

**Presentation to:  
ISACA – Information Systems and  
Control Association**

**Report on :  
Large Information Technology  
Projects  
Office of the Auditor General of  
Canada**

**By:  
Greg Boyd**



**December 11, 2006**

# Objective

- To provide you with an outsider (auditor's perspective) on Large IT Projects examined
- Answer any questions you may have about the chapter, methodology used, etc.



# Agenda

- Background
- Findings of previous OAG reports
- Main points
- Findings
- Message from the AG
- Press/media reaction
- Questions



# Background

- 1) \$ 8.7 billion new business projects approved over the last three years
- 2) The Office had conducted similar performance audits in 1995, 1996, and 1997. Denial of access
- 3) OPP
- 4) Audit approach
  - Sample
  - Criteria from best practices



# Findings of previous OAG reports

## 1. 1995 :

- Inadequate analysis of business issues
- Inconsistent management support and project ownership
- Inconsistent user involvement and acceptance
- Lack of effective monitoring

## 2. 1996 and 1997 audits reinforced these findings



## Findings of previous OAG reports (What was done)

1. 1996 : Public Accounts Committee (PAC)  
direction
  - Allocate more resources
  - Requirement for annual IT investments report to PAC
  - TBS to ensure ownership and accountability
  - Divide projects into smaller modules
2. 1998 : Enhanced Management Framework
3. 1999-2006 : ???



# Main point : Conclusion

Little progress made since our last audit : only two of seven sample projects met all our audit criteria.



# Main points

- 1. Seven sample projects examined from four perspectives :**
  - Governance – 3 ok**
  - Business Case – 2 ok**
  - Organizational Capacity – 2 ok**
  - Project Management – 4 ok, 1n/a**
- 2. Role of TBS in challenge and oversight (denial of access)**



# Standish Group

- 1994 - 31% cancelled, 53% cost 189% of original budget
- 2000 - average project cost less than half of 1994 cost
- 2004
  - 18% failed
  - 29% on time , on budget, with required functions
  - 53% challenged
- Recipe for success - six months and six people



# Audit Objectives

- Determine whether the process for approving and managing projects was sufficiently rigorous.
- Determine whether the business cases we examined clearly identified the expected results of the projects and how they would help to meet the business needs of the government and sponsoring department at a reasonable cost.
- Determine whether departments are managing large IT projects according to the criteria for governance, business cases, organizational capacity and project management.



# Criteria

1. **Governance.** Did the processes used by the government to approve and manage large IT projects increase the project's likelihood of success?
2. **Business Case.** Did the department proposing the project clearly define the business needs it expected the project to meet?



# Criteria (cont'd)

3. **Organizational Capacity.** Did the department have people with the needed skills and experience to manage a large IT project and did the organization have the ability to use all of a system's capabilities to improve the way it does business?
4. **Project management.** Did the department follow accepted best practices in managing the project?



# Projects examined

- **Global Case Management System (GCMS - CIC)**
- **Secure Channel (PWGSC and TBS)**
- **Expenditure Management and Information System (EMIS - TBS)**
- **Integrated Revenue Collections (IRC - CRA)**
- **2006 Census Online (Census - Stats Can)**
- **AgConnex (AAFC)**
- **My Account, My Business Account (My Account - CRA)**



<b>Project</b>	<b>Department or agency</b>	<b>Description</b>	<b>Budget <sup>[1], [2]</sup></b>	<b>Spent To Date March 2006</b>	<b>Project Schedule</b>	<b>Status</b>
<b>Global Case Management System</b>	Citizenship and Immigration Canada (joined by Canada Border Services Agency in 2004)	A multi-year program to replace Citizenship and Immigration Canada's outdated business systems with an integrated system that will improve all of its client operations in Canada and abroad.	Initial: \$194.8 million Revised: \$242.8 million	\$197.3 million	2000-07	In development
<b>Secure Channel</b>	Public Works and Government Services Canada and Treasury Board Secretariat	The Secure Channel is a common secure infrastructure that ensures Canadians can use the Government On-Line single window to conduct on-line transactions safely and effectively.	Initial: \$96 million Revised: \$400 million	\$400 million	1999-2004	Operational
<b>Expenditure Management and Information System</b>	Treasury Board Secretariat	An integrated financial system designed to support all aspects of government expenditure management	Initial: \$16.2 million Revised: \$53.7 million	\$22.5 million	2000 - ongoing	In development
<b>Integrated Revenue Collections</b>	Canada Revenue Agency	A new system to be used to prioritize and allocate collections work according to level of risk.	Initial: \$2.5 million Revised: \$147 million	\$30 million	2001-12	In development
<b>2006 Census Online</b>	Statistics Canada	An internet system provided to Canadian households to complete their 2006 census questionnaires online.	Initial: \$14.5 million Revised: N/A	\$12.3 million	2002-06	Operational
<b>AgConnex</b>	Agriculture and Agri-food Canada	A fully integrated system designed to provide a single window for farmers to access the various income support programs offered by Agriculture and Agri-food Canada	Initial: \$60 million Revised: \$177.4 million	\$ 14 million	2001-03	Discontinued
<b>My Account, My Business Account</b>	Canada Revenue Agency	A series of projects that will provide Canadians and Canadian businesses with a "personalized", secure and private online service for conducting transactions with CRA, provinces and other federal programs.	Initial: \$22 million Revised: N/A	\$11 million	2000 -ongoing	Operational

# Findings (1)

## 1. TBS oversight (governance):

- TB Ministers
- TBS role – PPA & EPA
- Project approval, project management policy, EMF
- Some special expenditure reviews however....
- Don't know if review advice followed since access denied



# Findings (2)

## 2. Governance (project):

- **Delivery of business change at an affordable cost with an acceptable level of risk**
- **4 projects had key issues not reported or not resolved**
- **IRC**
  - **CRA does not report to TB**
  - **Overall governance framework emerging**
  - **Business case – 4 yrs?**
  - **KPIs, benefits management strategy, communications strategy**



# Findings (2)

## 2. Governance (project):

- **Secure Channel**
  - **TBS Information Technology Management Board (IMB)**
  - **2003**
    - **Project governance to PWGSC**
    - **Program governance with IMB**
  - **Unresolved issues**
    - **Sustainability and benefits identification**
    - **Take-up**
- **Governance framework indicators**
  - **Key outcomes**
  - **Methods to measure outcomes and accountability**
  - **Expected delivery schedule**
  - **Monitoring process**





# Findings (3)

## 3. Business Case :

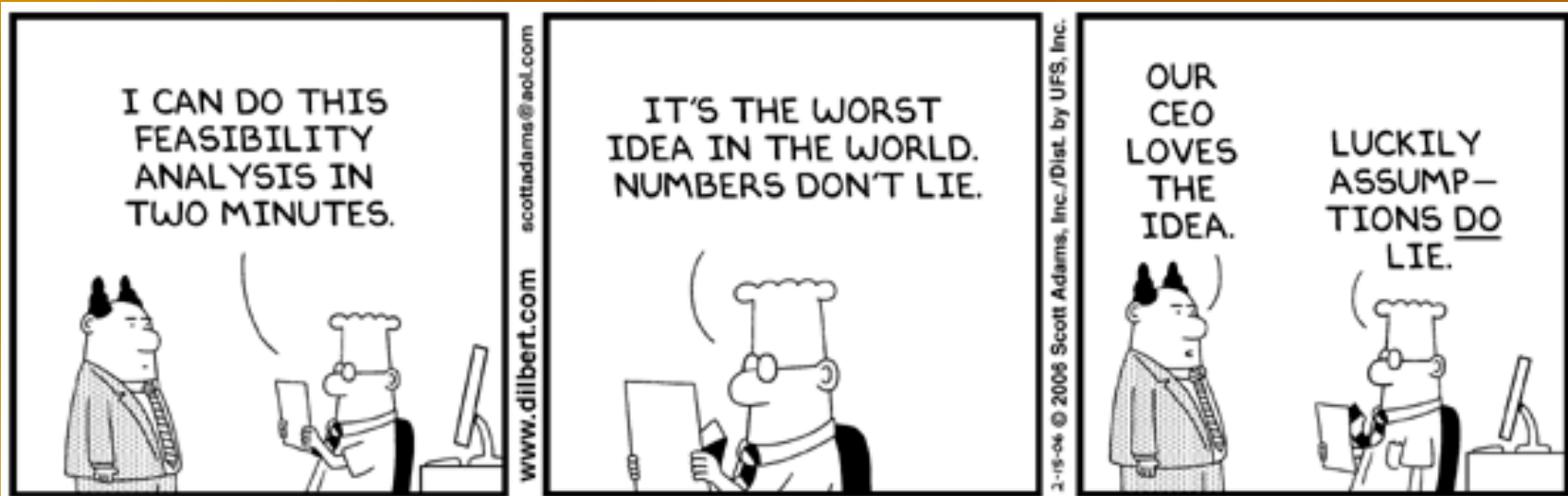
- **Foundation of every sound investment decision**
- **For 5 projects either incomplete, out-of-date or based on information that could not be verified**
- **Exceptions : My Account, Census**



### **3. Business Case :**

- **Secure Channel**
  - **Proof of Concept**
  - **OAG 2003 GOL chapter**
  - **11 TB submissions for \$596 million**
  - **5 requests for sustainable business model**
  - **\$5.2 billion indirect benefits not verifiable**
  - **EMS analysis and benchmarks**
- **EMIS**
  - **business goals vague, not measurable, not time limited**
- **GCMS**
  - **business case not revised**
- **Agconnex**
  - **revised business case leads to business alignment exercise**
  - **results in smaller, lower risk projects**





© Scott Adams, Inc./Dist. by UFS, Inc.



Greg Boyd

ISACA - December 11, 2006



© Scott Adams, Inc./Dist. by UFS, Inc.



# Findings (4)

## 4. Organizational Capacity :

- **Technical and managerial ability to deliver an IT project and...**
- **Entire organization's ability to improve the way it does business by using all of a system's capabilities**
- **Only two of seven assessed**



## **4. Organizational Capacity :**

- **EMIS**
  - **6 project managers and 7 senior responsible officers**
  - **33% positions vacant**
  
- **Census on-line**
  - **experienced project managers**
  - **no turnover**
  - **deadline**





© Scott Adams, Inc./Dist. by UFS, Inc.



Greg Boyd

ISACA - December 11, 2006

# Findings (5)

## 5. Project Management :

- **Control and coordinate activities, resources, time, and cost; and...**
- **Management that anticipates and controls risk**
- **Weak project management practices = long delays and large cost overruns**
- **EMIS and IRC weak**
- **AgConnex not assessed – project discontinued**



## **5. Project Management :**

- **Census Online**
  - **clear definition of responsibilities and assigned objectives**
  - **close collaboration among partners**
  - **fixed delivery date and budget**
  - **gates**
  - **contingency plan**





Audit criteria	Global Case Management System	Secure Channel Project	Expenditure Management and Information System	Integrated Revenue Collections	2006 Census Online	AgConnex	My Account, My Business Account,
<b>Governance</b> Clear governance structure that shows accountability relationships and is designed to ensure that the project is completed successfully	⊕	○	○	⊕	●	●	●
<b>Business Case</b> Evidence that projects are aligned with and support departmental and government business directions and priorities	⊕	○	○	⊕	●	⊕	●
<b>Organizational Capacity</b> Project management teams are experienced and have the leadership, capabilities and commitment to deliver their projects.	○	⊕	○	N/A	●	⊕	●
<b>Project Management</b> The department or agency's ability to handle changes to planned deliverables; manage changes in scope; identify and resolve issues, during the project; and identify, report, and manage project risks.	●	●	○	⊕	●	N/A	●

- The criterion was met over the life of the project.
- ⊕ The criterion was partially met over the life of the project.
- The criterion was not met over the life of the project.
- N/A Not assessed



# Message from the AG

- *"The persistence of these long-standing problems is extremely troubling, not only because they involve large public investments but also because of lost opportunities to improve business practices and services to Canadians"*



# Government Response

- Policy suite renewal
- Standardized capacity assessment tool
- Improve calibre of business cases
- Outcomes management
- Third party reviews



# Press/media reaction

1. Significant coverage
2. There is a continuing interest in the chapter
3. We are expecting to be called at Committees - Public Accounts and Government Operations



# Questions?

*Greg Boyd*

Director, IT Audit Services

Office of the Auditor General of Canada

Tel: (613)952-0213 ext. 2311

Fax: (613)957-9736

[Gregory.Boyd@oag-bvg.gc.ca](mailto:Gregory.Boyd@oag-bvg.gc.ca)

240 Sparks Street

Ottawa, Ontario, Canada

K1A 0G6

[www.oag-bvg.gc.ca](http://www.oag-bvg.gc.ca)

