Courts Administration Service
(CAS)

Audit of
Project Management Practices

_____   ___September 2017__
MR. DANIEL GOSSELIN   **DATE**
CHIEF ADMINISTRATOR
COURTS ADMINISTRATION SERVICE

EXECUTIVE SUMMARY

1.1 Background

The Courts Administration Service (CAS) was established in 2003 by the *Courts Administration Service Act* to support Canada's four Federal Courts. The Act mandates CAS to provide registry, judicial and corporate services to the four federal superior courts of record, thereby helping to maintain the independence of these courts from the government. The four courts served by CAS are the Federal Court of Appeal, the Federal Court, the Court Martial Appeal Court of Canada and the Tax Court of Canada. CAS must address the security considerations and needs specific to the Courts, as well as satisfy the requirements for security as outlined in the *Policy on Government Security.*

In 2013, a comprehensive Threat and Risk Assessment (TRA) of the Federal Courts System was conducted and concluded that enhancements were required. The 2015 Federal Budget provided funding over five years to enhance physical and IT security for the Federal Courts. Shortly thereafter, CAS prepared a Treasury Board (TB) submission including a business case to access the funds, which was approved in June 2015. The total funding obtained was $20.2M on a cash basis over five years (2015-16 to 2019-20) and $3.9M ongoing.

To address the recommendations of the TRA and to achieve the specific security needs of the Federal Courts System, the Courts Administration Service created the "*Physical Security Enhancements Program of Activities*", which includes projects and activities organized under six programs: Security Measures; Court Screening; Court Security Officers; Security Operations; Risk-Based Security Management; and IT Security.

1.2 Audit Objective and Scope

The objective of the audit was to provide assurance to Senior Management that CAS has integrated the requirements of the *TB Policy on the Management of Projects* and the *CAS Project Management Framework* (PMF) and developed an appropriate capacity for managing projects, which reflects the level of project complexity and risks, integrates decision-making across the programs and related projects, and supports the achievement and demonstration of value for money and sound stewardship. In particular, the audit was to assess that processes and practices governing the implementation over five years of the Physical Security Enhancements projects are appropriately managed through each phase of the projects' life cycles in order to achieve established objectives and expected results, taking into consideration the stage and phase at the time of the audit. Furthermore, the objective was to provide reasonable assurance that the PMF and related practices are adequate, appropriate to CAS, and being implemented.

Through the examination of the Physical Security Enhancements projects as well as the examination of the separate Windows 7 and Microsoft Office 2010 upgrade projects, the audit assessed with a reasonable level of assurance if adequate and effective measures and controls are in place to ascertain the use of an appropriate management framework for project management.

This internal audit did not intend to include an assessment of the appropriateness of the physical security measures, their deliverables, nor their expected outcomes. The Physical Security Enhancements projects were in their second year in 2016-17. Therefore, in order to provide assurance over the implementation of the CAS PMF, additional audit work may be required later in time to completely assess PMF implementation practices over the life-cycle of the projects within the programs.

1.3 Audit Findings

Overall, the audit found that there is an adequate project management framework in place for the management of projects at CAS. The audit noted several strengths and some areas where opportunities for improvement were identified.

The Windows 7 and Microsoft Office 2010 upgrade projects were completed within budget, scope and timelines. However, due to staff turnover, documentation during the roll-out and close-out phase of the projects was incompletely documented.

Overall, the *Physical Security Enhancements* projects and related programs are still on budget, within scope and on schedule after two years taking into account approved budget re-allocation and adjustments to the scope and to the delivery schedule.

The implementation of many recognized best practices for the management of projects were observed during the conduct of this audit, in conformance with *CAS Policy on the Management of Projects* and *CAS Project Management Framework*.

The report identifies these practices put in place as *Strengths* observed after reviewing the projects sampled. The audit found that the Project Management Framework in place for the management of projects with respect to governance, risk management, planning and implementation was effectively designed and operating as intended.

The audit also found a few opportunities for improvements in the areas of risk management, planning, implementation and quality assurance-outcome management in order to improve the management of projects at CAS. Four recommendations are made to the Program/Project Sponsor and Program/Project Director.

A more detailed discussion of audit findings and related audit recommendations are presented in Section 3 of this report.

1.3.1 Governance

Observed Strengths

- Project Management policies, directives and framework, are complete, up-to-date and communicated to all relevant stakeholders.

- Roles and responsibilities were well documented and communicated to key stakeholders in the Program Proposal and Program/Project Charters; several governance committees were regularly

consulted or informed on the programs and projects, these included the CAS Chief Justices' Steering Committee, the National Judges Committee on Security, CAS Senior Management Committee and the CAS Executive Committee; a number of committees and meetings have also been established at the project team level, these include a Steering Committee, an Advisory Committee, Project Management Team meetings and Risk meetings.

- An effective governance structure is in place for the management and oversight of projects at CAS. The key components are in place and put in use. An Enterprise Project Management Office (EPMO) that ensures compliance with the *CAS Project Management Framework and the TBS Policy on the Management of Projects* during the lifecycle of the project is also in place.

1.3.2 Risk Management

Observed Strengths:

- A formal and documented process for program/project risk management is in place including complete and up-to-date risk registers.

- Each risk in the risk register is classified as high, medium or low, indicates if there could be an impact on the budget, scope or schedule. Each risk and related mitigation is regularly followed-up and updated if necessary.

- Risks and mitigations are documented in a monthly summary dashboard for reporting purposes.

Opportunity for Improvement:

There is an opportunity to improve tools and mechanisms to support an integrated approach to the management of top risks at the consolidated program level. There are a number of similar risks for the different programs and projects that are recorded in the detailed risk registers but they are not summarized and consolidated at a higher level.

1.3.3 Planning

Observed Strengths:

- All documents required by the CAS Project Management Framework during the project initiation and planning phases have been completed. These included a business case, program proposal, program/project charters, program/project implementation plans, communication plan, risk register, project schedule, and program/project change requests.

- Specifications and conceptual design were established, including consultation with stakeholders.

- A shared file structure was established to capture all documentation and information related to the Physical Security Enhancements programs and projects and was available to all project team members. The shared files are maintained by the project manager and contain most of the information necessary to manage the overall programs/projects. The information is maintained at the portfolio, program and project levels.

- A number of follow-up processes and related tools to control costs, scope and schedule were developed and implemented at the planning phase and shared with the core project team during the planning and implementation phases, including: open action items, issues log, decisions log, dashboards, detailed risk registers and program/project change requests log.

- Milestones were developed and a gating process, conducted by individuals that are at arm's-length from the project team, was used.

Opportunities for Improvement:

- The implementation schedule did not include sufficient contingencies in response of an identified risk related to the number of partners involved in the delivery of the projects and to reflect the additional partner that was introduced in the first year of the projects.

- The project implementation plans would benefit from being updated more regularly to consolidate the decisions documented in the decision logs, and related cost estimates, and be shared before the beginning of the implementation phase with those stakeholders playing a role in the coordination for better understanding of the projects and their role.

1.3.4 Implementation

Observed Strengths:

- A committed project team, focused on the deliverables and sound management of the projects, was found to be in place during the audit.

- Key processes and tools for the implementation phase were formally established and used. For example, actions items were tracked during the planning and implementation phases and updated weekly by the project team; issues and decision logs were maintained and updated on a regular basis; risk registers were established and updated monthly and a change decision log was created and regularly maintained.

- Costs, scope and schedule were rigorously tracked and documented for the overall Physical Security Enhancements, by program and by project and reported in the monthly program dashboards. Program/project change requests were rigorously used.

- There is evidence of periodic briefings to the Chief Justices Steering Committee, National Judges Committee on Security, CAS Executive committee, and CAS Senior Management Committee on the program by either the Program/Project Sponsor or the Program/Project Director. In addition to formal periodic Briefing Notes, the Program/Project Sponsor indicated that senior management is informed verbally at each meeting of the status of the Physical Security Enhancements.

- Monthly advisory committee of the program/project management team was held and detailed minutes were kept.

- Weekly steering committee meetings and team meetings were held. In addition, monthly risk meetings include Regional Security Officers and, starting in May 2017, the Regional Directors Management Services began participating in monthly meetings with the Program Manager and team. Even though project meetings minutes were not kept, evidence of the discussion were found in the issues log, decision logs and/or risk registers.

- Gate reviews were conducted and a lesson learned meeting was held.

Opportunities for Improvement:

- The audit found that a formal process for the periodic monitoring of projects exists and is functioning well; however, it did not yet include a process to review and report on the expected outcomes, performance objectives and overall benefits of the projects.

- The gate reviews process does not include an assessment of the quality of the information contained in the documents.

1.4 Management Response

Management agrees with the audit observations and the recommendations made in this report. Appropriate detailed action plans have been developed and will be implemented.

1.5 Conclusion

The audit found that the Project Management Framework in place for the management of projects with respect to governance, risk management, planning and implementation was effectively designed and operating as intended.

1.6 Statement of Conformance

In our professional judgment, sufficient and appropriate audit procedures have been conducted and evidence gathered to support the accuracy of the conclusion provided and contained in this report. The audit conclusion is based on a comparison of the conditions, as they existed at the time, against pre-established audit criteria that were agreed upon with management. The conclusion is applicable only to the entity examined. The evidence was gathered in compliance with Treasury Board policies, directives and standards on internal audit and conforms to the Internal Auditing Standards for the Government of Canada.

The evidence gathered was sufficient to provide senior management with proof of the conclusion derived from the internal audit.

André Bolduc CIA
Chief Audit Executive

2 INTRODUCTION

2.1 Background

The role of CAS is to provide registry, judicial and corporate services to the four federal superior courts of record, thereby helping to maintain the independence of these courts from the government. The four courts served by CAS are the Federal Court of Appeal, the Federal Court, the Court Martial Appeal Court of Canada and the Tax Court of Canada (the Courts).

The 2015 Federal Budget provided funding over five years to enhance physical and IT security for the Federal Courts. Shortly thereafter, CAS prepared a Treasury Board (TB) submission including a business case to access the funds, which was approved in June 2015. The total funding obtained was $20.2M on a cash basis over five years (2015-16 to 2019-20) and $3.9M ongoing.

CAS organized the projects, activities and related programs as illustrated below:

1. **Security Measures**: Measures in all locations across Canada to detect and protect against unauthorized access to facilities and physical threats to members of the courts as well as front-line Registry staff.
   - One overarching Program to consistently manage aspects common to all locations, including policies, procedures and procurement strategies;
   - Site-specific projects (12): Ottawa (90 Sparks and 200 Kent); Toronto; Vancouver; Montréal; Calgary; Edmonton; Winnipeg; Québec; Halifax; Fredericton; and St. John's.
     - Each project includes some or all of the following activities: cameras; access control systems; ballistic protection for registry counters; building entrance security enhancements; and other measures (two-way radios for emergency communication; courtroom egress using FOB; ballistic protection for daises in courtrooms).

2. **Court Screening**: Enhancements to the screening program to ensure consistent detection of prohibited items and reduce risks, particularly to hearings.
   - One (1) overarching Program to consistently manage aspects common to all locations, such as policies, procedures, equipment procurement, contracting and training for operators;
   - Site-specific projects (12): Ottawa (90 Sparks and 200 Kent); Toronto; Vancouver; Montréal; Calgary; Edmonton; Winnipeg; Québec; Halifax; Fredericton; and St. John's.
     - Add and/or replace screening equipment (walk-through metal detectors and X-Ray equipment) in all locations.

3. **Court Security Officers**: Addition of Court Security Officers in courtrooms, based on risk, or to respond to other issues.
   - No projects

4. **Security Operations Capability**: Enhanced security operations capability to better respond to regional differences and provide more effective planning and support in the event of an incident or an emergency. Additional support for programs to ensure that they function properly and deliver the intended results.
   - One (1) project: Security Operations Centre located at 90 Sparks Street serving all CAS locations.

5. **Risk-based Security Management**: To anticipate threats and proactively implement consistent and effective mitigation measures, CAS is adopting a more strategic, risk-based approach to security management.
   - One (1) project: Information Analysis System
     - Implementation of system to collate information to assist in threat and risk assessment.

6. **IT security**: No projects.

While each project is managed independently, in cases where there are aspects that are common across several projects, CAS is managing those aspects at the level of the associated program. The objective is to achieve consistency and common standards across all locations, as well as to ensure efficiency in terms of governance, strategies and required documentation. This approach applies to the Security Measures and Court Screening Programs. Given the number of projects in these two programs and the number of activities within these projects, especially Security Measures, they are also managed iteratively, meaning that they advance at their own pace. Therefore, while some projects/activities might still be in the planning phase, others are being implemented. The security operations centre and information analysis system are stand-alone projects and will be managed as such.

Effective management of projects, as well as demonstrable sound stewardship and outcomes achievement, are paramount to ensure they achieve value for money. Among other mechanisms, deputy heads are responsible for monitoring and reporting on the management of projects in their department. They provide ongoing assurance that a control and oversight regime is in place to monitor adherence to TB *Policy on the Management of Projects* and its associated standards. CAS has in place a *Project Management Framework* (PMF), a *Policy on the Management of Projects* and a *Directive on Project Management*. These four policy instruments have provided the foundation for developing audit criteria for this audit.

The audit was identified and included as part of the multi-year Risk-Based Audit Plan (RBAP) adopted by CAS for the 2016-17 fiscal year period.

2.2 Audit Objective

The audit objective was to provide assurance to Senior Management that CAS has integrated the requirements of the *TB Policy on the Management of Projects* and the *CAS Project Management Framework* and developed an appropriate capacity for managing projects at CAS which reflects sound stewardship.

2.3 Audit Scope

The scope of the audit included an examination of key practices and processes in place for managing the Physical Security Enhancements programs and projects and focused on the first two programs and related projects; Security Measures and Court Screening Program because they were in the planning or implementation phases reflecting the iterative management of related projects/activities. The audit also examined the projects that were completed since the introduction of the *Project Management Framework* at CAS, more precisely the Windows 7 and MS Office 2010 upgrade projects.

The Security Operations Centre and intelligence analysis system were excluded from the audit since they were only at the planning stage. There are no projects in the Court Security Officers program. The scope of the audit also excluded the IT Security Program since it did not include any projects managed under the PMF and in any event was recently covered in another internal audit.

Audit activities were undertaken mostly in the National Capital Region but included interviews with regional stakeholders and review of project documentation. The audit covered the period between May 2015 and March 31, 2017.

2.4 Methodology

The audit engagement was conducted in accordance with *the Internal Auditing Standards for the Government of Canada* which incorporates *the Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing.* These professional standards require that the internal audit be planned and performed in such a way as to obtain reasonable assurance that audit objectives are achieved.

In addressing the audit objective, audit criteria were developed against which observations, assessments and conclusions were drawn. Appendix A to this report presents a list of the criteria for the audit and the conclusion reached against each criterion.

An audit program was developed that addressed the audit criteria through the following approaches:

- Documentation review including TB and CAS policies, directives and procedures relevant to project management and the Physical Security Enhancement Program of Activities electronic files (drive) and Windows 7 and MS Office 2010 upgrade projects;

- Meetings and interviews with stakeholders having key roles and responsibilities for the management of projects;

3 FINDINGS, RECOMMENDATIONS AND MANAGEMENT RESPONSE

3.1 Governance

3.1.1 Policies and Directives

Audit Criterion: Project management policies, directives and framework are complete, up to date and communicated to all relevant stakeholders.

The Courts Administration Service (CAS) developed the *Project Management Framework* (PMF), which was approved by CAS Executive Committee on December 2, 2011. In January 2017, CAS approved the CAS *Policy on the Management of Projects* and a *Directive on Project Management* to further clarify project management governance appropriate to the assessed size, complexity and risks of each project.

The CAS *Project Management Framework* (PMF), the CAS *Policy on the Management of Projects* and the CAS *Directive on Project Management* are consistent with Treasury Board requirements under the *Policy on the Management of Projects* and are based following PMBOK best practices. Based on a sound governance and control principle as referred to within section 6.2 of *CAS Policy on the Management of Projects*, they contain a seven stage gate process (see figure 1 below), especially including the following key phases of project life cycle related to Project Investment, Project Planning and Project Management,:

    i.   Project Initiation and Planning (including a Project Charter and relevant Project Governance)
    ii.   Execution (Project Implementation)
    iii.   Close-out.

Figure 1

CAS PROJECT MANAGEMENT FRAMEWORK
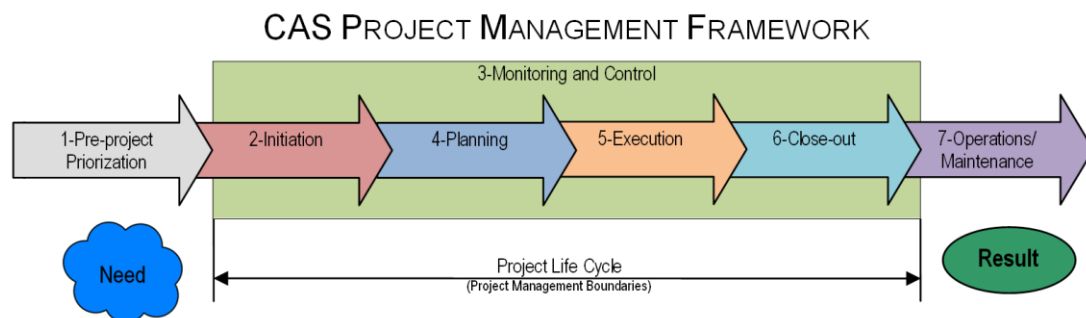
In addition, the Project Charter refers to key components of managing projects: *Scope, Schedule* and *Costs*, which form the basis on management processes of any project.

In the course of these activities, CAS created a new PMF tool called the Project vs Activity Matrix to aid in distinguishing projects from activities. CAS also revised the tool used to assess the size, complexity and risk of a project for the purpose of determining the extent of the PMF to apply

(formerly the Project Sizing Matrix, renamed Project Complexity Matrix). Accompanying PMF documentation was revised accordingly.

The CAS *Project Management Framework* was used for both the Windows7/MS Office 2010 upgrade projects and the Physical Security Enhancements projects.

The CAS *Project Management Framework* (PMF), the CAS *Policy on the Management of Projects* and the CAS *Directive on Project Management* are currently not available on the CAS Intranet site but are made available to all relevant stakeholders on demand and are available on the project shared drive. The audit team was informed that these documents will be uploaded to the CAS Intranet site in the near future.

The audit found that CAS policy instruments are aligned with the TBS Policy on the Management of Projects, are up to date and are available.

No recommendation is made.

3.1.2 Roles and responsibilities

Audit Criterion: Roles and responsibilities for project management are documented, communicated to all relevant stakeholders, and are functioning as defined.

The roles and responsibilities for project management are documented in the CAS *Project Management Framework*, CAS *Policy on the Management of Projects* and CAS *Directive on Project Management.* For the Windows 7/MS Office upgrade projects and the Physical Security Enhancements programs and projects, the roles and responsibilities were established and communicated primarily in the program/project charter.

The members of the Program and Project Management team are the same for the Physical Security Enhancements. Regional points of contact were identified to ensure proper coordination of site specific activities. PSPC project management contacts for facilities related work were also identified by location. The key members of the core Program and Project Management Team for the Physical Security Enhancements are:

    i.   Program/Project Sponsor
    ii.   Program/Project Director
    iii.   Program Manager
    iv.   Project Manager
    v.   Security Team Lead
    vi.   Facilities Team Lead
    vii.   Finance Team Lead
    viii.   Procurement Team Lead
    ix.   IM/IT Team lead
    x.   Regional coordinators
    xi.   Enterprise Project Management Office (EPMO).

The roles and responsibilities for each member listed above were well defined in the project charters and were made available to all core Program and Project Management Team via the project shared

drive and made available to other relevant stakeholders on demand. For example, the key roles and responsibilities of the Program/Project Sponsor were to:

i. Provide oversight of overall CAS physical security enhancement programs and projects to ensure they are being managed effectively to achieve strategic objectives;

ii. Oversee program and project communication to members of the courts, CAS executives and wider audiences;

iii. Approve risk management strategies and actions within her authority and/or based on established thresholds;

iv. Approve Program and Project Change Requests within his authority and/or based on established thresholds;

v. Consult with, report to and seek approval from the Chief Administrator, Chief Justices' Steering Committee, National Judges Committee on Security, CAS Executive Committee and CAS Senior Management as appropriate;

vi. Chair the Program/Project Steering Committee as well as chair and seek input from the CAS Security Advisory Committee.

The audit noted that clarification on the roles and responsibilities of the Regional Security Officers, the Regional Director Generals and the Regional Directors were necessary during project implementation to clarify and better understand a few items related to project deployment. The explanations were communicated to relevant stakeholders via email notification by the Program/Project Manager in July 2016.

The roles and responsibilities for project management are documented, communicated to all relevant stakeholders, and are functioning as defined.
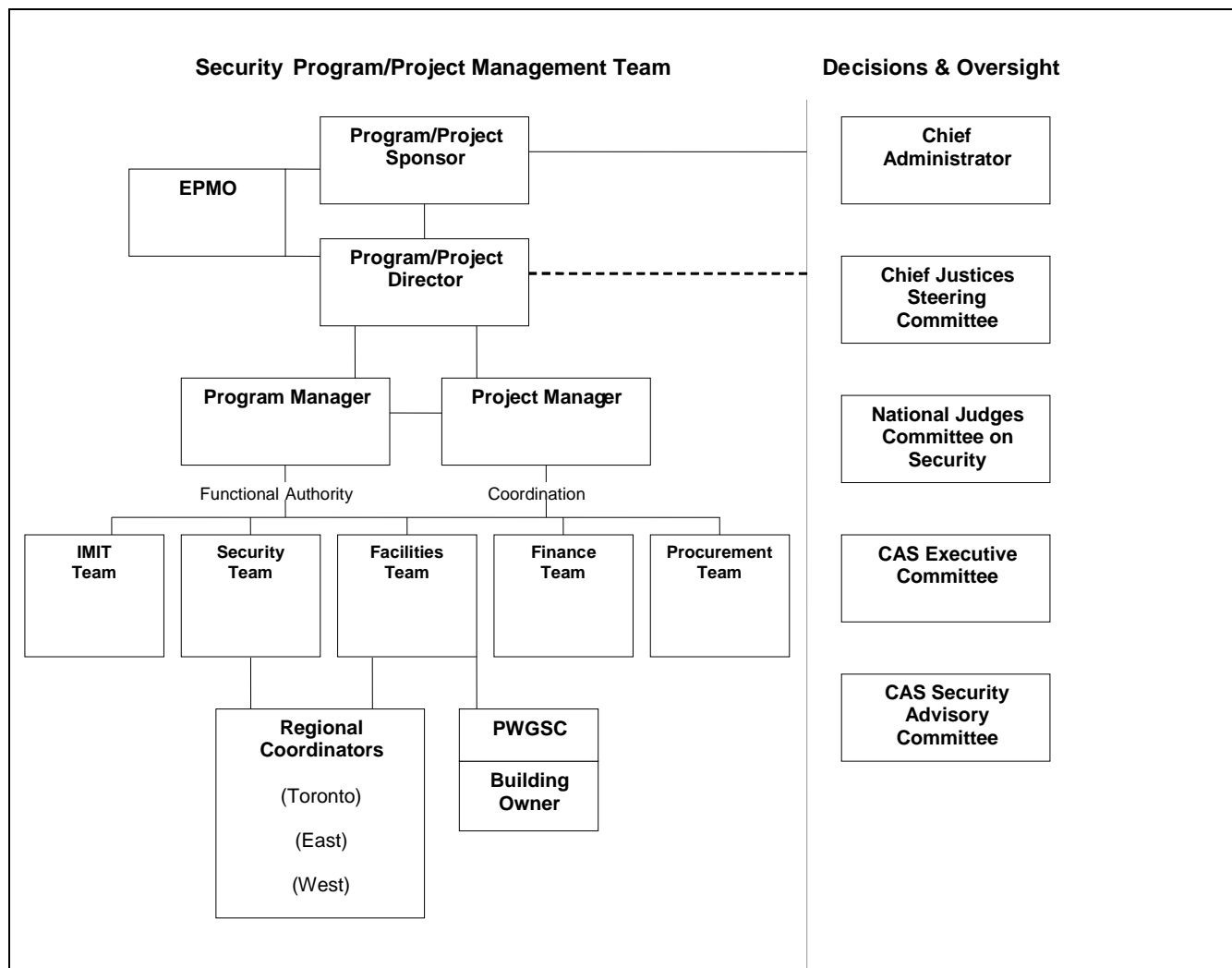
No recommendation is made.

3.1.3 Governance

Audit Criterion: An effective governance structure is in place for the management and oversight of projects.

The key components of the governance structure includes; an Enterprise Project Management Office (EPMO) that ensures compliance with the *CAS Project Management Framework and the TBS policy on the Management of Projects* during the lifecycle of the project*;* several governance committees that were regularly consulted or informed, these included the CAS Chief Justices' Steering Committee, National Judges Committee on Security, the CAS Executive Committee, the CAS Senior Management Committee, and the CAS Security Advisory Committee (CASSAC); a number of committees and meetings that have also been established at the project team level, these include a Steering Committee, an Advisory Committee, Project Management Team meetings and Risk meetings. See table 1 below for the governance structure for the Physical Security Enhancements programs and projects.

Table 1: Governance Structure - Physical Security Enhancements Program of Activities

Security Program/Project Management Team	Decisions & Oversight
Program/Project Sponsor — **EPMO** / **Program/Project Director** / **Program Manager** — **Project Manager** / *Functional Authority* — *Coordination* / **IMIT Team** — **Security Team** — **Facilities Team** — **Finance Team** — **Procurement Team** / **Regional Coordinators** (Toronto) (East) (West) — **PWGSC** / **Building Owner**	**Chief Administrator** / **Chief Justices Steering Committee** / **National Judges Committee on Security** / **CAS Executive Committee** / **CAS Security Advisory Committee**

The CAS Security Advisory Committee (CASSAC) which includes representatives from the National Capital Region (NCR) and regional offices is mandated to exchange insights, information, best practices and recommendations in an effort to support the development and implementation of Canada-wide security strategies, policies, programs, plans and measures that are standardized to the extent possible across Canada. The CASSAC has not met since November 18, 2015. The Program/Project Sponsor indicated that this was not such a problem since the membership of the CASSAC is similar to the Senior Management Committee who was briefed on a regular basis on the program and that new Terms of Reference were presently being developed for CASSAC.

The elements of an effective governance structure are in place to deal with matters pertaining to project management at the Courts Administration Services (CAS) and are functioning effectively.

No recommendation is made.

3.2 Risk Management

> **Audit Criterion**: An effective formal process for project risk management is in place including complete and up to date risk register.

The Program Proposal for the Physical Security Enhancements identified four broad categories of risk that could have an impact on the success of the overall Program. These were:

- **Issue History**: CAS could face questions in relation to the Court Screening program

- **Complexity**: The number of proposed activities and of partners involved in the delivery, such as law enforcement agencies, including the RCMP, PSPC procurement and PSPC facilities project management, building owners, property managers, could result in risks in term of coordination and activity. In the first year of the project a new player, BGIS, was introduced by PSPC in the management of the facilities related aspects.

- **Financial risk**: The costs in the Program proposal are substantive estimates. However, factors outside CAS' control may affect costs.

- **Organizational Risk:**
  - Members of the courts, employees and court users may be concerned by the additional visible security measures and change management may be required.
  - The ability to recruit necessary resources in a timely manner represents a risk.

At the program and project level, risks and mitigations are captured in the risk register. Each risk in the risk register is classified as high, medium or low, and indicates if there could be an impact on the budget, scope or schedule. Each risk and related mitigation is expected to be regularly followed-up and updated as necessary.

Risk management meetings are held and documented. Since the start of the Physical Security Enhancements, a total of 101 risks has been identified, of which 41 were still active as of March 2017. Until recently, risks and mitigations were reported in the monthly program/project dashboards, but now the risks are captured in the monthly Master Status Tracker distributed to the Program/Project Steering Committee, Program/Project Advisory Committee (i.e. Program/Project Sponsor, Security, Finance, Facilities and Procurement), to CAS Executive Committee (EXCOM) and the National Judges Committee on Security (NJCS).

From the risks identified in the program proposal above, as per the project team's assessment of risks, a few are still open for monitoring. The audit noted that the risks related to the need for coordination with many partners, especially with external stakeholders involved in project delivery of facilities related aspects, unforeseen changes to cost estimates and the ability to recruit necessary resources are still active.

While there is evidence that these risks were broken down and tracked at the level of the projects and reviewed at risk meetings, the audit team found no evidence that these risks were followed-up at the consolidated level on a regular basis and a risk response developed at the highest possible level, the program level in order to address common issues in a consolidated fashion.

Risk Response

There are a number of similar risks for the different programs and projects that are recorded in the detailed risk registers but they are not summarized and consolidated at a higher level as top risks requiring a coordinated mitigation response. Where appropriate, an overall risk response at the Program level was not found to have been developed or documented in the risk register by the project team.

For example, the risks related to the implementation schedule, including the lack of adequate project contingencies, appear on a recurring basis in the risk register. Risks involved in coordinating procurement activities with external partners were also identified during the audit as potentially significantly impacting the project delivery schedule.

Another top risk identified during the audit is related to the ability to recruit necessary resources in a timely manner. This risk was identified as a risk for the Physical Security Enhancements by the project team in order to implement effective mitigation measures. The Program was without a dedicated project manager for a period of approximately six months from September 2015 to February 2016, during which time alternate resources were assigned to support project management. For the Windows 7/MS Office upgrade projects, the project manager left late in the implementation phase of the project. As a result, documentation during the roll-out and close-out phase of the Windows 7/MS Office upgrade projects was incomplete.

The Treasury Board guide for project dashboards recommends that a project top risks be reported on the project dashboard. This includes the risk statement, the risk response, the potential impact on costs, scope or schedule and the current status. The tracking of top risks would allow following the potential impact on budget, time and scope of the project, determine if it could have an effect on the overall program, and whether corrective actions have been taken and are working as intended.

A formal and documented process for project risk management is in place including a complete and up-to-date detailed risk registers but the audit observed that there is an opportunity to strengthen the risk management tools and mechanisms to bolster the documentation, monitoring and reporting of the effectiveness of mitigation actions of top risks consolidated at the Program level in a coordinated fashion.

Recommendation 1 (*Medium Level*)

The Program/Project Sponsor should develop improved tools and mechanisms to support an integrated approach to the management of top risks at the consolidated program level to bolster the documentation, monitoring and reporting of the effectiveness of mitigation actions.

Management Response and Action Plan Recommendation #1		
Agreed.		
Management Action Plan	Responsible Official	Target Completion Date
Changes will be made to the Risk Register to facilitate the identification of risks as well as mitigation measures that are common to several projects and/or programs. Planned changes include: • Addition of criteria that will allow additional data filtering	Project Manager (Security) in consultation with Program/Project Sponsor,	September 2017

to more readily identify cross-cutting risks; • Addition of criteria to clearly identify mitigations that are at the program level. In addition, improvements will be made in terms of reporting the top risks to the CAS Executive Committee (EXCOM) and other governance committees. Changes will primarily be in terms of clarity and presentation of information on those top risks.	Program/Project Director and EPMO	

3.3 Project Planning

Audit Criteria:

- The project scope is adequately established, including technical requirements
- The project schedule is realistic for an effective management of the project
- The project costs and budgets are reasonable and based on sound financial assumptions
- Adequate mitigations are developed in response to project key risks
- Project initiation is supported by sufficient and adequate information
- Organizational capacity is properly assessed and sufficient to implement the project.

As per CAS Project Management Framework, there are a number of specific project management controls and processes as well as documents and approvals that need to be delivered before proceeding to the execution phase of the project. This was confirmed by gate reviews performed by the Enterprise Project Management Office (EPMO).

The audit found the following key documents:

- a business case: the business case was attached to the Treasury Board submission and provided the necessary information into a strategic context to make an informed decision about whether an associated investment should be supported.
- a program proposal
- Program/project charters: The program and project charters set the initial scope and include; overview, scope, milestones, deliverables, governance, team structure and roles and responsibilities.
- a program/project implementation plan
- a project management plan.

The table below illustrates a list of key deliverables and their completion dates for the Security Measures and Court Screening Programs.

Table 2 – List of Key Deliverables and Dates for the Security Measures and Court Screening Programs

DELIVERABLES	Security Measures	Court Screening
Business case	May 27, 2015	May 27, 2015

Program/Project Proposal	May 27, 2015	May 27, 2015
Program/Project Implementation Plan	May 1, 2015	May 10, 2016
Program/Project Charters	Sept 3, 2015	Sept 3, 2015
Program/ Project Management Plan	March 11, 2016	March 11, 2016
Gate 3 Review – End of Planning Phase (Note 1)	May 13, 2016	July 12, 2016

Note 1: Gate review for Court Screening was essentially completed in May 2016 and signed off in July 2016. While there is not a single date that marks the transition between planning and implementation given the iterative management of the many projects and related activities, the key date is May 2016 when Gate 3 (end of planning phase) was formally closed for both Security Measures and Court Screening programs.

In order to implement adequate mitigations in response to rising issues, CAS also developed a number of follow-up processes and related tools at the planning phase. These were meant to be used by the core project team members during the planning and implementation phases and were therefore shared with the team. They include:
1. open action items;
2. issues log;
3. decisions log;
4. program/project change requests log;
5. dashboards and master financial tracking tool;
6. risk register; and,
7. a gating process.

The audit found that all documents required by the CAS Project Management Framework during the project planning phase have been developed and contained the required key components.

Project Scope

Specifications of products and services were developed as part of the project scope and included in the implementation plans for the Security Measures and Court Screening Sub programs. As a centrally driven physical security programs and projects, specifications of products and services were developed during the initiation phase of the projects based on the results of the Threat and Risk Assessment conducted in 2013. CAS corporate strategy was to establish common security standards across all locations to ensure adequate protection, to standardize security equipment for efficient maintenance and lifecycle management, as well as to develop consistent policies and procedures. Procurement strategies were designed to achieve best value for money and to support the common standards in terms of type and quality of goods. Site-specific requirements were taken into account in the planning and design, in particular numbers and placement of equipment to address specific security gaps, based on available space, current operational set-up and the local security environment.

Early during the planning phase, several stakeholders were consulted to establish common principles related to the implementation of the Security Measures and Court Screening Programs and input was included in the Program/Project Implementation Plans (PIP), such as common design elements for registry counter ballistic protection. The initial scope of activities to enhance physical security in each CAS location is captured in the Project Charters and Project Implementation Plans. Later in the planning phase, additional consultation took place to gather more regional and site specific requirements such as the number of wickets at a specific registry counter. Several adjustments were expected during the planning phase. Changes to the scope of the project were rigorously documented

and justified. All changes to the scope of the projects examined during the audit were recorded in the decision log and, if required, a formal Program or Project Change Request was prepared and approved. The monthly programs and project dashboard also provides the baseline and revised scope for all activities by project.

However, the Program/Project Implementation Plans, which include specifications and implementation schedules, were not updated despite some significant changes in scope (see table 3 below). The PIP for the Security Measures and Court Screening Programs are scheduled to be updated during the summer of 2017.

The audit team interviewed several stakeholders in Ottawa and the regions, reviewed communications documentation and issues log contained in the project shared files. Several comments related to misunderstandings related to the project decision making process, regional consultation and deployments of measures were noted. A misunderstanding and a perception of insufficient planning developed among some stakeholders. Better and timelier communication with end users and relevant stakeholders is useful to minimize misperception and potential delays in implementation due to late change requests.

The audit found that the scope definition (project specifications) was not widely shared with all internal stakeholders before the implementation phase. The management of the projects would benefit from updating and sharing the Project Implementation Plan widely, or a summary of it, with those stakeholders playing a role in the coordination before beginning the implementation phase for better understanding of the projects and their role.

The table below compares the scope of activities for the Security Measures and Court Screening Programs at initiation phase and as they stand on March 9, 2017. As illustrated, several changes were necessary during the planning phase. It is therefore important to update the Program/Project Implementation Plan to reflect the decisions captured in the decision logs, and related cost estimates, during the planning phase and to share it, or a summary of it, with those involved in the regional coordination previous to the implementation phase.

CAS management indicated to the audit team that changes in scope were made to better achieve the security baseline. For example, it was decided further to consultation to increase the number of screening equipment in some locations to screen mail and deliveries to the Registry, to add ballistic protection to the registry desks in courtrooms (reflected in the table under daises) and to add access controls to courtroom doors. It should also be noted that the changes in quantities below represent totals across 24 separate projects (12 in each program).

Table 3 - Comparison of scope at initiation phase vs revised scope as of March 9, 2017

PRODUCTS	INITIATION PHASE	REVISED (as of March 9, 2017)
1 Security Measures Program		
Cameras	285 Cameras	326 Cameras
Access controls (doors)	48 Doors	79 Doors
Registry counter ballistic protection (linear meters)	81.99 Meters	81.07 Meters
Building Entrance Enhancement (zoning)	9 Locations	5 Locations
Two-way Radios	80 Two-way Radios	80 Two-way Radios
Courtroom Egress FOB's	53 FOB's	53 FOB's
DAIS Ballistic Protection	38 Dais	85 Dais
2 Court Screening Program		
2.1 Screening Equipment	16 Units	21 Units

Project Schedule

Funding for the Physical Security Enhancements covered the five year period from 2015-16 to 2019-20 plus ongoing funding and was approved by Treasury Board on June 17, 2015. An integrated Master Schedule was developed by the project team to track deliverables and activities both at the program level as well as at the project level. A project level schedule has been included as part of the Project Implementation Plan.

The planning phase included relevant tools to appropriately control and monitor schedule changes when required, using a decision log and a Program or Project Change Request. Generally speaking, project planning was found to be in compliance with CAS Project Management Framework.

The *Security Measures* Project Implementation Plan (PIP) indicated that many security measures would be implemented in fiscal year 2015-16 and others would be spread over the following four years. Many activities planned for 2015-16 were subsequently rescheduled to future years while others were advanced. Similarly, limited activities in the Court Screening Program took place in 2015-16 as originally planned in the *Court Screening* PIP.

CAS had identified the number of proposed activities and partners involved in the realization of the projects as a significant risk in terms of capacity. The Program/Project Sponsor supported that the activities did not represent a new challenge, were operational in nature and that CAS had past experience with similar activities to effectively deliver on the proposal. Therefore the project team considered that CAS was in a sufficiently good position, also considering key contracts in place, to quickly engage the required resources, as well as established relationships with external stakeholders, especially PSPC.

The original implementation schedule did not include sufficient contingencies in response to an identified risk related to the number of partners involved in the delivery of the projects, and to reflect the additional partner that was introduced in the first year of the projects, therefore increasing significantly the likelihood of working with an ambitious implementation schedule. For instance, the introduction of a new player for the facilities related aspects and facilities related issues that took longer to address than anticipated. While the projects are planned over five years, many activities could not be performed within the original timelines as planned. The management of the project was then perceived as willing to move too quickly.

The table below compares the original and revised schedule for each of the programs.

Table 4 – Initial schedule compared with revised implementation schedule

PROGRAM & DELIVERABLES	INITIAL SCHEDULE	REVISED (as of March 2017)
1 Security Measures Program	2015-16 to 2019-20	2015-16 to 2019-20
2 Court Screening Program	2015-16 to 2018-19	2016-17 to 2019-20
3 Court Security Officers Program	2015-16 to 2019-20	2017-18 to 2019-20
4 Security Operations	2015-16 to 2019-20	2015-16 to 2019-20
5 Risk-based Security Management	2015-16 to 2019-20	2017-18 to 2019-20
6 IT Security	2015-16 to 2019-20	2016-17 to 2019-20

Project Costs

CAS has discretion to re-allocate funds within the Security programs and can move funds between years as long as it does not exceed the normal overall 5% carry forward for the department.

The CAS Project Management Framework recommends that project costs should be approximately within a 25% range during the project initiation phase and be further refined to approximately within a 10% range by the end of the planning phase. The cost estimates for the Physical Security Enhancements were established during the initiation phase of the projects and were updated by the end of the planning phase. The same cost estimates can be found in the Treasury Board submission, the business case, the program proposal and the program/project implementation plans. Changes to the costs were tracked in decision logs and issues logs as appropriate and regular budget status reports were provided to the Steering Committee to be escalated as appropriate, but they were not updated in the implementation plans As illustrated in the table below, important variances in the cost estimates for the Security Measures and Court Screening programs have occurred.

Table 5 – Comparison of initial costs estimates vs. actual costs and forecast to complete each program as of March 9, 2017

		ORIGINAL ESTIMATES	REVISED ESTIMATES March 2017	VARIANCE %
1	Security Measures Program	2,860,000	4,094,441	43%
2	Court Screening Program	3,968,123	4,196,943	6%
3	Other Programs and Projects	13,339,984	10,348,535	-22%
		20,168,107	**18,639,919**	**-7.6%**

Note: The revised estimates as of March 2017 reflect actual expenditures as of that date plus forecast cost estimates for the remainder of the deliverables. The total includes a contingency of 5% given that there are three years of deliverables remaining.

The changes in costs are mainly related to decisions to add security measures, as mentioned above under Project Scope, and were absorbed within the overall Physical Security Enhancements Program of Activities budget.

The various decisions made to add security measures to the scope of the projects to enhance security and respond to facilities-related site-specific requirements required a number of amendments to the cost estimates and timelines, therefore supporting the need for a greater level of accuracy in the initial scope definition to the extent possible. Analysis and design during the planning phase also resulted in changes to the costs. The various changes and adjustments that had to be made to the specifications of the project required significant adjustments to the cost estimates as documented.

Nevertheless, the audit found that at planning phase:

- Effective tools were developed to rigorously track and report on project costs at all levels: program and project;
- Proper estimates were also conducted and documented.

Documentation of information

A shared file structure was established to capture all documentation and information related to the Physical Security Enhancements and available to all project team members. The shared files are maintained and kept up to date by the project manager and contain most of the information necessary to manage the overall program. The information is maintained at the portfolio (overall program), programs and project levels and can be easily retrieved.

Organizational Capacity

CAS underwent an Organizational Project Management Capacity Assessment (OPMCA) in 2011 to assess its project management capacity. In 2012, CAS received a letter from TBS confirming that CAS project authority was level 0 (up to $1 million).

All projects in the Physical Security Enhancements are under $1 million. The audit found that CAS has presently the capacity to adequately manage a project within its project authority.

Recommendation 2 (*Medium Level)***

The Program/Project Sponsor and the Program/Project Director should at the end of the planning phase of any project conducted:

1. Ensure project implementation plans are updated more regularly to consolidate the decisions made and document related cost estimates and are shared before the beginning of the implementation phase with those stakeholders playing a role in the coordination for better understanding of their role.
2. Ensure that project schedules include sufficient contingencies to mitigate the risks related to the number of partners involved in the delivery of the projects.

Management Response and Action Plan Recommendation #2

Agreed.

Management Action Plan	Responsible Official	Target Completion Date
(A) The schedule and criteria for updating project implementation plans for the Physical Security Enhancements will be reviewed to ensure the frequency is appropriate and a clear threshold is established for more frequent updates where changes warrant it.	(A) Program Manager and Project Manager	(All) September 2017
(B) Stakeholders will be informed in a timely manner of timelines and scope, as well as expectations in terms of coordination.	(B) Program/Project Sponsor and Director, Program Manager and Project Manager	
(C) Project schedules will be reviewed to assess the adequacy of timeline contingencies.	(C) Program/Project Sponsor and Director, Program Manager, Project Manager and Facilities Lead	

3.4 Project Implementation

3.4.1 Project controls

Audit Criterion: Mitigations and controls are effective during the implementation phase of the project

to monitor and ensure:
- Overall progresses against scope and schedule
- Proper control of action items
- Resolution of issues and concerns
- Change management
- Effective decision-making
- Effective and adequate management of procurement
- Effective cost management
- Project documentation
- Periodic reporting

Managing Scope, Schedule and Costs

The audit noted that a number of controls were in place during the implementation phase to address issues and mitigate risks involved as well as to monitor the progress of each project for both programs. For example, actions items were tracked during the implementation phase and updated weekly in the decisions log by the Project team.

The audit found that the Issue Management process implemented during the planning phase was rigorously followed during the implementation phase. Program/Project Change Requests (PCRs) were documented and approved. The S*cope* changes due to change in requirements or site specific conditions were documented and decisions justified.

An integrated master *Schedule* tracks deliverables and activities at both the program as well as the project level. A project level schedule has been developed as part of the Project Implementation Plan and changes to the schedule were recorded in the decision log and the Program/Project Change Request when required. Despite some adjustments made to the original schedules, the audit also found the *Physical Security Enhancements* to be on schedule and project deliverables are expected to be completed within the five year timelines.

The audit found that project *Costs* are rigorously tracked and documented for the overall Physical Security Enhancements, as well as by programs and by project. The results are documented and regularly reported through regular financial dashboards, such as Financial Master Status Dashboards. Financial overall forecasts for the entire Program must be noted, as they are still within budget by 12%.

Effective Monitoring and Reporting

Weekly Project Manager Meetings and regular Project Steering Committee meetings with core Project team were also held and documented in decisions log or issues log. Monthly advisory Committee Meetings including the Program/Project Sponsor and Program/Project Director were also held and documented in detailed meetings minutes. The audit has confirmed that planned processes used during the implementation phase allowed adequate monitoring of the overall program and appropriate relevant mitigations response.

For example, following an email issued in fiscal 2016-17 to the Regional Directors General clarifying the regional consultation process for the Physical Security Enhancements in response to identified concerns related to the deployment of the Security Measures and Court Screening programs, the

Communication Plan was updated early in 2017. It was also decided to include the regional Directors of Management Services of each region to the monthly security meetings starting in May 2017. This should likely improve communications and bolster individual engagement and buy-in to the overall project results.

No recommendation is made.

3.4.2 Quality assurance and outcome management

Audit Criterion: There is a formal process for the periodic monitoring, review and reporting on the expected outcomes, performance objectives and benefits of the overall program.

Quality Assurance

CAS has created the Enterprise Project Management Office (EPMO) to assess and reports on project progress at established gate review points. At the time of the audit, the EPMO had completed a total of six gate reviews (three for Security Measures and three for the Court Screening Program). All gate review reports were approved by the Program/Project Sponsor and Program/Project Director and confirmed full compliance with CAS Project Management Framework (PMF). The audit noted that the gate reviews confirmed that the required documents required by the PMF were in place, that they were complete and were approved.

While there is no specific date between the planning phase and the execution phase given the iteration management of the projects, Gate 3 completion marks the transition between the planning and execution phase for both the Security Measures and Court Screening program. Gate reviews were completed in May 2016. However, the gate reviews did not assess the quality of the information contained in the documents. For example, it did not challenge in any way the reasonableness of the schedule or the lack of contingencies in the planning phase documentation

Outcome Management

The Treasury Board of Canada Secretariat (TBS) expects that mechanisms are in place to measure progress and overall success in qualitative and quantitative terms to be documented and tracked throughout a project life-cycle. The Program Charters for the Security Measures and Court Screening Programs stated that the performance objectives are linked to achieving the security baseline established in the TRA and set out the essential elements of the security baseline which each program will address. While gate reviews at the planning phase were completed, the gate reports did not specifically note the need to establish key performance indicators, supporting data and the frequency of reviews to measure the achievement of the expected results for the Physical Security Enhancements. It is important to establish the key performance indicators early in the planning phase to prevent a misunderstanding of the expectations during and at the end of the program.

It is important to formally re-validate/reconfirm on a periodic basis that the expected outcomes, benefits and performance objectives that were approved in the Treasury Board submission and business case are still valid and will be met as scope, schedule and budget are adjusted.

The audit found that a formal process for the periodic monitoring of project exist and is functioning well, however it did not yet include a process to review and report on the expected outcomes, performance objectives and benefits of the overall program needs to be established.

Recommendation 3 (*Medium Level*)

In collaboration with the Enterprise Project Management Office, the Program/Project Sponsor and the Program/Project Director should:

1. Ensure that there is a formal process in place to review and report on the expected outcomes, performance objectives and overall benefits of the projects; and,

2. Develop key performance indicators to measure expected outcomes and benefits, ideally early in the initiation phase of a project to allow better monitoring activities.

3. Ensure that the gate reviews include an assessment of the quality of the information contained in the various documents.

Management Response and Action Plan Recommendation #3

Agreed. Given the nature of the Security Enhancement Program and Projects, it is clear when related security measures have been implemented and objectives are therefore being met. Nevertheless, more measurable and specific key performance indicators will be beneficial for ongoing monitoring of benefit realization.

Management Action Plan	Responsible Official	Target Completion Date
(A) A formal process will be established to periodically review the Physical Security Enhancement projects and activities against the performance objectives set out in the Charters, as well as the overall benefits of the projects.	(A) Program/Project Director	(All) October 2017
(B) Key performance indicators will be defined for the Physical Security Enhancements.	(B) Program/Project Director	
(C) Training on the CAS Project Management Framework will cover performance, including the establishment of objectives, indicators and periodic reviews.	(C) Project Manager	
(D) PMF guidance on gating will be reviewed to ensure clear direction to include quality assessment in gate reviews.	(D) EPMO	

3.4.3 Appendix A

Criteria		
1	**Governance**	
	1.1	An effective governance structure is in place for the management and oversight of projects.
	1.2	Roles and responsibilities for project management are documented, communicated to all relevant stakeholders, and are functioning as defined.
	1.3	Project Management policies, directives and framework are complete, up to date and communicated to all relevant stakeholders.
2	**Risk Management**	
	2.1	An effective formal process for project risk management is in place including complete and up-to-date risk register.
3	**Project Planning**	
	3.1 The project scope is adequately established, including technical requirements	
	3.2 The project schedule is realistic for an effective management of the project	
	3.3 The project costs and budgets are reasonable and based on sound financial assumptions.	
	3.4 Adequate mitigations are developed in response to project key risks	
	3.5 Project initiation is supported by sufficient and adequate documentation	
	3.6 Organizational capacity is properly assessed and sufficient to implement the projec	
4	**Project Implementation**	
	4.1	Mitigations and controls are effective during the implementation phase of the project to monitor and ensure : • Overall progresses against scope and schedule • Proper control of action items • Resolution of issues and concerns • Change management • Effective decision-making • Effective and adequate management of procurement

		- Effective cost management - Project documentation - Periodic reporting
	4.2	There is a formal process for the periodic monitoring, review and reporting on the expected outcomes, performance objectives and benefits of the overall program.