their choosing." The government believed that this vision, although ambitious, was achievable.

In the context of Canada's federal government, Government On-Line (GOL) refers to making many government services available to citizens electronically, using Internet technology. One of the key principles of Government On-Line is that programs and services will be transformed to reflect the needs and expectations of clients and citizens. From the government's perspective, the overall objective of the GOL initiative is service transformation—to fundamentally change the way the government itself operates and to deliver better service to Canadians.

1.2 Canada compares favorably on the international scene

A number of international studies by private and public sector organizations have been released in the past few years that have assessed both the progress that several countries have made in providing services via the Internet, and their capacity to sustain on-line development.

For example, one study published in April 2003 by a private sector firm ranked Canada in first place for a third year in a row, ahead of Singapore and the United States. Another study by an international organization in 2002 ranked Canada in sixth place, tied with the United Kingdom, but behind Singapore and the United States (see Exhibit 1).

Exhibit 1: Canada's ranking as per two major international studies

Country	Ranking	
	Accenture (1)	United Nations (2)
Canada	1	6
Singapore	2	4
United States	3	1
Denmark	4	9
Australia	5	2
Finland	6	13
Hong Kong	7	Not rated
United Kingdom	8	7
Belgium	9	12
Germany	10	10

(1) Source: Accenture, The Government Executive Series - 2003 Report, eGovernment Leadership: Engaging the Customer, Country Reports

(2) Source: American Society for Public Administration (ASPA) and the United Nations Division for Public Economics and Public Administration (UNDPEPA), Benchmarking E-government: A Global Perspective - 2002 Report

During the audit we were conscious of the very enviable worldwide reputation of the Canadian GOL initiative. We were concerned that negative comments by the Auditor General could tarnish this reputation.

2. Focus of the audit

In a value-for-money (VFM) audit, given multiple possible areas for examination, the audit team must concentrate on areas that are significant to the auditee (Parliament and the Canadian taxpayer) and are auditable. An audit organization's well-developed audit methodology is key to achieving a successful audit product. In this section, we will be discussing major highlights of our Office's VFM methodology and elaborate on how we arrived at the specific examination or focus areas of our GOL audit.

2.1 OAG VFM audit process

The OAG audit process involves setting priorities, developing strategic and long-range plans, submitting chapter proposals, rationalizing resources, and assessing whether audit objectives have been attained. In selecting audits, audit management uses their preliminary knowledge of the subject area to form a reasonable basis for believing that the audit can be completed in accordance with the VFM audit policies.

At both the planning and examination phases of a VFM audit of E-government, critical questions must be successfully addressed and resolved. For example, at the planning stage: Is the area for audit within our mandate and is it auditable? During the examination phase: Is the evidence sufficient and appropriate? Are issues significant and are they appropriately addressed? **Appendix 1** provides an overview of the basic VFM audit approach.

A chapter proposal is approved by a senior-level committee prior to the overview/survey phases of an audit. Obtaining a sound knowledge of the audit subject (e-government within the federal government), including any environmental issues, constitutes the overview stage. The survey stage gains sufficient knowledge of the subject area for confirming that the audit can be conducted in accordance with the Office's Value for Money auditing policies, and to develop an examination plan that will provide a basis for the orderly, efficient and cost-effective conduct of the audit. The survey report is a broad-based appraisal of the operation subject to audit, without conducting a detailed verification. The latter is done during the examination phase.

2.2 GOL audit approach and focus

For purposes of the GOL survey, we linked our potential audit areas to critical IT project management elements included in government guidelines, referred to as The Enhanced Management Framework (EMF). It is always more efficient (and more easily defensible to the government organization being audited) to link audit objectives and criteria to those included in applicable government or legislative requirements.

Our GOL audit combined the initial overview and preliminary survey stages and involved six full-time team members by the examination stage, interviewing government officials from four departments and a central agency. These stages took almost five months to complete, from September, 2002 to late January, 2003.

In late November, 2002, we had the first of two meetings with the External Advisors, and presented to them our survey report. The survey report included key potential audit areas surveyed and our assessment of which audit areas should be selected for examination. The examination plan was completed in late January, 2003, after consideration of all comments from the Advisors and our internal quality reviewer. It includes our audit objectives and general procedures to satisfy those objectives, with estimated costs. An audit program was prepared soon after.

2.3 Initial overview/preliminary survey

We started out by learning about the Canadian GOL initiative and other governments' GOL efforts. Here is a sample of our initial procedures as performed by a team of two auditors:

- reviewed newspaper articles;
- visited Canadian government web sites;
- reviewed third party reports specifically related to the Canadian GOL effort, such as United Nations and Accenture, noting scope and conclusions;
- reviewed other governments' related audit reports to determine scope and conclusions. These included the National Audit Office (UK); New South Wales, Australia; General Accounting Office (US); and the Canadian province of Quebec; and
- conducted general overview interviews with key central and departmental government officials:
 - at the central agency, we asked questions such as: what are your overall objectives? How do you know that the initiative will be a success? What are the major risks and how are these being addressed?
 - in government departments: what support are you getting from the central agency? How are your objectives aligned with the overall objectives? What are your particular major risks and how are these being addressed?

Benchmarking for E-government should be approached with caution. As a team we asked ourselves: Is there a need to benchmark against the Canadian initiative? If so, what should be benchmarked? Horizontal sectors? Individual projects? Due to Canada's advanced standing compared to other foreign jurisdictions, we decided not to benchmark. However, we did conduct interviews at both the audit and operational offices in the UK since they also had a similar E-government deadline and the NAO had already conducted three recent audits. We wanted to understand both the operational and audit risks, how these were addressed, and the lessons learned.

Finally, we prepared a chronology of major events specifically related to the initiative which was discussed with government officials. This helped us understand potential issues and background behind several events, as well as the government's vision and objectives.

2.4 Determining what areas to examine

Given our limited resources (6 full-time staff auditors and a small consultant budget), we had to focus on examination areas, or lines of enquiry, that would be of most significance to Parliament and the Canadian taxpayer. There were several team discussions and debates over the optimum use of the team's resources, auditability of potential examination areas, and the extent to which these were of significance to Parliament.

3. Lines of audit enquiry and audit programs

3.1 Strategic Planning

This is considered an abstract and complex area, so auditors must ensure that the audit objectives and criteria are auditable. Consequently, we limited our audit objective to assessing whether the government had established adequate plans and strategies to achieve its GOL objectives for 2005. The government did have a well-developed vision "all government information and services on-line at the time and place of their (Canadians) choosing". The government subsequently set out service transformation as the overall GOL objective. We therefore expected specific outcomes to be set to follow up on the vision and overall objective. Our preliminary interviews with the central agency revealed that the government believed that specific outcomes were not set mainly due to the evolving nature of this initiative. Outcomes indicated were therefore vague and difficult to measure, thus making it possible for the government to declare victory by the 2005 initiative's deadline. To assess whether the government's rationale was consistent with best practices, we requested the opinion of an expert in this field. At the same time, the government issued a methodology on reporting strategic outcomes for horizontal initiatives such as the Government On-Line initiative.

The credibility of this expert was recognized by the auditee and was crucial in the clearance of our findings and recommendations. The consultant's conclusions supported our findings: a lack of detailed expected outcomes for measuring progress and performance. The government had set a main objective, over two years into the initiative, to have 132 of the most commonly-used services on-line and had developed a self-assessment model for departments to predict the services' on-line progress. However, this model failed to include an assessment of progress toward achieving the overall GOL objective of full service transformation.

3.2 Funding

The Office views program or initiative funding as part of government policy so a VFM examination in this area is limited to assessing the funding framework and whether the policy goals are being achieved. Our audits do not question the merits of the government's programs and policies. The merits are for Parliament to review and debate. If audit findings throw a government policy or legislation into doubt, caution is necessary as the auditor may become involved in a partisan political debate.

For the above reason, we did not specifically include audit objectives or criteria related to funding, except as part of our audit objective to assess whether appropriate accountability and reporting mechanisms had been established. We noted that the full cost of the GOL initiative will be much greater than the \$ 880 million funds allocated to

the central agency. Although we did find that these funds were well-managed, we are concerned that no new funding has been allocated over the last two years.

3.3 Pathfinder/pilot projects

We looked at nine GOL projects to assess the extent to which they contribute to the government's overall GOL objective. Specifically, our review included examining departmental strategic plans, project business cases, and other relevant documents to assess progress toward meeting the overall GOL objective of service transformation. We also assessed take-up rates for new on-line services and the benefits in terms of cost savings for the government and better service to the public. The GOL projects that we reviewed were aligned with the government's overall GOL objective. However, our review of these projects showed that the GOL initiative faces major challenges such as maintaining financial sustainability, transforming services, and marketing on-line services to encourage the public to use them.

3.4 Governance

The GOL initiative, due to its horizontal nature, is a complex project. The government had appointed an external senior Advisory Panel who concluded in the fall of 2001 that the objectives of the GOL initiative will not be met with the current governance structure. We recommended that the government strengthen its current GOL governance structure to provide greater direction over all aspects of government services and their delivery, as well as common service infrastructure, to achieve full service transformation.

3.5 Common secure infrastructure

The Secure Channel project is a multi-departmental effort led by the Treasury Board Secretariat. Its primary goal is to provide highly secure, responsive and economical access to government services by citizens and businesses. This secure infrastructure is the foundation for government electronic service delivery and is considered a key component of GOL by the Government of Canada. The government believes that Canadians will do business with it only if they trust that all transactions will be secure and private.

The Secure Channel is expected to cost about \$604 million. This highly complex and costly project is one of the world's first such services for mass use by individuals that incorporate the "digital signature certificate" concept. This concept provides a unique means of verifying the identity of everyone who carries out a transaction with a government department or agency. Because the Secure Channel was initially classified as a concept, the decision to build it was not based on a comprehensive business case. The government is now developing such a business case.

Three applications have been launched using the Secure Channel security and privacy features: one application provides Canadians the ability to notify the Canada Revenue Agency that they have changed their address; a second enables departments and agencies to accept credit card payments on-line; and a third uses the Secure Channel authentication services to provide a venue by which businesses can submit Employment Insurance documentation on-line.

We noted that difficulties have been encountered in achieving compatibility between Secure Channel and other applications. Early adopters of the Secure Channel have had to absorb unanticipated resources to make their applications work properly with the infrastructure's complex security features. Up to March 2003, only one application used the authentication features offered by the Secure Channel. Departments will be expected to pay for the use of the Secure Channel and these costs may be so high as to provide a disincentive to departmental take-up.

The original intent of the Secure Channel was to provide a single entry point for citizens to interact securely and privately on-line with all federal government departments and agencies. However, the Secure Channel may not be as easy to use as was originally intended because of the current legal and privacy framework surrounding the sharing of information among and between departments. Citizens will have to go through a separate authentication process to verify their identity for every government organization that they wish to do business with. The re-authentication is necessary because legal and privacy constraints prevent departments from sharing information on individuals unless they are specifically permitted to do so by law. In particular, this requires a strong process for authenticating businesses and individuals in situations that involve exchanging sensitive information. The risk is that if the legal and privacy considerations render the system cumbersome and inconvenient, the public may choose not to use it. We are not aware of another government or institution that has implemented a version of a secure channel that incorporates privacy and authentication features similar to the Canadian government's system.

We concluded that the success of the Secure Channel is at risk from a number of factors. There is no comprehensive business case that includes an objective, options analysis, costs, benefits and risks, and an implementation plan. Legal and privacy issues must be resolved, such as the inability to share personal information could make on-line transactions less convenient. In addition, there is no complete plan that addresses the risks and costs of the transition to the Secure Channel for all appropriate applications. Finally, the technology has yet to be exposed to live, sensitive, and high-traffic conditions.

We recommended that the government address the key risks and challenges it faces by finalizing a comprehensive business case for the Secure Channel project, addressing its long-term financing, establishing mechanisms to encourage the adoption of Secure Channel by departments and agencies, businesses and Canadian citizens, and addressing the current legal and policy frameworks, including the inability to share personal information.

4. Areas we did not examine and why

We examined the GOL benchmarking done by the government against other jurisdictions but this was limited to interviews with senior officials and high level review of reports. We did not examine the procurement of IT goods and services. This area was covered in a previous audit in December, 2000 "Information Technology - Acquisition of Goods and Services".

We did analyze the Secure Channel project to determine whether key risks, such as costs and take-up, were properly identified and managed and to assess the adequacy of the follow-up action taken. However we excluded from our scope the technical aspects

of the project because it was too premature to examine since the IT/IS infrastructure was still under development. We also excluded the management of the Secure Channel as a project.

5. Lessons learned

Involve team members at an early stage. How the team is deployed is critical. For example, two individual team members—with one being appointed the lead and the other the “back-up”—handled specific tasks or coverage by department and/or by specific area (e.g. strategic planning, Secure Channel). This ensured continuity during vacation periods and/or periods of illness. For a VFM audit that covers several departments, audit team members should be selected based on the extent to which they are team-oriented, with a sound ability to work together while individually contributing to the overall project.

Regular team meetings with documented records of decision instilled accountability and clear expectations among team members. There must exist an atmosphere where constructive challenge of both negative and positive findings can be achieved.

At the beginning, there was a firm resolve among team members to keep ahead of the Office’s critical project milestone dates, because some planned procedures can and do take longer than planned. However, auditees took advantage of our time advance to delay clearance of our findings.

The Offices’ evolving Quality Management Framework ensured that this VFM was done in a rigorous way.

We were able to reach compromises with auditees without changing our main messages, given that our audit evidence was sufficient and appropriate.

The use of a third-party writer helped to save time but this person must be involved at an early stage and attend all edit-related meetings with the chapter author’s superiors.

6. Reaction from the press

Prior to tabling its report, the Office prepares a press release (Exhibit 2). The purpose of preparing a press release is to provide a concise and accurate summary of complex material and to publicize a point of view in the wake of a news event. The press has only a few hours between the time they first have access to the report and the time they have to file their articles. Press releases help prevent the misinterpretation of our messages.

Exhibit 2: GOL Press Releases

Chapter 1—Information Technology: Government On-Line

GOL could become an expensive and underused initiative unless obstacles are overcome

Ottawa, 10 February 2004—Many difficult issues must be resolved if the federal government is to succeed in its objective of providing government services through the Internet, according to Sheila Fraser, the Auditor General of Canada, in her Report tabled today in the House of Commons. For example, the government needs to establish clear expectations for the initiative, resolve some complex legal and privacy issues, and provide for long-term financing.

"Canada enjoys an enviable worldwide reputation for Government On-Line," said Ms. Fraser. "However, two-thirds of the project's six-year timeframe has elapsed, and some of the most difficult tasks remain. Unless the government overcomes these stumbling blocks, GOL could become an expensive and underused initiative."

Many departments have developed only high-level plans for service transformation and for dealing with the changes that will occur as a result of a shift to delivering services on-line. They have not developed detailed plans for dealing with matters such as staffing, marketing on-line services to encourage their use by the public, integrating their numerous information systems, and developing new business processes.

As part of this initiative, the government has embarked on the development of a Secure Channel, which it considers critical to the success of the entire GOL initiative and the cornerstone of electronic service delivery. Its purpose is to provide highly secure, responsive and economical access to government services for citizens and businesses. At the time of our audit, the Secure Channel project was expected to cost about \$604 million. We found that this major Crown project faces major challenges, including its long-term financing, which must be addressed.

"Taking new technologies into account in delivering services is something government needs to do. But to succeed, government needs to rethink the way it does business," said Ms. Fraser.

It is a practice of the Office to show the draft press release to the entities involved in the audit two days before the audit. This is only by courtesy, and not for approval. Despite this process, the press can decide what they want to print and can provide their own interpretation of the observations as illustrated in the titles used by the newspapers (Exhibit 3) in the days following the tabling of the report. The departments are aware that these interpretations are not those of the Office and showing them helps to maintain good relations.

Exhibit 3: Sample of GOL Press Headlines

"Canada off line"

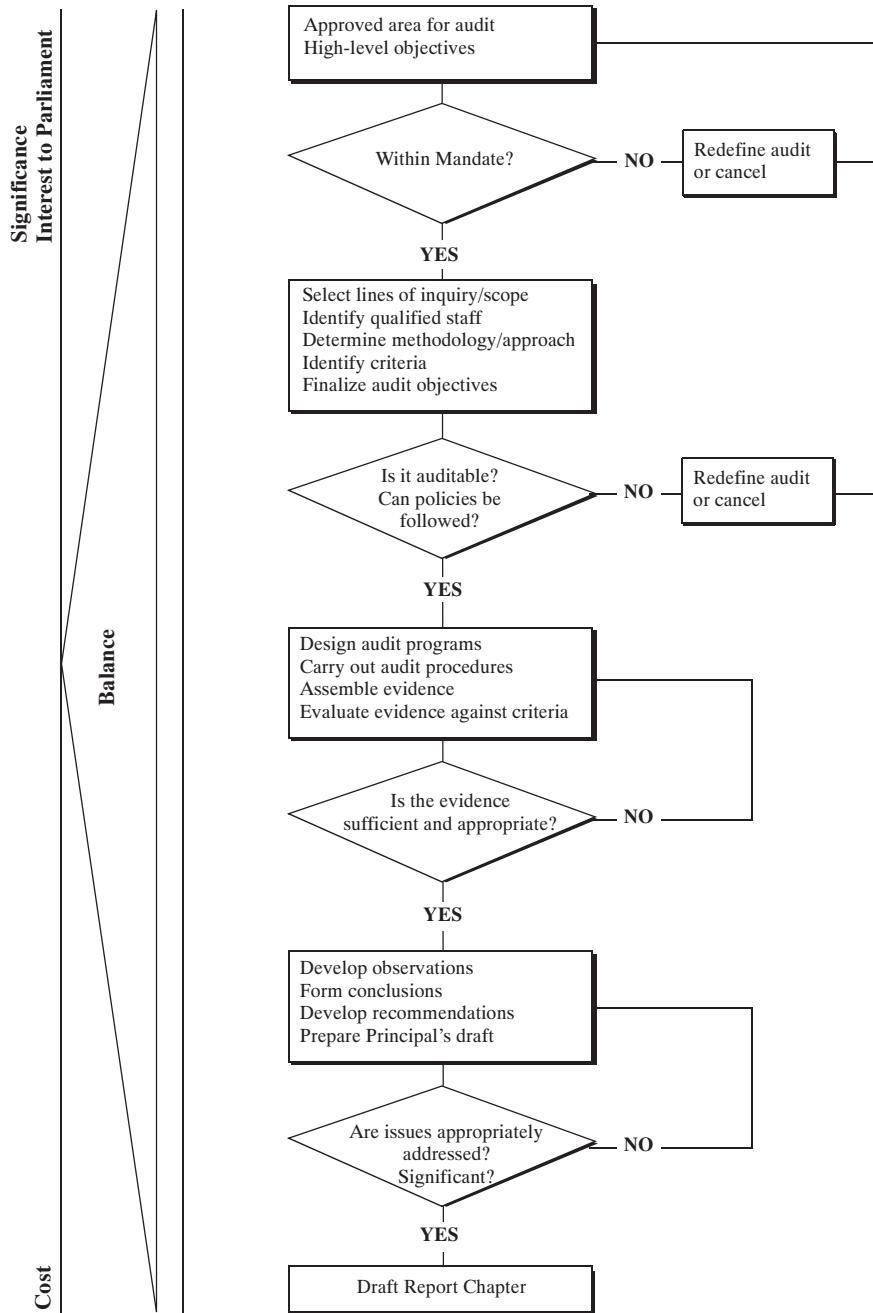
"Government On-Line isn't off track yet—let's keep it that way"

"Government On-Line faces project failure: Auditor"

« Le fédéral "en direct" de travers »

"\$2-billion Internet services project snarled in bureaucratic mess"

Basic Performance Audit Approach



Source: OAG VFM Audit Manual