



**1998-707 Final Report**

**SUD Audit of the PWGSC Development for the FIS**

**1999-06-08**



Public Works and  
Government Services  
Canada

Travaux publics et  
Services gouvernementaux  
Canada

Audit and Review

Vérification et Examen

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## Executive Summary

### Authority for the Project

This Systems Under Development (SUD) Audit of the Public Works and Government Services Canada (PWGSC) Development for the Financial Information Strategy (FIS) [SUD - PWGSC FIS] was approved as part of the 1998/99 Audit and Review Plan by the Audit and Review Committee.

### Objectives

The objectives of the audit were:

- to assess the effectiveness of the processes in place to manage the evaluation and acceptance of the FIS Pre-Production Pilot; and,
- to verify the testing of the Central Financial Management and Reporting System (CFMRS) in a 32 bit environment.

### Scope

The scope of the audit included all PWGSC component systems development activities for the implementation of the government-wide FIS. This includes the CFMRS and the Standard Payment System/Interdepartmental Settlements (SPS/IS) development, as well as modifications to the Common Departmental Financial System (CDFS), SPS, the Bank Facilities System (BFS), and Compensation (PAY).

The scope included the PWGSC FIS Implementation Project Office, its interfacing organizations including other Government Operational Service (GOS) organizations, Government Telecommunications and Informatics Services (GTIS), Treasury Board Secretariat (TBS) and systems development contractors as needed.

The audit did not address the FIS readiness or compliance of PWGSC as a client department.

### Background

The Financial Information Strategy (FIS) is a government-wide initiative that involves central agencies and departments across government. The FIS addresses several government accounting issues and replaces outdated financial management reporting systems.

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The Treasury Board Secretariat (TBS) FIS Office manages and co-ordinates the development and implementation of FIS in departments and central agencies under the leadership of the Deputy Comptroller General.

In support of the FIS, PWGSC is responsible for the systems development of many of the FIS functions. This includes replacing the existing Central Accounting System with the Central Financial Management and Reporting System (CFMRS). The CFMRS will receive, process and store the summary level financial data received from departments on a monthly basis. This will provide comprehensive financial management, financial control and reporting capabilities in support of central agencies and departments. In addition to the CFMRS, implementation of the FIS requires several new application interfaces and major modifications to existing systems that are maintained and operated by the Government Operational Service Branch. These include changes to the Standard Payment System/Interdepartmental Settlements (SPS/IS) processes, the Compensation System, the Bank Facilities System (BFS), the Common Departmental Financial System (CDFS) and several PWGSC Finance Sector systems.

The PWGSC Government Operational Service (GOS) Branch has established the FIS Implementation Project Directorate which has the overall responsibility to manage the systems development of the CFMRS and the other related FIS requirements. The development and implementation of changes to these systems are directly managed by the GOS managers responsible for the respective function. The actual systems development of the CFMRS is being provided by an outside contractor. The systems development of the changes to the existing systems, the interfaces and the related technological services are being conducted by the Government Telecommunications and Informatics Services (GTIS).

The PWGSC FIS Implementation Project Director reports to the PWGSC CFMRS Steering Committee. The PWGSC CFMRS Steering Committee is co-chaired by the Assistant Deputy Minister (ADM), GOS and the ADM, GTIS. The ADM, GOS has established and chairs the GOS FIS Readiness Steering Committee made up of senior GOS managers, including the Director, PWGSC FIS Implementation, to review and co-ordinate FIS implementation activity and ongoing maintenance critical to FIS processes in PWGSC.

The completion of the CFMRS Phase 1 Prototype was a major decision-making milestone in that it provided the first off ramp for the FIS Project. The CFMRS Phase 1 Prototype and its Proof of Operations were successful. As a result, TBS gave approval to proceed with the Phase 2, or Pre-Production Pilot implementation. Given that the Pre-Production Pilot is successful, there will be a phased Departmental Implementation starting in 1999-04.

There were Systems Under Development Audits in 1996 (96-715) and 1997 (97-707) which assessed the effectiveness of the managerial and operational controls for PWGSC FIS Implementation system development activities including those processes intended to meet stated functional requirements, to manage change, to manage risks and to provide for adequate controls. Both audits concluded that, overall, the managerial and operational controls for PWGSC FIS Implementation system development activities were effective. Given that these

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controls did not change significantly, this year's audit (98-707) did not assess the managerial and operational controls.

Completion of the changes to the interfacing systems including the CDFS, Compensation, SPS and the new IS processes, and BFS systems is critical to the success of Phase 2. The 1997 SUD Audit of PWGSC Development for the FIS (97-707) expressed concern that the required changes to the CDFS would not be ready in time thus causing a delay in the implementation of FIS.

It should be noted that the Office of the Auditor General is relying on the audit work conducted by the PWGSC Audit and Review Branch, rather than conducting their own SUD Audit of the PWGSC Development for the FIS.

The results of this SUD Audit of the PWGSC Development for the FIS will be made available to the TBS FIS Government Review, after clearance within PWGSC, to satisfy their FIS risk assessment requirement.

### **Key Findings**

- FIS Pre-Production Pilot testing was performed in accordance with a pre-established plan that included defined accreditation criteria;
- FIS Pre-Production Pilot testing included all significant systems involved in the FIS Control Framework;
- activities identified in the test plan were carried-out, documented and included appropriate sign-off;
- appropriate business and information systems representatives were included in the testing team and evaluation committee;
- testing was carried-out in an environment representative of the future operational environment;
- The CFMRS was successfully tested in a 32 bit environment (with one noted difficulty regarding the display of accented French characters in the FIS mailbox browser on a Windows NT workstation); and,
- the CDFS changes were implemented in time so no delays were incurred.

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**Conclusions**

The processes to manage the evaluation and acceptance of the FIS Pre-Production Pilot test were effective.

The CFMRS will operate successfully in a 32 bit environment.

**Recommendations**

*There are no recommendations.*

## **1 Introduction**

### **1.1 Authority for the Project**

This Systems Under Development (SUD) Audit of the Public Works and Government Services Canada (PWGSC) Development for the Financial Information Strategy (FIS) [SUD - PWGSC FIS] was approved as part of the 1998/99 Audit and Review Plan by the Audit and Review Committee.

### **1.2 Objectives**

The objectives of the audit were:

- to assess the effectiveness of the processes in place to manage the evaluation and acceptance of the FIS Pre-Production Pilot; and,
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### **1.3 Scope**

The scope of the audit included all PWGSC component systems development activities for the implementation of the government-wide FIS. This includes the CFMRS and the Standard Payment System/Interdepartmental Settlements (SPS/IS) development, as well as modifications to the Common Departmental Financial System (CDFS), SPS, the Bank Facilities System (BFS), and Compensation (PAY).

The scope included the PWGSC FIS Implementation Project Office, its interfacing organizations including other Government Operational Service (GOS) organizations, Government Telecommunications and Informatics Services (GTIS), Treasury Board Secretariat (TBS) and systems development contractors as needed.

The audit did not address the FIS readiness or compliance of PWGSC as a client department.

### **1.4 Background**

The Financial Information Strategy (FIS) is a government-wide initiative that involves central agencies and departments across government. The FIS addresses several government accounting issues and replaces outdated financial management reporting systems.

The Treasury Board Secretariat (TBS) FIS Office manages and co-ordinates the development and implementation of FIS in departments and central agencies under the leadership of the Deputy Comptroller General.

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There were Systems Under Development Audits in 1996 (96-715) and 1997 (97-707) which assessed the effectiveness of the managerial and operational controls for PWGSC FIS Implementation system development activities including those processes intended to meet stated functional requirements, to manage change, to manage risks and to provide for adequate controls. Both audits concluded that, overall, the managerial and operational controls for PWGSC FIS Implementation system development activities were effective. Given that these controls did not change significantly, this year's audit (98-707) did not assess the managerial and operational controls.



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Completion of the changes to the interfacing systems including the CDFS, Compensation, SPS and the new IS processes, and BFS systems is critical to the success of Phase 2. The 1997 SUD Audit of PWGSC Development for the FIS (97-707) expressed concern that the required changes to the CDFS would not be ready in time thus causing a delay in the implementation of FIS.

It should be noted that the Office of the Auditor General is relying on the audit work conducted by the PWGSC Audit and Review Branch, rather than conducting their own SUD Audit of the PWGSC Development for the FIS.

The results of this SUD Audit of the PWGSC Development for the FIS will be made available to the TBS FIS Government Review, after clearance within PWGSC, to satisfy their FIS risk assessment requirement.

## 2 Findings, Conclusions and Recommendations

### 2.1 FIS Pre-Production Pilot Acceptance

To assess the effectiveness of the processes in place to manage the evaluation and acceptance of the FIS Pre-Production Pilot.

#### 2.1.1 Testing Plan

**Principle: Testing is performed in accordance with a pre-established plan, with defined accreditation.**

- FIS Pilot Test objectives were defined in the FIS Pilot Methodology.
- Key objectives for the pilot included:
  - ❖ test the integrity, controls, connectivity and operation of the FIS compliant central systems interfaces.
  - ❖ test receipt, validation and processing of departmental trial balances.
  - ❖ validate account balance concept of FIS from a departmental system and PWGSC central system perspective and a TBS accounting policy perspective.
  - ❖ confirm the integrity and completeness of information produced by CFMRS.
  - ❖ validate the Government of Canada government-wide chart of accounts structure and existing values.
- The methodology for test completion and evaluation was based on:
  - ❖ FIS Pilot objectives were defined in the joint PWGSC/RC/TBS MOU and the CFMRS RFP.
  - ❖ FIS Pilot Scope was developed based on the pilot objectives.
  - ❖ FIS Pilot Master Plan schedule was developed for all Pilot activities to monitor progress.
  - ❖ FIS Pilot Test Scripts, which detail tests, time frames, data used and expected results for each test, were developed.
  - ❖ FIS Pilot Evaluation Criteria were developed based on the Pilot objectives and the Pilot Test Scripts' expected results.
  - ❖ FIS Pilot Co-ordination Team held daily meetings to monitor Pilot activities based on the Master Plan and Test Scripts.
  - ❖ GOS-FIS Readiness Steering Committee held monthly meetings to review the Pilot's progress based on the Master Plan.
  - ❖ FIS Pilot Evaluation Committee with membership from the PWGSC, Revenue Canada and Treasury Board Secretariat completed an evaluation based on the FIS Pilot Evaluation Criteria. The FIS Pilot Detail Evaluation Report was produced to document the results.

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- ❖ The FIS Pilot Steering Committee met at the end of each major milestone to review results and approve continuation of the pilot and implementation.
- The nature and timing of the test procedures were defined in detailed test plans for each test period (the pilot test covered periods 10,11,12 and 1, and included year-end and new year scenarios).

## **Conclusion**

FIS Pre-Production Pilot testing was performed in accordance with a pre-established plan that included defined accreditation criteria.

### **2.1.2 Total System Testing**

**Principle: Testing addresses the total system**

- The FIS Pre-Production Pilot included the following applications:
  - ❖ Central Financial Management Reporting System (CFMRS).
  - ❖ Standard Payments Systems (SPS) and Interdepartmental Settlements (SPS/IS).
  - ❖ Bank Facilities System (BFS).
  - ❖ Payroll Systems (PS), including Regional Pay System (RFP) and the Payroll System General Ledger (PSGL).
  - ❖ Receiver General - General Ledger (RG-GL).
  - ❖ FIS CAIS/R (FCI), including
  - ❖ Revenue Canada (SAP R/3) and PWGSC (CDFS) Departmental Financial Management Systems.

## **Conclusion**

FIS Pre-Production Pilot testing included all significant systems involved in the FIS Control Framework.

### **2.1.3 Testing Sign-off**

**Principle: Mandatory activities identified in the test plan are completed, with written testing reviews and appropriate sign-off**

- Accountability for meeting test objectives was assigned to test team members (OPI's). This included formal sign-off of individual test results.

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- Test progress was monitored on a daily basis by the FIS Pilot Coordination Team.
- Detailed evaluation reports were prepared for each accounting period. The report identified, for each transaction, planned and actual start and finish dates, % complete, pass/fail, and cross-referenced any Problem Management Report (PMR) that was raised as a result of the test step.
- The results of testing were formally evaluated and approved by the members of the FIS Pilot Evaluation Committee. This include determining whether the defined test objectives had been achieved.
- Documentation was maintained of test results, by test case.

## **Conclusion**

Activities identified in the test plan were carried-out, documented and included appropriate sign-off.

### **2.1.4 Separate Test Environment**

**Principle: Testing is conducted in a separate test environment representative of the future operational environment by an independent test group before use in the operational environment.**

- The FIS Pilot Evaluation Committee was established to evaluate whether the pilot test met the objectives of the Memorandum of Understanding and the CFMRS Request for Proposal.
- Members of the FIS Pilot Evaluation Committee included representatives from Revenue Canada (functional and technical), PWGSC Central and Public Accounts Directorate, PWGSC Department 127 (i.e., a CDFS user department), Treasury Board Secretariat, in addition to the FIS Functional and Technical Directors.
- The FIS test group involved representatives from PWGSC business (Banking and Cash Management, Central Accounting and Reporting and Compensation Sectors of GOS) and technical (GTIS) areas, and Revenue Canada (functional and technical resources).
- The test environment, including the server, network, telecommunications, desktop, operating system and security, was the same as will be used in the production environment.
- For some of the applications involved in the Pre-Production Pilot (e.g., CDFS), there will be additional releases before the April 1999 "go-live" date. As these subsequent releases are available, they will be tested at the application level through the established testing process within the department

## Conclusions

- Appropriate business and information systems representatives were included in the testing team and evaluation committee.
- Testing was carried-out in an environment representative of the future operational environment.

### 2.2 32 Bit Technology

To verify the testing of the Central Financial Management and Reporting System (CFMRS) in a 32 bit environment.

#### 2.2.1 Findings

- The FIS Pre-Production Pilot test of the CFMRS (release 1.1) was run on Windows 3.1 workstations, i.e., a 16 bit environment.
- Technical testing for CFMRS release 1.2, which supports operation of the CFMRS as a 16 bit application running in a 32 bit environment, has been successfully tested in 4 different 32 bit environments:
  - Windows NT
  - Windows NT-OIR
  - Windows 95
  - Windows 95-OIR
- One problem was encountered. When installed on a Windows NT workstation, the CFMRS FIS mailbox browser did not properly display accented French characters. This was communicated through a FIS Implementation Project Errata Sheet, Version 1.0, issued March 15, 1999. The suggested resolution is to install on a Windows 95 workstation.

## Conclusion

The CFMRS version 1.2 will operate successfully in a 32 bit environment, with the one noted difficulty regarding the display of accented French characters in the FIS mailbox browser on a Windows NT workstation.

## Recommendations

*There are no recommendations.*

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**2.3 CDFS Changes**

The 1997 SUD Audit of PWGSC Development for the FIS (97-707) expressed concern that the required changes to the CDFS would not be ready in time thus causing a delay in the implementation of FIS.

In fact, the CDFS changes were implemented in time so no delays were incurred.