



Final Audit Report

Audit of Information Technology (IT) Planning

June 2014

Canada 

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Executive summary

Information Technology (IT) is central to almost every aspect of Health Canada's (the Department) and the Public Health Agency of Canada's (the Agency) business. The Department's and Agency's investment represents approximately \$81 million in annual expenditures, with over 2,000 business applications and databases being supported and maintained by a mix of internal and contracted resources.

The Treasury Board Secretariat of Canada (TBS) *Directive on Management of IT* (the TBS Directive), which came into effect on April 1, 2009, defines the requirement for a departmental IT Plan. The TBS Guide to the Preparation of the 2014-15 Departmental IT Plan (the TBS Guide) provides more detailed guidance specific to the 2014-15 Plan. The objective of the audit was to assess the effectiveness of the management control framework, in place during fiscal year 2013-14, which supports the Department/Agency Partnership IT planning, and compliance with TBS policies and directives.

The audit was conducted in accordance with the *Internal Auditing Standards for the Government of Canada* and the *International Standards for the Professional Practice of Internal Audit*. Sufficient and appropriate procedures were performed and evidence gathered to support the accuracy of the audit conclusion.

The audit concluded that the management control framework for IT planning in both the Department and the Agency needs moderate improvement. The audit noted that while oversight bodies are established to govern the IT planning process in the Department and the Agency, the organizations would benefit from ensuring that the oversight bodies are operating as intended, including appropriate maintenance of records of decision. Furthermore, roles and responsibilities associated with the IT planning processes need to be clearly defined and communicated.

While a number of planning processes exist that produce IT-related information, there is no formal, documented IT planning process approved by management and supported by policy. An approved formal and documented process would better assure execution and communication of the IT Plans by the Department and the Agency. Risks have been identified at various levels within the Department and the Agency. However, how these risks will be identified in the IT planning process and presented in the IT Plans are still unknown.

Although there are differences in how the Department and the Agency structure and conduct operational and investment planning, the investment and operational planning processes should provide the information flow needed to develop the directive-required IT Plans. The IT planning process would be strengthened by developing an IT planning process that fully integrates with operational and investment planning for both the Department and the Agency.

The Department and the Agency have plans that contain Government of Canada IT initiatives and priorities. Taken together, these documents cover most of the Government of Canada initiatives and priorities that are highlighted in the TBS Guide and Directive.

The IT Plans for both the Department and the Agency, called for by the TBS Directive, have not yet been delivered. Although the planning cycle does produce plans with significant IT implications, a complete picture of IT in the Department and the Agency is missing.

Management provided the Partnership Oversight Committee with an update on the Department and Agency 2012-15 IM/IT Strategic Plan. Management measures actual performance against planned results for Investment Plan projects and Operational Plan activities. As the IT plans have not yet been developed, related measurements are not yet in place.

The recommended improvements to the management control framework for IT planning include the definition and communication of clear roles and responsibilities associated with the IT planning process; the development of an IT planning process that is fully integrated with operational and investment planning processes; and the production of IT Plans for both the Department and the Agency, in accordance with the TBS Directive and Guide, which includes the identification of risks and the development of appropriate performance measures.

Management agrees with the three recommendations and has provided an action plan that will improve the IT planning and compliance with TBS policies and directives.

A - Introduction

1. Background

Information Technology (IT) promotes and supports program delivery, innovation, productivity, value for money, better decision making at all levels and enhanced services to the public.

IT services are strategically critical to increasing government productivity and enhancing government services to the public for the benefit of citizens, businesses, taxpayers and employees. IT planning is concerned with allowing management to make IT investment decisions in a quicker, more flexible manner, while ensuring that those investments are thoroughly aligned with organizational goals and directions.

The Treasury Board Secretariat of Canada (TBS) *Directive on Management of Information Technology* (the TBS Directive), which came into effect on April 1, 2009, defines the requirement for a departmental IT Plan and provides a table of contents. The Guide to the Preparation of the 2014-15 Departmental Information Technology Plan (the TBS Guide) provides more detailed guidance specific to the 2014-15 Plan.

In addition, a recent presentation to the Chief Information Officer's (CIO) Council¹ has indicated that in the future the directive-required plan will cover both information management (IM) and IT. The use of the term IT-related plans recognizes that other plans exist with significant IT components.

Importance of planning for IT

The TBS Directive defines the importance of IT planning and the requirements that departments and agencies must meet to be in compliance with this Directive. The Government of Canada (GoC) spends \$4.7 billion per year on information technology.

IT is fundamental to the provision of Health Canada's (the Department) and the Public Health Agency of Canada's (the Agency) delivery of programs and services. The success of the Department's and the Agency's programs is dependent on the appropriate management and oversight of IT assets and investments. In a period of rising service delivery expectations and ongoing fiscal restraint, the support and enablement of the business of the Department and the Agency require responsive, adaptable and flexible IT services. The Department's and the Agency's investment represents approximately \$81 million annually, including roughly \$18 million from the Agency, for internal services related to IM/IT, with over 2,000 business applications and databases being supported and maintained by a mix of internal and contracted resources.

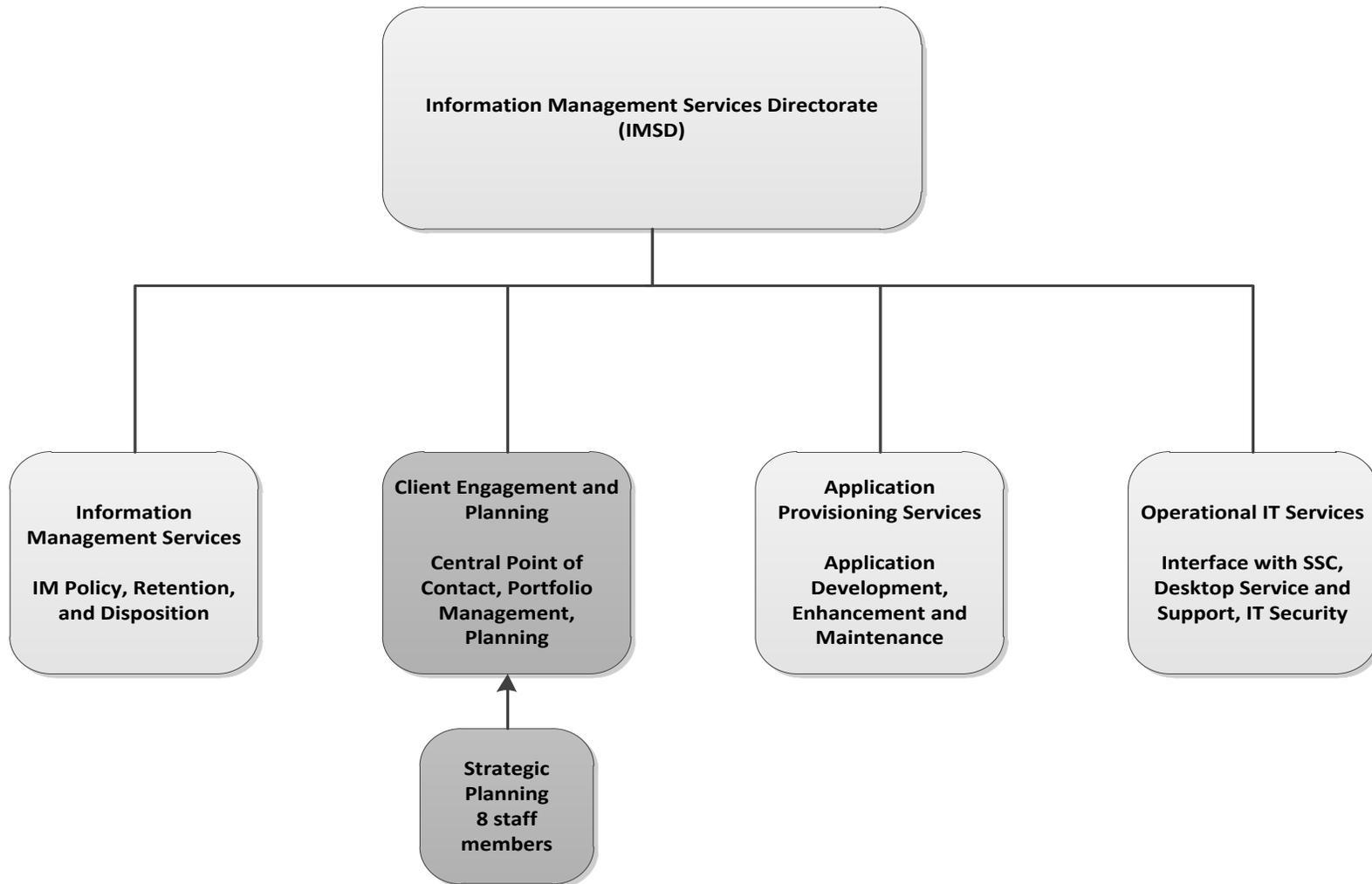
¹ CIO Council is an advisory body chaired by the Chief Information Officer for the Government of Canada.

Organization for the delivery of IT services

As part of the business transformation agenda resulting from the federal Budget 2012, the Agency's IM/IT Directorate has consolidated the delivery of its services under a single shared services partnership with the Department's Information Management Services Directorate (IMSD). IMSD, which reports to the Assistant Deputy Minister, Corporate Services Branch, manages and develops IM/IT strategies, policies, infrastructure and solutions and maintains the skilled personnel required to support both the Department and the Agency in the delivery of their programs and services.

More specifically, IMSD manages and develops strategies, policies and infrastructure, provides workspace solutions, automated business solutions, IT management solutions and business intelligence, and liaises with internal and external clients. In addition, IMSD provides desktop support and IT security, for both the Department and the Agency to make effective use of IM/IT, as programs and services are delivered. Lastly, IMSD delivers IM/IT services in both the National Capital Region and regional offices across Canada. For fiscal year 2013-14, there were 536 full-time equivalent positions with a salary budget of \$32 million.

Figure 1: Organization for the delivery of IT services



IT planning falls under the domain of the Chief Information Officer (CIO). The CIO is responsible for: 1) developing, implementing and sustaining an effective Department and Agency IT planning process that is integrated with the overall Department and Agency corporate planning process and aligned with the investment planning process to support business, enable transformation and guide IT decision making; 2) preparing the IT plans and a progress report against the plan and submitting it to TBS and the Chief Information Officer Branch (CIOB) as requested; and 3) ensuring that the IT plan is aligned to support both departmental and agency business and government-wide strategic directions by communicating with and engaging departmental, agency and external stakeholders, as appropriate.

Partnership IT planning

In 2012, IMSD put forward an IM/IT Strategic Plan for the period 2012-15 that set the vision, strategic goals and objectives for the effective delivery and support of IM/IT within the Department and the Agency. The plan is built on six core goals: (1) establish an enterprise-wide approach to the management of IM/IT; (2) provide flexible and responsive service delivery; (3) contain and reduce risk due to aging IT; (4) implement a client-centric, shared-services delivery model; (5) enable decision-making through business intelligence; and (6) support and cultivate a knowledge-based workforce. The plan was written to support and complement the IM Strategic Plan and Information Management Services Directorate Human Resources Strategic Plan.

In June 2012, the Department and the Agency entered into a Shared Services Partnership (SSP) Framework Agreement for the delivery of corporate administrative services, including IT services. This agreement outlines the specific responsibilities and commitments of each party. The governance structure to manage this framework is further discussed in [Appendix C](#).

TBS has identified major changes in the area of IT, including email transformation, modernization and consolidation of data centres and updating workplace technology. These changes will be led by the Government of Canada's IT infrastructure service provider, Shared Services Canada (SSC). Departments and agencies will be required to consider both TB initiatives and SSC work plans when developing their own IT-related plans. Smaller IT investments are recorded and managed by IMSD outside the Investment Plan (IP) process. The CIO is now drafting the IT Plans for the partnership, as specified in the TBS Directive covering the Department and the Agency.

2. Audit objective

The objective of the audit was to assess the effectiveness of the management control framework that supports the Department/Agency Partnership IT planning and compliance to Treasury Board Secretariat policies and directives.

3. Audit scope

The audit examined governance, risk management and internal controls of the IT planning process in both the Department and the Agency during fiscal year 2013-14. Key activities, processes and outputs examined included:

- integration and alignment of the IT planning process with the Department and Agency operational planning and investment planning processes;
- enterprise architecture and the operation of the Architecture Review Board (ARB) in relation to IT planning;
- integration and alignment of IT planning with Department and Agency corporate plans, investment plans and Government of Canada initiatives; and
- business plan of Shared Services Canada (SSC), the external service provider .

The Portfolio Audit and Accountability Bureau (PAAB) is currently conducting an Audit of Project Management. The management of IT projects is therefore excluded from the IT planning audit.

4. Audit approach

The audit examined the governance, risk management and control practices of the IT planning function in both the Department and the Agency, against a set of pre-defined audit criteria. The audit approach included a review of documentation, policies, standards, guidelines and frameworks, business processes, interviews and observation, inquiry, testing and analysis.

The audit criteria, outlined in [Appendix A](#), have been drawn from key sources including Treasury Board Secretariat's *Policy on Management of Information Technology* and *Directive on Management of Information Technology*, the Profile of the Government of Canada's IT Services, the Information Technology Infrastructure Library (ITIL), the Institute of Internal Auditor's Global Technology Audit Guide, the Information Systems Audit and Control Association's (ISACA) Cobit 4.1 and Val IT Framework and the Open Group Architecture Framework (TOGAF).

5. Statement of conformance

In the professional judgment of the Chief Audit Executive, sufficient and appropriate procedures were performed and evidence was gathered to support the accuracy of the audit conclusion. The audit findings and conclusion are based on a comparison of the conditions that existed as of the date of the audit, against established criteria that were agreed upon with management. Further, the evidence was gathered in accordance with the *Internal Auditing Standards for the Government of Canada* and the *International Standards for the Professional Practice of Internal Auditing*. The audit conforms to the *Internal Auditing Standards for the Government of Canada*, as supported by the results of the quality assurance and improvement program.

B - Findings, recommendations and management responses

1. Governance

1.1 Oversight

***Audit criterion:** Effective oversight bodies are established to govern the IT planning process in the Department and the Agency.*

Governance is essential for the development, discussion and approval of IT plans that address business needs and risks and have management support. A sound governance structure fosters prudent stewardship of public resources in the delivery of the mandate of an organization.

Oversight for IT planning interfaces with what now exists for investment and operational planning. Governance is evident in both the Department and the Agency for the production, approval and management of investment and operational plans. Both partners have established separate investment and operational planning structures that participate in investment definition, approval, monitoring and completion for the individual organizations.

In the Department, IM/IT projects are classified according to size, business impact, required resources, etc. Very large, complex IM/IT investments are reflected in the Investment Plan and receive increased management scrutiny through a formal gating process² managed by the Chief Financial Officer Branch (CFOB). A five-stage gating process is used on projects greater than \$1 million, whereas projects between \$250K and \$1 million are subject to a three-gate process. The Project Management Framework³ in the Department uses a gating process that receives oversight from the Executive Committee on Finance Investment Planning and Transformation (EC-FIPT), the Director General Committee on Investment Planning (DG-IP) and the Executive Committee. The EC-FIPT provides a forum to review finance, investment and transformation projects and initiatives. The DG-IP looks at risks and strategic and horizontal considerations, identifies common business requirements related to projects and services such as IM/IT and reviews the performance of investments.

The Governance Planning and Reporting Directorate (GPRD) at the Agency manages both the investment and planning processes. The Agency is in the process of modelling its gating process⁴ for projects on the Department's approach (idea generation, project initiation, project planning, project execution and project close-out). For the Agency, projects are generally gated through the Science, Policy and Management Committee (SPMC) prior to being approved at the Executive Committee (EC). The SPMC is a forum for discussion and

² A gating structure is a framework that specifies control points that project sponsors and managers must address in order to obtain management approval. For example, a business case is needed to get gate 1 approval.

³ The Project Management Framework supports the Department in complying with Treasury Board Secretariat's *Policy on the Management of Projects* and encompasses both IT- and non-IT-enable projects.

⁴ The Agency's Framework on Project Management provides a similar level of support in complying with TBS *Policy on the Management of Projects*.

recommendations to EC on the management and integration of the Agency's policy, management, science and research activities.

In addition, the Department and the Agency have a shared services agreement covering internal services, including IM/IT services. This agreement is subject to a joint governance structure representing both partners (the Portfolio Executive Committee (PEC) and Portfolio Executive Committee - Internal Services [PEC-IS])⁵.

The Shared Services Partnership (SSP) Agreement specifies that certain areas, including IM/IT services delivered by the Information Management Services Directorate (IMSD), are to be shared between both partners. Further, IMSD is to remain part of the Department and sharing criteria are to be transparent and equitable. The PEC is to oversee the partnership agreement and be the decision-maker over shared services. Working committees are called for under PEC to deal with planning, prioritization and coordination in each functional area and program area covered by the Partnership. The Terms of Reference for PEC-IS states that the committee is to assess and provide recommendations on the implementation of Central Agency programs, policies and directives with horizontal implications; approve and/or endorse internal service plans, priorities and investments; follow up on specific matters referred to PEC-IS by PEC; and encourage the sharing of best practices across branches and regions. The Assistant Deputy Minister, Corporate Services Branch (CSB), is co-chair of the PEC-IS.

This joint oversight structure adds complexity in terms of number of players, number of separate bodies and somewhat combined set of roles and responsibilities. For example, the Department and Agency 2012-15 IM/IT Strategic Plan was first presented to the Health Canada Investment Planning Committee (EC-IP) for review in March 2013. The mandate of this committee is to ensure alignment of investments with departmental strategies, including IM/IT. The committee was supportive of the plan and provided comments to the CIO to improve it. The plan was then presented to PEC in April 2013 for review and approval. The committee agreed with the key concepts and goals of the plan and asked the CIO to continue consultations with clients to refine the plan and to report on progress using the shared services governance. However, the PEC Records of Decision did not indicate that the plan was formally approved. It should be noted that, as part of the IT planning process, the CIO made a commitment to present an update of the plan after six months; this update was presented to PEC-IS in October 2013.

One of the PEC-IS's responsibilities is to approve and/or endorse internal service plans, priorities and investments (that is, IM-IT priorities). As such, we expected that the plan would be presented to PEC-IS for discussion and endorsement prior to being tabled at PEC for approval. The audit also observed that the PEC-IS membership has often been delegated to the director level or alternate representatives, potentially limiting the role of the committee in planning, prioritization and coordination. A December 2013 internal review of the PEC-IS Terms of Reference cited several proposed opportunities to improve the effectiveness of the committee.

⁵ Refer to [Appendix C](#) for a more detailed discussion of the Portfolio governance structure.

Governance is complex in both the Department and the Agency and the shared internal services need time to transition to full partnership. Changes to governance are also being driven by investment and operational planning processes. In addition, SSC/TBS want an integrated enterprise planning process that will have an impact on the context and content of any such IT Plan. Since the delivery of IT services is subject to a shared services agreement, resulting IT plans must have suitable oversight to be acceptable to the partners.

In conclusion, while oversight bodies are established to govern the IT planning process in the Department and the Agency, the organizations would benefit from ensuring that oversight bodies are operating as intended, including appropriate maintenance of records of decision.

1.2 Roles and responsibilities

***Audit criterion:** Roles and responsibilities involved with the IT planning process are defined and effectively communicated.*

Clearly defined roles for IT planning are necessary to ensure that resulting plans are complete and meet the business and science needs of the shared services partners. The roles are clear for investment and operational planning in the Department and the Agency separately; the role of IT planning is clearly assigned to the CIO by the TBS Directive. In the Department, IT planning is well integrated into the investment and operational planning processes, with corresponding role assignments. In the Agency, IT planning is not as well integrated and planning roles for IT are not as well defined. In addition, how current roles will be affected by the need for an IT Plan has not been fully explored. Department and Agency IT planning roles need to be defined further.

The Department's investment planning process has defined the roles and responsibilities of the project sponsor, the Chief Financial Officer Branch, executive committees and IMSD. IMSD plays an active role throughout the process for IP projects requiring an IT solution. IP process documentation in the Department covers governance, that is, committee structure and general business flow. The project sponsor must seek funding confirmation and gating through the Department's IP process. The operational planning process in the Department is the responsibility of the branches. CSB must collect functional data (for example, HR, IT and Real Property) to produce the CSB Branch Operational Plan. The Planning and Corporate Management Practices (CFOB) is responsible for the Departmental Integrated Planning Process. It provides a data-gathering tool and a framework for that data. CSB's Planning, Integration and Management Services Directorate (PIMSD) provides a coordination role between IMSD and the other branches, and between the Department and the Agency.

At the Agency, planning is led by the Assistant Deputy Minister, Strategic Policy, Planning and International Affairs Branch (SPPIAB). The GPRD at the Agency carries the project management, investment and operational planning responsibilities and guides branch responses. IM/IT needs were requested by call letters for the Agency 2014-15 investment and operational planning processes. Agency functional information is fed into the Departmental operational planning process to allow CSB to complete its operational plan. IMSD again plays an active role in this process.

The TBS Directive assigns the role for IT planning to the CIO. Within IMSD, the Director of Strategic Planning has the role for IT planning for both the Department and the Agency, including strategic plans, cost estimates for investment projects with IM/IT implications, the directorate response to the operational plan and the specific IT plan required by the TBS Directive. IMSD's client engagement staff operate as a liaison between the branches and IMSD. A client engagement team comprising ten (10) full-time equivalents (FTEs) is in place to support the Agency. One of the roles provided by the client engagement team is to assist business owners with the identification of business needs. However, the role of the client engagement team in context of the IT planning process is not clear.

IMSD clearly has a role in the investment and operational planning processes for the Department. It is not as clear, however, how IMSD works with the investment and operational planning processes for the Agency. As part of the overall planning function, IMSD's Strategic Planning Directorate is developing a set of roles and responsibilities. Documentation supporting these roles and responsibilities has yet to be fully developed, validated or approved.

The Chief Information Officer Branch (CIOB) direction for enterprise architecture (EA) will result in the creation of an Enterprise Architecture Review Board (ARB) to play a part in planning for, creating and deploying IM/IT solutions that affect the Government of Canada. Departments and agencies will be expected to implement a similar discipline. The ARB will review and assess the architectural aspects of IT investments against Government of Canada IT direction. The impact of enterprise architecture on IT planning is yet to be fully developed. In addition, IT planning roles now extend beyond the boundaries of the Department and Agency. SSC has announced its intention to produce an enterprise IT plan by asking its partners to integrate with its initiatives.

Given the complex governance surrounding planning (investment, operational, branch, IT functional and central agency planning), roles are also complex and interfaces are still being developed. Although IMSD has recognized the need to identify and define roles and responsibilities in the IT planning process, this information has yet to be formally documented. Roles and responsibilities involved in the IT planning process need to be clearly defined and communicated.

Recommendation 1

It is recommended that Assistant Deputy Minister, Corporate Services Branch, in collaboration with the Chief Financial Officer, Chief Financial Officer Branch, Health Canada, and the Assistant Deputy Minister, Strategic Policy, Planning and International Affairs Branch, Public Health Agency of Canada, ensure that the roles and responsibilities associated with the IT planning process are clearly defined and communicated.

Management response

Management agrees with the recommendation.

The Corporate Services Branch (CSB) will define the IT planning roles and responsibilities within Health Canada (HC) and the Public Health Agency of Canada (the Agency), in consultation with appropriate departmental planning organizations and other key internal stakeholders.

CSB will define a governance framework for approving the IT planning process and the IT Plan within HC and the Agency, in consultation with appropriate departmental planning organizations and other key internal stakeholders.

Roles and responsibilities will be incorporated into IT planning processes and communicated to parties via the communication processes outlined in [Recommendation 2](#).

1.3 IT planning structure

Audit criterion: *The IT planning process has been approved by management and is supported by policy and guidance.*

A formal, approved process is important for the consistent production of a complete IT plan that can be supported by management. Although planning processes and practices exist, there is no separate process that covers the production of IT plans, including the TBS Directive-driven IT Plan. How this all fits together is not clearly outlined in one authoritative source, but must be identified from a number of documents, including the investment and operational planning processes and presentations from the centre (CIOB and SSC) to partner departments.

There is evidence of practices in use to deliver the Investment Plan and the Operational Plan in the Department. The Investment Planning Framework documentation in the Department clearly outlines the function of the various governance committees involved in departmental investment planning, and depicts the difference between projects at the Investment Plan level and all other projects. The Investment Planning Framework, dated November 2012, is the last official process document. Changes will be made after April 2014, arising from the fact that practice no longer aligns with the documentation. The changes are expected to include data streamlining, the renaming of committees, the reduction of redundancy and some adapting of the costing methodology.

The Agency has a governance structure for investment planning that adheres to the TBS Investment Plan Guide, which it has amended to suit the organization. Key elements of the Agency's Framework on Project Management (such as project definition, governance, project approval, and funding approval processes) are in the process of being updated.

Specific documentation was available on the Department's operational planning process through a web-enabled planning tool. The use of this tool is not evident in the Agency, since

the Agency Operational Plan Guide references enabling functions including IT, but does not specify a process. The operational planning phase usually begins with the issuance of a call letter and ends with the approval of the CSB Branch Operational Plan and corresponding initial budget allocations, and with the confirmation of the new investments and changes to existing ones. As branches are the first stage of any such planning, they tend to send out their own templates for gathering planning information. Data is captured in Excel or Microsoft Word templates, prioritized within branches and placed into the Integrated Planning and Performance Reporting System (IPPRS). This is the departmental tool used to capture projects and manage them once approved. Reporting based on the IPPRS has been seen as inadequate, and CSB planners use Excel to respond to management requests prior to IPPRS entry.

IT planning in IMSD starts with central IT directions and initiatives (CIOB and SSC), to which it must then add program-related IT activity. Once IMSD Branch Operational Plan input is ready for CSB, the Directorate meets with all branch planners from the Department and Agency to determine if any IT requirements of significance have been missed. This practice is not part of a formal process, and was new for the Agency branches this year. Documentation is not yet evident for these processes.

Although planning processes and practices exist that produce IT-related information, there is no formal, documented IT planning process approved by management and supported by policy. Having a formal process with suitable documentation and which is approved by management (branch as well as CSB and Agency) would better assure execution and communication of the IT Plans by the Department and the Agency (see [Recommendation 2](#)).

2. Risk management

2.1 Planning for IT risks

***Audit criterion:** IT risks are identified, assessed and used by the IT planning process in the formulation of IT-related plans.*

Risk is a significant component of management in the Department and the Agency. In this regard, both the Department and the Agency develop a corporate risk profile (CRP), risk assessment that is part of the Investment Plan project approval process, as well as operational plan documents to address risk. Although corporate risks tend to be centred on the health of Canadians and not internal-facing risks to operations (including IT), in their branch operational plans, branches are to address risks at the branch level, which may be much more directly aligned with IT. IMSD has recognized certain risks as part of its input to the CSB Branch Operational Plan. Although the TBS Directive and the TBS Guide indicate the kinds of risks that should be considered, it is not known at this time which IT risks will be discussed in the IT Plan.

The Agency has a risk structure that produces a CRP on a regular basis. Agency corporate risks are largely focused on the health risks for Canadians and not on corporate risks within the Department and the Agency. The 2013-15 CRP for the Agency noted that senior management made a decision not to include certain types of risks in this document. For

example, the Agency now considers internally-focused services (that is, values and ethics, HR, IT, etc.) as enablers rather than independent CRP-level risks. This means that these “risks” will be monitored in other venues. Thus, while IT service delivery would be incorporated into the assessment of the Agency’s capacity, it is not addressed directly as a risk. However, IT capacity and capability can be seen in almost all risk treatments as providing enabling technology to detect and manage risk.

The Department’s CRP identifies a hierarchy of risks at the corporate, operational and program/project levels. Risk responses are allocated to branches for implementation and are captured in the CRP and in the operational risk registers that form a database of risk management information. CSB has identified two risks that have an impact on the delivery of IT services.

1. Risks exist with the maintenance of service levels as the Department and the Agency adopt a shared services model; and
2. Risks exist with ensuring the capacity and sustainability of information management procedures and practices.

The CRP identified sources of risk for each risk cited above, including: changing governance structures; lack of clarity regarding roles and responsibilities; additional transformative initiatives already underway (such as: Open Government, Shared Services Canada) that put additional pressure on the organization while experiencing significant change; internal re-organization activities impacting staff and functions; different institutional policies and governance mechanisms for managing information; varying levels of understanding, expertise and capacity for managing information; increasing volumes of digital information; and absence of enterprise-wide tools.

Key organizations are then identified for risks at the branch and directorate level. In a sense, each branch has its own Branch Risk Profile. Risks are not specifically identified for the IT plan, but as part of the branch operational planning exercise. The IT planning organization reacted to CSB risks, but the capacity to deliver on projects was considered outside of the planning authority. The proposed Table of Contents for the IT Plan identifies a section for the IT risk analysis; however, not everyone interviewed was sure how IT risks were recognized in IT plans, while acknowledging that demand identified in planning always exceeds Department and Agency capacity to deliver needed IT services.

The TBS Directive and the TBS Guide both require an assessment of IT risks (that is, financial and human resource capacity, technology, governance and control), as part of the process to deliver the IT Plan. Although planning and related risk documents outline a number of risks at various levels within the Department and the Agency, how these risks relate to each other and the degree to which they are addressed by specific projects or initiatives remain unclear.

For example, while actions cited in planning documents include the implementation of IMSD’s IT Aging Strategy as a priority, the overall risk presented by technology obsolescence to ongoing operations is not explored. Interviews revealed that technology

obsolescence is considered a prime consideration for the Department and Agency and that it permeates IT prioritisation, notably in the investment planning process. In addition, implementing Application Portfolio Management, which will also serve to address technology obsolescence for both the Department and the Agency, is a commitment for this coming fiscal year in the CSB Branch Operational Plan. Although technology obsolescence is being addressed, the magnitude of this issue is not yet fully known, nor can the audit provide assurance that this issue is being addressed at an enterprise level in both the Department and the Agency.

Risks have been identified at various levels within the Department and the Agency. However, how these risks will be identified in the IT planning process and presented in the IT Plans are still unknown (see [Recommendation 3](#)).

3. Internal controls

3.1 IT planning process

***Audit criterion:** The IT planning process is integrated with the overall departmental corporate planning and investment process and supports the strategic outcomes of both the Department and Agency.*

An IT planning process that is integrated with the overall departmental corporate planning and investment planning processes will support business, enable transformation and guide IT decision-making. Integrating IT into these processes involves participation in program consultation to identify IT implications related to program needs and to introduce priorities into the departmental planning processes. The investment and operational planning processes should provide the information flow needed to develop the directive-required IT Plans, to support the strategic outcomes of both the Department and the Agency.

Integration of IT planning is impacted by a complex organizational/governance structure, multiple committees (decision points), multiple flows of information for IT projects and investments and multiple stakeholders external to the Portfolio. Nonetheless, the integration of IT planning with Investment and Operational Planning processes in the Department is substantial. Less integration exists between the Agency and partnership IT planning. The new IT Plan is not part of the planning process to date, but will be a by-product of that effort. How this integration will occur has not yet been fully developed and documented.

For the Department, IT is included since many of the major investment projects are IT in nature or have significant IT implications. The investment planning process in the Department ensures that major projects are captured, prioritized and put forward for management decision. IMSD is involved in the early stages of such departmental projects to help branch sponsors and planners estimate duration, cost and resource utilization. This interaction added through each stage/gate assists greatly with investment planning solutions. Agency investment planning processes are separate from those in the Department. The majority of IT investments for the Agency are driven by Government of Canada priorities, delivered by IMSD and therefore acquired services for the Agency. There is little indication

that IMSD has been engaged to the same degree during the definition of investment projects for the Agency. Although the threshold for investment planning (IP) projects is \$1 million for both the Department and the Agency, the Department has chosen to treat all projects over \$250k as IP material. For the Agency, while IT projects are planned within the IP, projects for IT (under \$1 million) are not detailed to the same degree.

The integration between IT planning and operational planning in the Department is significant. Each director in IMSD generates input to the Directorate Operational Plan, which is then fed into the CSB Branch Operational Plan. Major initiatives are captured from the investment planning process, as well as central priorities that require a departmental reaction. For the CSB Branch Operational Plan to be complete, all IT requirements have to be identified. In order to identify all IT requirements, branch operational plans from across the enterprise have to be complete. To facilitate the completion of the CSB Branch Operational Plan, CSB planners organize meetings between the Department branches and IMSD and other internal service suppliers to review branch business needs. This year, the schedule provided more time for IMSD to capture all such requirements. While this exercise is also now carried out for the Agency, it was new this year and not fully understood by all participants. How the practice of further review is carried out has not yet been documented.

However, the IT planning process is not yet fully integrated with other planning processes within the Department and Agency. For example:

- Health Canada branches enter ADM-approved IT projects into a departmental planning tool operated by the CFOB from which IMSD obtains information for planning purposes. The IPPRS is the information source used to capture projects and manage them once approved. However, the use of IPPRS is not a requirement and not all branches in the Department use IPPRS. In particular, the Agency does not use IPPRS.
- The Agency Operational Planning Guide (V4.1) states that branches must provide complete and timely planning information to enable internal/shared service groups to help branches in their work, and that plans are to be reviewed by the internal/shared service groups. However, a subsequent Agency Operational Plan Status document noted that information on IM/IT needs is being collected by the IM/IT team in a separate exercise for the 2013-14 planning period. Thus, IM/IT will not be integrated explicitly within the 2013-14 Agency operational planning process. A gap therefore remains between Agency branches and IMSD in terms of capturing IT information for planning.

IMSD planners have indicated that they want a three-year plan for IT which, once produced, can be rolled forward each year for a three-year horizon. This effort will require new data sources in order to capture the non-CIO expenditures and activities involving IT across the Department and Agency. These new information sources have not yet been developed and documented.

In addition, it is clear that IMSD, as the IT planning office of primary interest (OPI) for the Department and Agency, has a number of challenges that can affect the ability of the planning unit to create the IT Plan. For example:

- The CIO does not yet have access to view all IT-related expenditures within the Department and Agency. Current planning processes and practices only track expenditures and activities that are under the purview of the CIO. Creating this new data flow will require collaboration between IMSD and the business lines.
- IMSD capacity is set by senior management and the CIO must plan within that context. However, the IT environment across government includes a number of strategic initiatives over which neither the Department nor the Agency has any real control. Balancing the limitations of IMSD capacity against the demands of central, corporate and business requirements is creating challenges for IT planning for the Department and Agency.

In conclusion, while there are differences in how each organization structures and conducts operational and investment planning, the investment and operational planning processes should provide the information flow needed to develop the directive-required IT Plans to support the strategic outcomes of both the Department and the Agency. There is a gap between the Department and the Agency in terms of how IT projects are captured. IT planning would be strengthened by developing an IT planning process that is fully integrated with the operational and investment planning processes of the Department and the Agency.

Recommendation 2

It is recommended that the Assistant Deputy Minister, Corporate Services Branch, in collaboration with the Chief Financial Officer, Chief Financial Officer Branch, Health Canada, and the Assistant Deputy Minister, Strategic Policy, Planning and International Affairs Branch, Public Health Agency of Canada, develop an IT planning process that is fully integrated with the operational and investment planning processes of both the Department and the Agency.

Management response

Management agrees with the recommendation.

The Corporate Services Branch (CSB) will develop an interim IT planning process that is integrated into each of Health Canada's (HC) and the Public Health Agency of Canada's (the Agency) operational and investment planning processes for the 2015-16 planning cycle. It will be based on current processes and governance, and will provide clear roles and responsibilities.

CSB will develop an IT planning process that is integrated into each of HC's and the Agency's operational and investment planning processes. The processes will take into account the different planning frameworks in the two organizations and will take into consideration lessons learned from the 2015-16 planning exercise, internal audits such as the audits of Project Management and Operational Planning, and IT drivers.

CSB will communicate the process to all relevant stakeholders, including corporate planning areas and branch planners.

3.2 Alignment with Government of Canada initiatives and priorities

Audit criterion: *The IT planning process ensures that resulting IT-related plans are aligned with government-wide IT priorities, technology and common and shared services, when such services are available and appropriate.*

Government of Canada initiatives and the SSC service delivery model will have an impact on Portfolio IT plans going forward. The new guide for IT planning provides a short list of essential government priorities to be included in the plan for 2014-15. Current planning documents cover most of the required central agency IT initiatives and priorities.

The recent TBS Guide specifies that a set of Government of Canada priorities are to be considered when creating the plan. This plan does not yet exist in the Department and the Agency. However, a review of existing and draft future plans reveals that most of the priorities to be considered have been addressed to some degree. SSC has approached its partners with a process by which it expects to arrive at a single roadmap for SSC and its partners. The 2013-14 Planning Cycle for 2014-15 to 2016-17 means that the IT Plan now has a three-year horizon and aligns with SSC's planning timeframe.

CIOB is now championing an approach to providing enterprise architecture at the Government of Canada level, focusing primarily on areas that are Government of Canada in scope such as human resources, finance, grants and contributions, document management and security. However, CIOB expects departmental partners to implement an enterprise architecture and the Architecture Review Board processes through which IP projects must flow and to participate in central Architecture Review Board efforts.

To date, IMSD has recognized these central initiatives in its operating plans and has participated in coordinating efforts with SSC. Further work will be done to meet the new TBS Guide, which lists the central initiatives to be covered.

The Department and the Agency have plans that include Government of Canada IT initiatives and priorities. Taken together, these documents cover most of the Government of Canada initiatives and priorities highlighted in the TBS Directive and the TBS Guide.

3.3 Content of the IT Plan

***Audit criterion:** The IT Plan (or equivalent supporting planning documents) defines departmental directions and the related IT strategies and activities, including planned expenditures, HR capacity and resource allocations, timelines and alignment with technology architecture. The IT Plan also identifies new projects, initiatives or large enhancements to existing systems and services, as well as the planned maintenance to major systems, the risks and IT operations.*

At the time of the audit, IMSD planners are working to provide the IT Plans called for in the TBS Directive by May 31, 2014. This is new to the Department and the Agency since no such plan has yet been delivered, despite the fact that the TBS Directive has been in force since 2012. Although other IT-related plans exist with relatively suitable coverage, these documents lack the completeness required by the TBS Directive.

As of March 31, 2012, all departments and agencies were to prepare an annual IT plan. Neither the Department nor the Agency prepared an IT Plan, in keeping with the TBS Directive. IMSD points to the absence of a call letter and report format from TBS or CIOB during the years in which no plan was prepared. CIOB sent out a call letter on March 26, 2014, requesting that departments use the TBS Guide to develop an IT plan. In past years, no such letter had been issued.

The TBS Guide specifies that the plan format and structure has been updated. As well, the TBS Directive is to be updated in the new fiscal year. IMSD will use this most recent guidance (the TBS Guide) to develop the IT Plan for the Department and the Agency.

Both the Department and the Agency have plans that include IT priorities. Taken together, these documents cover much of what the TBS Guide requires of an IT plan. A review of existing plans, strategies and information documents reveals the following.

- IMSD input to the 2014-15 CSB Branch Operational Plan includes much of the material expected in an IT plan. However, at the time of the audit, not all the anticipated information was available. For example, comprehensive information on approved IT expenditures is only available later in the fiscal year. In addition, as lists of initiatives and milestones tend to be all that is available, some of the explanation items do not exist, such as a fulsome description of IT risks and specific actions planned the address them.
- IMSD has developed an IM/IT Strategic Plan that sets a vision for the directorate, as well as strategic goals and objectives for effective IT service delivery over the next

three years. A recent update to this strategic plan outlines the results obtained for both the IT Strategic Plan and the IM Strategy. This document does not follow the format laid out in the TBS Directive and the TBS Guide⁶ for an IT plan. In addition, IMSD has made several presentations to PEC-IS on a range of topics including IM/IT Landscape⁷, Application Portfolio Management⁸, Lotus Notes Roadmap⁹ and Government of Canada IT Planning¹⁰.

- For the Department, many of the major IP projects are IT in nature or have significant IT implications. For 2011-12 to 2015-16, \$128.3 million is planned for IT investments. The Agency IP reflects joint initiatives pursued by IMSD. It is not clear if these initiatives are managed through a joint governance process or if management within both organizations is simply informed by that governance. Although nothing is listed as an IP project that is Agency program-related, there are IT-related business needs cited, such as improved surveillance systems.

In conclusion, the IT Plans for both the Department and the Agency, called for in the TBS Directive, have not yet been delivered. Although the planning cycle produces plans with significant IT implications, a complete picture of IT in the Department and the Agency is absent. In addition, there has not as yet been a discussion regarding the challenges faced by the CIO in developing the IT Plan.

Recommendation 3

It is recommended that Assistant Deputy Minister, Corporate Services Branch, produce IT Plans for both the Department and the Agency, in accordance with the TBS Directive on Management of IT and the Guide to the Preparation of the 2014-15 Departmental IT Plan, which includes the identification of risks and the development of appropriate performance measures.

⁶ The TBS Directive was provided in 2012, and the TBS Guide in 2014.

⁷ IM/IT 2013-14 Landscape plus IM/IT Project Landscape diagram (undated).

⁸ Application Portfolio Management Results, December 3, 2013.

⁹ Lotus Notes Roadmap, May 7, 2013.

¹⁰ Government of Canada IT Planning, January 27, 2014.

Management response

Management agrees with the recommendation.

- The Corporate Services Branch (CSB) will produce a Health Canada (HC) IT Plan, in accordance with the Treasury Board Secretariat (TBS) *Directive on Management of IT* (the TBS Directive) and the planning guide, which includes the identification of risks and appropriate performance measures.

CSB will seek branch feedback and approval on contextual and financial information.

CSB will produce a Public Health Agency of Canada (the Agency) IT Plan, in accordance with the TBS Directive and planning guide, which includes the identification of risks and appropriate performance measures.

CSB will seek branch feedback and approval on contextual and financial information.

- Although IT Plans are being produced in 2014-15, they are being developed using a new template provided by TBS. Lessons learned will impact next year's plans.

CSB will produce an HC 2015-18 IT Plan, in accordance with the TBS Directive and the guidance provided.

CSB will seek approvals based on the governance framework developed in action item 1.2.

3.4 Monitoring and reporting

Audit criterion: Management measures actual performance against planned results, makes adjustments as required and reports on progress towards meeting Department and Agency priorities.

Performance indicators and the measurement of planned goals can only occur once a plan is produced. Because the IT Plan has not yet been produced, measurement falls to operational plans, investment plans and individual projects. IP projects are closely monitored. IT activities with goals and measurements are cited in the CSB Branch Operational Plan. IT projects under IP limits are managed using IMSD tools.

All investments are subject to regular performance reporting by both partners. In-year reporting includes the review on status indicators of investments via the Management Variance Report (MVR) process and reported in the monthly dashboard presented to management. For IP projects, the main measures are schedule, cost and scope. Dashboards are prepared for branch management and, in some cases, for PEC-IS. Dashboards have different formats and contain some similar and some different information.

The IMSD Project Management Framework sets out IMSD's minimum project management expectations for each project manager. Compliance with the framework is expected of each IMSD project manager and resource contributing to an approved project. A review of project

dashboards showed a marked improvement since 2011 in offering management much more information upon which to base decisions. Similar measures exist for under \$250K projects within IMSD.

As noted earlier in the report, as part of the IT planning process, the CIO made a commitment to present to PEC-IS an update of the Department and Agency 2012-15 IM/IT Strategic Plan after six months of operation; this update was presented in October of 2013.

Performance measures against the IT Plan have not yet been developed. However, the Operational Plan has performance measures, and the Investment Plans for both partners contain timelines and deliverables for each project. In the absence of a formal IT Plan, the CSB Branch Operational Plan is the most significant IT-related planning document. As a result, IMSD will have to rely on performance indicators from other operational planning documents. Because the IT Plans for the Department and Agency have not yet been developed, related measurements are not yet in place (see [Recommendation 3](#)).

C - Conclusion

Overall, the control framework for IT planning in both the Department and the Agency needs moderate improvement.

The delivery of IT services is subject to a shared services agreement. As a result, IT plans must have suitable oversight to be acceptable to the partners. While oversight bodies are established to govern the IT planning process in the Department and the Agency, the organizations would benefit from ensuring that oversight bodies are operating as intended including appropriate maintenance of records of decision.

Although the Information Management Services Directorate (IMSD) has recognized the need to identify and define roles and responsibilities in the IT planning process, this information has yet to be formally documented. The roles and responsibilities involved in the IT planning process need to be clearly defined and communicated.

While a number of planning processes exist that produce IT-related information, there is no formal, documented IT planning approved by management and supported by policy. Having a formal process with suitable documentation and approved by management would better ensure the execution and communication of the IT Plans by the Department and the Agency. Risks have been identified at various levels within the Department and the Agency. However, how these risks will be identified in the IT planning process and presented in the IT Plan are still unknown.

While there are differences in how the Department and the Agency structure and conduct operational and investment planning, the investment and operational planning processes should provide the information flow needed to develop the directive-required IT Plans. The IT planning process would be strengthened by developing an IT planning process that fully integrates with operational and investment planning processes for both the Department and the Agency.

The Department and the Agency have plans that include Government of Canada IT initiatives and priorities. Taken together, these documents cover most of the Government of Canada initiatives and priorities highlighted in the Treasury Board Secretariat's Guide to the Preparation of the 2014-15 Departmental Information Technology Plan (the TBS Guide) and the Treasury Board Secretariat's *Directive on Management of Information Technology* (the TBS Directive).

The IT Plans for both the Department and Agency, called for in the TBS Directive, have not yet been delivered. Although the planning cycle produces plans with significant IT implications, a complete picture of IT in the Department and the Agency is absent.

Management provided the Partnership Oversight Committee with an update on the Department and Agency 2012-15 IM/IT Strategic Plan. Management measures actual performance against planned results for investment plan projects and Operational Plan

activities. Since the IT Plans have not been developed, related measurements are not yet in place.

Areas of improvement that have been noted will collectively strengthen the management control framework in support of IT planning in the Department and the Agency.

Appendix A – Specific lines of enquiry and criteria

Audit of IM/IT Planning	
Criteria Title	Audit Criteria
Line of Enquiry 1: Governance	
1.1 Oversight	Effective oversight bodies are established to govern the IT planning process in the Department and the Agency.
1.2 Role and responsibilities	Roles and responsibilities involved with the IT planning process are defined and effectively communicated.
1.3 IT planning structure	The IT planning process has been approved by management and is supported by policy and guidance.
Line of Enquiry 2: Risk management	
2.1 Planning for IT risks	IT risks are identified, assessed and used by the IT planning process in the formulation of IT-related plans.
Line of Enquiry 3: Internal controls	
3.1 IT planning process	The IT planning process is integrated with the overall departmental corporate planning and investment process and supports the strategic outcomes of both the Department and Agency.
3.2 Alignment with Government of Canada initiatives and priorities	The IT planning process ensures that resulting IT-related plans are aligned with government-wide IT priorities, technology and common and shared services, when such services are available and appropriate.
3.3 Content of the IT Plan	The IT Plan (or equivalent supporting planning documents) defines departmental directions and the related IT strategies and activities, including planned expenditures, HR capacity and resource allocations, timelines and alignment with technology architecture. The IT Plan also identifies new projects, initiatives or large enhancements to existing systems and services, as well as the planned maintenance to major systems, the risks and IT operations.
3.4 Monitoring and reporting	Management measures actual performance against planned results, makes adjustments as required and reports on progress towards meeting Department and Agency priorities.

Information sources:

- Information Systems Audit and Control Association – CoBit 4.0, 4.1.
- Information Systems Audit and Control Association – Val IT.
- Treasury Board Secretariat’s *Directive on Management of Information Technology*.
- Treasury Board Secretariat’s *Policy on Management of Information Technology*.
- Institute of Internal Auditor’s *Global Technology Audit Guide*, July 2007.
- Profile of Government of Canada IT Services.
- Information Technology Infrastructure Library.

Appendix B – Scorecard

Criterion	Rating	Conclusion	Rec #
Governance			
1.1 Oversight	Needs minor improvement	While oversight bodies are established to govern the IT planning process in the Department and the Agency, the organizations would benefit from ensuring that oversight bodies are operating as intended, including the appropriate maintenance of records of decision.	-
1.2 Role and responsibilities	Needs minor improvement	Although IMSD has recognized the need to identify and define roles and responsibilities in the IT planning process, this information has yet to be formally documented. The roles and responsibilities involved in the IT planning process need to be clearly defined and communicated.	1
1.3 IT planning structure	Needs moderate improvement	Although a number of planning processes exist that produce IT-related information, there is no formal, documented IT process that is approved by management and supported by policy. Having a formal process with suitable documentation and approved by management would better ensure the execution and communication of the IT Plans by the Department and the Agency.	See rec. 2
Risk management			
2.1 Planning for IT risks	Needs moderate improvement	Risks have been identified at various levels within the Department and the Agency. However, how these risks will be identified in the IT planning process and presented in the IT Plan is still unknown.	See rec. 3
Internal controls			
3.1 IT planning process	Needs moderate improvement	While there are differences in how the Department and the Agency structure and conduct operational and investment planning, the investment and operational planning processes should provide the information flow needed to develop the directive-required IT Plans. The IT planning process would be strengthened by developing an IT planning process that is fully integrated with operational and investment planning for both the Department and the Agency.	2
3.2. Alignment with Government of Canada initiatives and priorities	Needs minor improvement	The Department and the Agency have plans that include Government of Canada IT initiatives and priorities. Taken together, these documents cover most of the Government of Canada initiatives and priorities highlighted in the TBS Guide and the TBS Directive.	-
3.3 Content of the IT Plan	Needs improvement	The IT Plans for both the Department and Agency, called for in the TBS Directive, have yet to be delivered. Although the planning cycle produces plans with significant IT implications, a complete picture of IT in the Department and the Agency is absent.	3
3.4 Monitoring and reporting	Needs moderate improvement	Management provided the Partnership Oversight Committee with an update on the Department and Agency 2012-15 IM/IT Strategic Plan. Management measures actual performance against planned results for Investment Plan projects and Operational Plan activities. Since the IT Plans have not been developed, related measurements are not yet in place.	See rec. 3

Appendix C: Governance for IT planning

Partnership Executive Committee: The Partnership Executive Committee (PEC) works in parallel with the executive committees of both the Department and the Agency. PEC is responsible for direction-setting and oversight of items pertaining to shared services between the organizations. PEC is co-chaired by the Agency Deputy Head and the Deputy Minister of the Department. Membership includes internal services and selected program ADMs from both organizations. PEC is supported by several working committees that are designed to provide leadership and direction on specific areas of focus.

Health Canada Executive Committee: The Executive Committee (EC) is the Department's most senior decision-making, direction-setting and oversight body. EC is chaired by the Deputy Minister.

Public Health Agency of Canada Executive Committee: The Agency's Executive Committee is the most senior decision-making, direction-setting and oversight body. It is chaired by the Chief Public Health Officer.

Partnership Executive Committee – Internal Services: For the Corporate Services Branch (CSB), a critical sub-committee is the Partnership Executive Committee on Internal Services (PEC-IS). PEC-IS is responsible for assessing and providing recommendations on the implementation of Central Agency programs, policies and directives with horizontal implications and approving and/or endorsing internal service plans, priorities and investments (that is, IM-IT priorities). PEC-IS is co-chaired by the ADM, CSB and the ADM, Infectious Disease, Prevention and Control Branch, Public Health Agency of Canada. The ADM, CSB is an active participant in both the Department's and the Agency's respective Executive Committees, where policies and initiatives specific to each client are discussed. Within the Department, CSB's planning cycle and financial management processes are integrated; however, CSB's role includes harmonizing its services, strategies and practices with both partners, where possible.

Internal governance structure

Branch Executive Committee: The Branch Executive Committee (BEC), chaired by the ADM, serves as CSB's central decision-making body responsible for the strategic management of the branch's substantive and corporate responsibilities. BEC is responsible for the strategic management of the Branch's functions and internal workings, including operational planning, financial stewardship and accountability and program delivery. The role of BEC is to:

- share information to ensure a common awareness of the Department and the Agency program business, policy deliberations and corporate issues involving CSB, as well as the branch's work across functional areas, to advance and support corporate priorities for both organizations;
- discuss and confirm key initiatives; and
- plan, guide and monitor the achievement of CSB's strategic and corporate priorities.

Information Management Services Directorate Executive Committee (IMSD-EC): This committee is responsible for strategic management for the directorate. IMSD-EC is composed of the CIO and IMSD's executive directors.