

United Nations



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REF: AUD-8-10: 1 (00189/06)

4 April 2006

TO: Mr. Bernard Cochemé
A: Chief Executive Officer
United Nations Joint Staff Pension Fund

Mr. Christopher B. Burnham, Under-Secretary-General for Management and
Representative of the Secretary-General for Investments of the Pension Fund

FROM: Dagfinn Knutsen, Acting Director
DE: Internal Audit Division I
Office of Internal Oversight Services

A handwritten signature in blue ink, appearing to read "Dagfinn Knutsen".

SUBJECT: **OIOS Audit No. AS2005/800/01: Audit of the UNJSPF Lawson Accounting System**

1. I am pleased to present the final audit report on the subject audit which was carried out at the United Nations Headquarters from July to December 2005. The audit was conducted in accordance with the standards for the professional practice of internal auditing in the United Nations organizations.

2. We noted from your responses of 16 and 20 March 2006, respectively, that you have accepted most of the recommendations. Your comments have been incorporated as appropriate in this report and are marked in italics. In summary, recommendations 2, 7, 11, 32 and 33 are considered to have been implemented and have therefore been closed in the OIOS database. Recommendations 4 and 8 have been overtaken by events and are therefore closed without implementation, and recommendation 30 has been withdrawn. Recommendations 5, 20, 28, 29 and 31 have not been agreed to and are being reiterated together with OIOS' comments for further consideration by the UNJSPF management.

3. All other recommendations have been agreed and their implementation is either in progress or has not been started. The recommendations falling under these latter two categories remain open in OIOS' database pending the receipt of further comments and clarifications that would allow us to close them. We would also appreciate receiving your time schedule for full implementation of the open recommendations.

4. The Internal Audit Division is assessing the overall quality of its audit process, and I kindly request that you take a few minutes to consult with your managers who dealt directly with the auditors and complete the attached client satisfaction survey.

5. I would like to take this opportunity to thank the management and staff of the UNJSPF Secretariat and IMS for the cooperation extended to the auditors in connection with this assignment.

Copy to:

Ms. Chieko Okuda, Director, IMS

UN Board of Auditors

OIOS Programme Officer

UNITED NATIONS



OIOS Client Satisfaction Survey

Audit of: The UNJSPF Lawson Accounting System

(AS2005/800/01)

	1	2	3	4	5
	Very Poor	Poor	Satisfactory	Good	Excellent
By checking the appropriate box, please rate:					
1. The extent to which the audit addressed your concerns as a manager.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The audit staff's understanding of your operations and objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Professionalism of the audit staff (demeanour, communication and responsiveness).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The quality of the Audit Report in terms of:					
• Accuracy and validity of findings and conclusions;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Clarity and conciseness;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Balance and objectivity;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Timeliness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. The extent to which the audit recommendations were appropriate and helpful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The extent to which the auditors considered your comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your overall satisfaction with the conduct of the audit and its results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any further comments you may have on the audit process to let us know what we are doing well and what can be improved.

Name: _____ Title: _____ Date: _____

Thank you for taking the time to fill out this survey. Please send the completed survey as soon as possible to:
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 By fax: (212) 963-3388
 By E-mail: iad1support@un.org



United Nations
OFFICE OF INTERNAL OVERSIGHT SERVICES
Internal Audit Division I



Audit subject:	Audit of the Lawson Accounting System
Audit No.:	AS2005/800/01
Report date:	4 April 2006
Audit team:	William Petersen Irene Gichinga Mariel Arcilla-Aguilar Muthoni Mwangi (Consultant)

Audit of the Lawson Accounting System (AS2005/800/01)

Executive Summary

Overall, the Lawson Accounting System (Lawson) is functioning adequately to support the United Nations Joint Staff Pension Fund's (UNJSPF or the Fund) information needs. In addition, adequate controls exist to protect the Lawson system environment to ensure integrity of the Fund's financial information. However, opportunities exist for improving the system functionality and user friendliness.

Lawson is not integrated with the other mission critical systems thus resulting in the need for several interfaces. These interfaces lead to inefficiencies as they call for reconciliations between source systems and Lawson. Many of the interfaces, which are also often too slow, could be eliminated by the implementation of an integrated system. In addition, to serve the evolving requirements of the UNJSPF, the use of an enterprise-wide resource planning (ERP) system would enhance the efficiency of the Fund business operations. The report details the cases for and against using Lawson as the ERP of choice and makes observations on the options available. In the meantime, the Fund should endeavor to upgrade the Lawson system to the latest version. In doing so, the Fund will continue enjoying vendor support since the version in use, Version 7.2, is no longer being supported by the vendor.

The reporting functionalities of the system do not allow for multi-period reporting as current financial functions cannot report more than one year of historical data. To further enhance the system's functionalities the Office of Internal Oversight Services (OIOS) supports the initiative of the Fund to implement the Accounts Receivable module since processing receivables in the Accounts Payable module as is currently the case does not provide the level of detail necessary for proper control and monitoring. OIOS notes, however, that the UNJSPF intends to move all processing of administrative expenditures to the UN Accounts Division. This change could reduce reconciliation needs, but it should be done only after consideration of all likely consequences.

Lawson's use as a budgeting tool should be enhanced to include an online review of funding sufficiency. Also, related application controls have to be tailored to ensure that all expenditures for which there is a budget line are correctly charged to the relevant budget code.

The application language of the Lawson system is a COBOL-like proprietary language for which there may not be too many programmers. Although the Fund currently has qualified staff to support the language, OIOS is of the view that the primary disadvantage of continuing to use COBOL for the core logic is the inability to find other people with the skills or willingness to maintain COBOL code.

The UNJSPF maintains adequate logical security for all Lawson system modules in operation. However, the current user management system is too manual and therefore inefficient and prone to errors. There would be merit in having a centralized system that would manage all users' profiles. In addition, OIOS recommends implementation of a file purging and archiving process or policy as none currently exists. While there is prevalent use of biometrics technology at the UNJSPF secretariat side, the same technology is not available at the Investment Management Services

(IMS). In OIOS' view, there is a need to standardize the security levels at the UNJSPF and the IMS.

Segregation of duties control should be strengthened to ensure that the staff do not perform incompatible functions. As well, the quality control process should be formalized. Notwithstanding the small size of the Information Management System Section (IMSS) and hence easier control and monitoring, application developers should not be provided with access rights to the production environment. The application change management process should be formalized and documented including users signing off to evidence receipt of requested changes.

The Lawson database is currently managed by the IT developers and consultants from The Revere Group, Ltd. The database administrator should be given a more active role in the administration of the database and, as a minimum, needs to be involved in decisions on production issues, such as the number of instances to create, and in the administration of the database including granting and restricting access to the users.

With regard to the application controls, error messages should be more explicit while the audit trails needs to be improved. User profiles should be deleted promptly when users either leave or change functions and the Fund should consider automating the validity periods of access profiles. Also, the IMSS should consider making Lawson screens more user-friendly by enhancing the screens to include pertinent details such as totals, debit and credit columns, and by showing validity status of the transactions and more specific descriptions of both valid and voided transactions recorded.

There were several cases noted of direct procurement for Lawson related services, some involving amounts in excess of \$200,000. The UNJSPF has generally followed the guidelines for direct procurement introduced by the Pension Board in 1996. However, OIOS is of the view that the UNJSPF management, in cooperation with the UN Procurement Service, should review the existing guidelines for conducting direct procurement, and present all Lawson system-related contracts in excess of \$200,000, including those awarded using the Fund's direct procurement authority, to the Headquarter Committee on Contracts (HCC) for review.

Table of Contents

	Paragraphs
I. INTRODUCTION	1 - 4
II. AUDIT OBJECTIVES	5
III. AUDIT SCOPE AND METHODOLOGY	6 - 8
IV. FINDINGS AND RECOMMENDATIONS	9-158
A. SYSTEM FUNCTIONALITY	9-55
(i) Lack of integration	9-24
(ii) System interfaces	25-32
(iii) Finance and accounting functions	33-55
B. GENERAL CONTROLS	56-106
(i) Security	56-63
(ii) Control over the Lawson database	64-66
(iii) Archiving and purging	67-69
(iv) Segregation of duties	70-73
(v) Application change management	74-78
(vi) System support	79-88
(vii) Documentation and training	89-97
(viii) Lawson screens	98-102
(ix) Application development team needs to be strengthened	103-106
C. APPLICATION CONTROLS	107-124
(i) Good application controls	108
(ii) Ambiguous error messages	109-112
(iii) More edit checks needed	113-116
(iv) Need for adequate audit trails	117-121
(v) Tracking of software changes	122-124
D. PROCUREMENT RELATED TO THE LAWSON SYSTEM	125-152
(i) Direct Procurement authority granted to the Secretary/ Chief Executive Officer	126-149
(ii) Documentation of supporting invoices	150-152
E. BUSINESS CONTINUITY AND DISASTER RECOVERY	153-158
F. ACKNOWLEDGEMENT	159
ANNEXES	
I Lawson Interfaces	
II Procurement Policies and Procedures (extracts)	

I. INTRODUCTION

1. Prior to 1999, the United Nations Joint Staff Pension Fund (UNJSPF or the Fund) was using, for its accounting information needs, a legacy system known as the General Accounting System which was also the system the United Nations (UN) was using. When the UN migrated to their current system, the Integrated Management Information System (IMIS), they indicated that the system would not be customized for the UNJSPF.
2. The General Accounting System was deficient in many ways and was not Year 2000 compliant. Therefore, when the General Accounting System was discontinued, the UNJSPF sought out another system to replace it. The Lawson Accounting System was acquired in 1999 to integrate the legacy accounting systems within the Fund Secretariat while at the same time assuring Y2K compliance. The summarized activities of the Investment Management Service are uploaded into the Lawson application monthly via a manual interface.
3. The Lawson Financial Accounting Software (Lawson System) runs on a RS/6000 platform under an AIX operating system. The application language is a COBOL-like proprietary language and the Database Management System is DB2. Due to the uniqueness of the UNJSPF, the Lawson Application has undergone significant modification and customization.
4. The Lawson Accounting System is one of the mission critical systems utilized by the UNJSPF. All financial activities of the UNJSPF are recorded in the General Ledger. However, most data supporting the General Ledger transactions originate from the other pension fund applications that are uploaded into the Lawson via interfaces as shown in Annex I.

II. AUDIT OBJECTIVES

5. The objectives of this audit were to: (a) assess the existence and adequacy of system controls in maintaining data integrity and for ensuring that resources are safeguarded against loss, waste and abuse; (b) provide an independent assessment of Lawson System's functionality and complexity of the technology environment, (c) ensure the accuracy and reliability of management information produced by the system and (d) review the appropriateness of upgrading Lawson into an enterprise-wide resource planning (ERP) system vis-a-vis acquiring another ERP available in the industry. In addition, the audit covered the procurement aspects of the system and ancillary consulting services in order to provide management with information concerning the Fund's compliance with United Nations procurement rules and the exercise of authority for undertaking direct procurement.

III. AUDIT SCOPE AND METHODOLOGY

6. As a first time audit of the Lawson System, the audit covered the period since the system's inception in 1999 to the present. The exercise focused on the effectiveness of Lawson's support of the Fund's activities by reviewing the operational processes supported by the system and the relationship between business objectives and the Lawson System functionalities. It involved evaluating whether data, system processing and system access are controlled. OIOS reviewed the physical and

environmental controls, the database and application access security, application change control procedures and the operating system maintenance. With the agreement of the UNJSPF management, the audit's scope was expanded to include a review of the procurement case files for the initial acquisition of the Lawson system as well as contracts awarded to The Revere Group for system maintenance and support.

7. In reviewing the system's adequacy as a platform for an ERP system, the technological level of Lawson was assessed and compared with existing IT applications supporting similar operational functions by carrying out a high level overview of the functional requirements of the Pension Fund and an inventory of the hardware and software infrastructure.

8. Information was obtained on both the automated and manual aspects of using Lawson System. This included examining documentation, written policies and procedures and interviewing managers as well as users. System tests were carried out and observations of users' activities were made. The relative level of IT related risks was determined through a survey of the general controls and Lawson-specific controls. The risks were assessed in planning, organizing, change implementation, delivery and support of Lawson. OIOS conducted this audit in accordance with the standards for the professional practice of internal auditing in United Nations organizations.

IV. FINDINGS AND RECOMMENDATIONS

1. SYSTEM FUNCTIONALITY

(i) Lack of integration

9. OIOS' walkthrough and review of the Lawson Accounting System revealed that the system lacks integration with the other mission critical systems of the UNJSPF including the benefits calculation system PENSYS as well as the workflow processing system Content Manager.

10. As a result of this lack of integration, users sometimes have to key into Lawson information already found in other systems. This results in inefficiencies and creates room for errors during the manual keying in of the data. Also, there is currently no single system that contains all the information for a beneficiary.

11. Lawson is updated with the financial information from the other systems via interfaces leaving other pertinent details in the other systems. A beneficiary who requests financial and/or non-financial information can often not obtain an immediate response since the looking-up of information has to be done from various systems. In addition, reconciliations have to be performed after every interface to ensure the integrity of data uploaded into Lawson. Since there are many interfaces, the workload of the Finance Unit staff is greatly increased.

(a) Case for an enterprise-wide resource planning system (ERP)

12. At the time of acquisition, the Fund detailed out their system requirements. In the opinion of OIOS, the Lawson Accounting System is currently meeting those requirements as they have been

initially defined. However, implementing an ERP would eliminate the need for many interfaces that are currently done, as it would be a repository of most if not all relevant financial and non-financial information. Since moving to an ERP system would probably require some process re-engineering, implementation of the ERP could also result in improvements in the Fund's business operations.

13. Currently every UNJSPF unit maintains its own knowledge on its particular process and function. Integration would ensure that information is more readily available thus improving business decisions. Users in different departments would all see the same information and could update it, where authorized. When one business unit finishes with a process activity, it would be automatically routed via the system to the next unit making it easier to track the workflow.

14. The ERP would also serve to increase efficiency and effectiveness, as there would be a reduction of data entry duplication and in the time required to reconcile data between disparate systems. There would also be fewer security risks due to reducing the number of systems in operation.

15. OIOS acknowledges the complexity of the operations of the UNJSPF and is aware that extensive customization of the ERP system would be required. Accordingly, the following are some of the issues to be considered as decisions are made to move towards an ERP:

Factors favoring the use of Lawson as an ERP system

- The current Lawson Accounting System has been serving the financial needs of the UNJSPF adequately. Users are comfortable with it and, generally, it is considered quite stable. Only a few enhancements would be required to make it more user-friendly.
- Implementing an ERP involves not just the IT system changes, but also a business culture change since it transforms the way a company does business. Implementing an ERP involves business process review and re-engineering changes. This is a decision that has to be driven by management and supported by managers so that users will embrace the changes. As users are already familiar with Lawson, resistance to change will be lower than in the case of an entirely new system.
- Extensive customization has already been made to the current Lawson system. It would take a much shorter time to implement the Lawson full suite than to start from scratch with another vendor which could also reduce the implementation costs. The support systems have also been established and the application developers are well conversant with the programs.

Factors favoring the use of an alternative ERP system

- Given the complexities and expected growth of the Pension Fund, the small size of Lawson Associates has to be considered. In this dynamic IT world, Lawson Associates may not be able to compete effectively with larger organizations offering similar services.
- There may be merit in implementing an ERP system already used by other UN organizations, preferably one which is already being used by organization(s) having a large number of pension participants.
- The UN requirement for mobility of staff should also be taken into consideration. The Pension Fund could benefit by implementing a system that can be readily used by other UN staff as it

would be ensured of staffing resources as and when the Fund's staff have to leave in compliance with this requirement.

- The underlying technology also has to be considered. The Lawson system's application language is a COBOL-like proprietary language. Although there is a plan for Lawson vendors to move into Java programming language, the existing application shortcoming has to be assessed as it may prevent the vendor from adding new functionality.

16. Whatever course the Fund takes, robust research needs to be undertaken on ERP options available in the market in order to identify the system that best suits the Pension Fund's unique needs. The future direction of the Information and Communications Technology (ICT) strategy is to combine the Investment Management Service's systems and the UNJSPF Secretariat's systems and this also has to be taken into consideration when acquiring the new system as it will increase the requirements for the system that is to be implemented.

17. The system chosen should have good customization capabilities and a number of knowledgeable partner vendors to support the product. In addition, it should have a wide variety of modules available since this could avert the need to replace the system as the Fund grows and changes. Ease of use is another desirable feature as training is a significant implementation cost.

18. Consideration should also be paid to the financial strength and business reputation of the ERP vendor selected. The company behind the product should have a strong financial position and diverse customer base. Finally, thorough estimates of the implementation costs and timeframes, including customization, should be prepared for the alternative ERPs under consideration, with clear cost/benefit analysis of each. This is especially relevant in the context of the tight UNJSPF budget constraints as any funding delays may escalate project costs.

19. The decision on the ERP to be acquired should be made on the basis of the cost/benefit analysis and a risk assessment of the alternative ERP systems. The ERP's principal aim should be to support the business goals of the organization, and an effective IT governance structure has to be in place to direct and control the achievement of its goals while mitigating the risks versus the returns on the investment in the ERP. 'COBIT', as promulgated by the Information Systems Audit and Control Association (ISACA) is considered to be the model for IT governance, and the Fund may benefit from its guidance.

20. In the meantime, as the Fund continues to use the disparate systems, immediate action should be taken to improve interface controls. Section A (ii) below details our findings on the system interfaces. Also, the Fund should make efforts to ensure that financial information held in the other systems is promptly uploaded into Lawson at the end of each month.

Recommendation 1

OIOS recommends that IMSS carry out a robust cost-benefit study of suitable enterprise-wide resource planning systems available to help the Fund in planning, budgeting, benefits processing, evaluating and implementing management information. (AS2005/800/01/01)

21. *UNJSPF accepted recommendation 1. IMSS, in cooperation with the UNJSPF business users, has initiated a project to study the Fund's options regarding the selection of an ERP system. All criteria mentioned in this recommendation will be considered in the study. Recommendation 1 is considered to be in progress and will be closed when OIOS is provided with the result of the cost-benefit study.*

(b) Data Synchronization between Lawson and PENSYS

22. The financial information used for management decision-making needs to be complete and accurate. The monthly payroll is fully processed in PENSYS system. Historical data interface is then made into Lawson by the 10th day of the following month. Thus, the financial system is always lagging behind the payroll system, and users often have to use the two systems to obtain a complete picture of transaction details. Also, corrections of errors in the payroll affecting Lawson often have to wait until the interface has been run, a practice which leads to inefficiencies.

23. OIOS is of the view that running the payments historical data interfaces earlier in the cycle, ideally as soon as the payroll is run, would ensure an earlier capture of payroll information in Lawson. Implementation of an ERP system would result in a more integrated approach that would eliminate the need to run this interface, and thus the financial information would always be current. OIOS was informed during the exit conference that following our discussion of this issue with the responsible UNJSPF staff, the historical data interface for the month of December 2005 was done before the month end, a practice which will help ensure that the payroll related information in Lawson System is always up to date.

Recommendation 2

OIOS recommends that the UNJSPF management run all payroll historical data interfaces earlier in the cycle before the end of each payroll month so as to ensure that the financial information recorded in the system is more representative of the actual account balances.
(AS2005/800/01/02)

24. *Recommendation 2 was accepted and implemented by the Fund. Effective January 2006, the payroll historical data interfaces are now being run on the Fund's "voucher date" (i. e., approximately 20th – 23rd of the month), and the accounting records are updated accordingly. The new procedure enhances the Fund's handling of returned payments. In view of the above, this recommendation has been closed in the OIOS recommendations database.*

(ii) **System Interfaces**

25. Effective system interfaces depend on reliable data and effective electronic communications procedures which ensure that data are transmitted promptly and are verified and reconciled to the source systems. Data reliability is ensured when proper interface controls are in place to detect and correct changed or deleted data.

26. Good interface controls include control totals to ensure that data is processed accurately. The audit's preliminary review indicated that system interfaces are fully functioning and are indeed posting the financial transactions accurately and completely, as proper reconciliations were being done at every interface level. OIOS is also pleased to note that the responsible officers duly approve these reconciliations.

(a) Controls over duplicated entries should be enhanced

27. OIOS was informed that there are controls to detect duplication of data for those transactions that have unique identification references such as invoice numbers for the Accounts Payable module or Cash Voucher references for the Cashbook module. However, OIOS did not find any controls to prevent double uploading of data in the General Ledger interface of the Investment Management Services' (IMS) transactions. OIOS is of the view that the UNJSPF should put in place controls to detect duplications at the point of uploading General Ledger transactions from the Master Record Keeper accounts of IMS.

(b) Need for automation

28. All interfaces are currently user-triggered. Also, there are many interfaces most of which cannot be run concurrently, which requires coordination between individuals running the interfaces so as not to create a conflict. This situation is exacerbated by the fact that most of the interfaces take long periods of time to run. OIOS, during a walkthrough of the PENSYS weekly payments interface - LA20, observed that it took up to 30 minutes to complete this interface.

29. Change orders to an existing purchase orders cannot be referenced to the old purchase order in Lawson application, and therefore, such references are done manually. Automating this process with a feature to automatically update Lawson documents with any changes in originally uploaded documents would ensure that subsequent changes are promptly posted in Lawson, and thereby ensure completeness of information.

(c) Reconciliation controls could be improved

30. Reconciliations are a good interface control since they ensure that the data uploaded agrees to the source system. The following may act as useful guides in the reconciliation process:

- Reconcile key accounts or difficult accounts more frequently, even daily;
- Complete reconciliations away from the end of the period for items whose cycles do not correspond with the end of the period; and
- Where feasible, replace reconciliations with variance analyses using tolerances based on materiality guidelines.

Recommendations 3 and 4

OIOS recommends that IMSS:

- (i) Establish an application control to prevent potential duplication of data that could result from erroneous double uploads of Investment Management Service General Ledger data (AS2005/800/01/03); and
- (ii) Consider automating the interfaces to enhance efficiency and ensure concurrency of data in disparate systems. (AS2005/800/01/04)

31. *The UNJSPF agreed with recommendation 3. Considering that IMS is currently finalizing the change of vendor providing the Master Record Keeper services, new controls will be introduced when the change is completed. It is expected that data transfers to the Fund Secretariat's general ledger will undergo a series of edits that will eliminate the risk of duplication. This recommendation has been recorded in OIOS' database as not yet started.*

32. *Following the Fund's decision to use IMIS as the sole system for the recording and monitoring of budget expenditures, the management considers recommendation 4 to be overtaken by events. Only very high-level summary entries will be made within the Lawson environment to complete expenditure records for financial reporting purposes. These entries will be based exclusively on data within IMIS as controlled by the Executive Officer of the Fund. This recommendation has been closed in OIOS' database.*

(iii) Finance and accounting functions

(a) General Ledger reporting functions

33. The General Ledger function is central to the financial accounting system. It is the ultimate repository for all financial information which it receives and stores from the subsystems and other system interfaces. The General Ledger controls the information as it is entered, subject to edit and validation rules, and it provides a functionality to allow inquiries into these transactions as well as immediate access to summary balance information with drill-down access to detailed transactions.

34. However, the current financial functions do not permit reporting of multiple years of historical data as the reporting is restricted to one financial year only. For instance, it is not currently possible to report the biennium transactions of an account balance such as the Emergency Fund in a single report. Where users need to review data for a period spanning across two annual periods, for instance transactions for the period 1 April 2003 to 30 May 2004, two reports have to be produced. In view of the fact that the Fund often has a need for information that may be spread over a biennium or over several years, OIOS is of the view that the system reporting should be enhanced to allow for multiple period reporting.

Recommendation 5

OIOS recommends that UNJSPF management consider enhancing the General Ledger module to enable the capture, maintenance and reporting of financial information at the level of detail needed to meet internal and external user requirements. (AS2005/800/01/05)

35. *The Fund did not agree with recommendation 5 and explained that the enhancement suggested would not be significant or add enough value to justify a request for resources as a priority over other initiatives in Lawson. This issue pertains to the reporting period of the emergency fund which does not match with the Fund's financial reporting period and to the biennial figures for which two sets of annual figures are provided. Although the reports are not in the most convenient format, the Fund believes that they provide all related transactions.* OIOS continues to view information availability in a user friendly format as an important attribute of any accounting system. Although manipulation of data outside the system remains an option, it could lead to inefficiencies. OIOS therefore reiterates its recommendation that the Fund enhance the Lawson system to allow for improved reporting functionalities.

(b) Accounts Receivable processing

36. Accounts receivable are currently processed in the Lawson system's Accounts Payable module, as the UNJSPF has not implemented the Accounts Receivable module. As part of the recent audit of the Geneva Office (AS2005/800/2), OIOS requested a breakdown of the \$1.8 million overpayments for the year ended 31 December 2004 and was informed that the system is not currently able to produce an itemized listing of the receivables by beneficiary. Further, the system could not provide information on accounts that had been in a receivable position but which had been subsequently cleared. Subsequent to the audit fieldwork, OIOS was informed that the Fund has implemented a report that provides the necessary breakdown of the accounts receivable from the system's Accounts Payable module.

37. The audit further showed that to the extent that PENSYS (the benefits processing system) and Lawson are not integrated, it was not possible to reconcile the overpayment amounts shown in the two systems. To obtain the individual balances for the overpayments, one would have to know the exact accounts which were overpaid. Further, the system could not be used to provide an ageing of the overpayments so as to determine the efficiency of the collection efforts.

38. As part of the current audit, OIOS requested a listing of outstanding receivables as of 31 December 2004, and was provided with a detailed report showing all transactions of overpayments relating to death including the recoveries made. According to the Payments Unit staff, it is not possible to produce a listing of the outstanding receivable only as these are currently reported in the accounts payables accounts of the vendors and a net figure reported.

39. In reviewing the invoices from Lawson Software, the UNJSPF was billed for the Accounts Receivable module even if the UNJSPF does not utilize the module. The total amount billed since 1999 is approximately US\$62,200. Upon clarification with IMSS, OIOS learned that Lawson

charges for the maintenance of the whole package regardless if a module is used or not. Therefore, it would further benefit the UNJSPF to maximize the use of the package and start using the Accounts Receivable module.

40. The Fund plans to implement the Accounts Receivable module and has included funding for this requirement in its 2006-2007 budget request. OIOS supports this initiative, as it will enable better management information reporting. The Accounts Receivable application acquired should facilitate monitoring of receivables and enable on-line searches of vendor balances and recoveries made. To complement the investment in the Accounts Receivable application, OIOS reiterates the recommendation made in its audit report (AS2005/800/2) that the UNJSPF needs to establish policies and procedures for the management and collection of accounts receivable including procedures for writing off amounts deemed uncollectible and for determining when to end collection efforts.

Recommendation 6

OIOS recommends that UNJSPF management procure and implement the Lawson Accounts Receivable module and ensure that when implemented, the module enables better control, monitoring and reporting of the Fund's accounts receivable balances.
(AS2005/800/01/06)

41. *UNJSPF accepted recommendation 6 and indicated that the Accounts Receivable (AR) module was already in the Fund's possession during the main Lawson implementation but was not considered a priority project at that time. The Fund was more involved then with large projects such as "JP Morgan Chase" and "Content Manager" requiring significant resource requirements, maintenance and voluminous daily work.*

42. *The UNJSPF's request for additional staff resources, justified in part by the need to implement the AR module, has been approved in the 2006-07 Budget, and the Fund's IT Executive Committee recommended priority implementation of the AR module in 2006. This recommendation is considered to be in progress and will be closed in the OIOS recommendation database upon implementation of the AR module.*

(c) Processing administrative expenses

43. Administrative expenses are currently processed in IMIS and uploaded into Lawson via interface. To recognize these transactions, they are also posted into Accounts Payable module without the amounts as 'Records Only Payments' (RONY). Before being posted by the Payments Unit staff, a staff member in the Executive Office summarizes the results of the IMIS upload for onward transmission to the Payment Units. Any modifications made to data in the source system also have to be entered in Lawson.

Processing of administrative expenses to be done in IMIS

44. All allotments are issued in IMIS. In addition, other administrative expenditure incurred by the UN on behalf of the UNJSPF are entered into IMIS after the necessary approvals. This information is uploaded into Lawson on a weekly basis via interface.

45. The UN reimburses the UNJSPF one third of the qualifying administrative costs as per a cost-sharing schedule. Thus, at any one time, there is some amount owing to/from the UN and vice versa. As the accounts are currently maintained in both Lawson and IMIS without either having the complete set of information, onerous reconciliations have to be performed periodically. As of the time of the audit, there was an aggregate unreconciled amount of \$1.7 million

46. The UNJSPF made a proposal and obtained approval to migrate the processing of all administrative disbursements from Lawson to IMIS. The plan to revert back to IMIS effective 1 January 2006 should alleviate the risks posed by the current need for periodic interfaces and reconciliation. OIOS points out that the migration process needs to be carefully planned and implemented so as to ensure that the integrity and completeness of the information is preserved.

Recommendation 7

OIOS recommends that UNJSPF management exercise due care in implementing the planned migration of all administrative expense processing from Lawson to IMIS in a way that minimizes the duplication of effort by the Executive Office and Payments Unit. (AS2005/800/01/07)

47. *The Fund indicated that the migration of all administrative expense processing Lawson to IMIS has been completed.* Recommendation 7 is considered implemented and has been closed in the OIOS recommendations database.

(d) Lawson as a budgeting tool

48. The budgeting process is used both for control and evaluation of the financial resources used by an organization. Budgets establish accountability for purposes of management and in order to achieve intended results, the managers must receive accurate, reliable and relevant information. Also, they must continuously monitor the relationship between the actual expenditures and budgeted amounts. This is often done through pre-expenditure obligation and certification that funds are available.

Lawson system does not ensure funding sufficiency before establishing an obligation

49. OIOS tested Lawson's controls in the budgeting process with a view of establishing whether the system facilitates the generation of an obligation only after ensuring funding sufficiency. The audit found that all sampled purchase orders raised in the system during our testing were released without regard to the availability of funds. OIOS established that Lawson allows the obligation of amounts beyond current un-obligated balances, which could lead to over expenditures. Whereas over-

expenditures within object codes may at times be necessary, a good system should alert the user of the potential over-expenditure at the point of obligating the funds.

Unreliable budgeting information

50. The financial information extracted from an organization's accounting system is an important component of the suite of performance information provided to managers. The quality and usefulness of this financial information, both for internal and external use, is determined by its relevance, reliability, comparability and timeliness. Information relating to the status of budgeted expenditures is useful for controlling and monitoring the budget accounts.

51. OIOS established that where wrong screens are used to process transaction documents, the system information is compromised. The screen MA40 is used for matching invoices to the related purchase orders. When the full purchase order amount is invoiced, the purchase order closes automatically. All invoices for which purchase orders are not raised are processed via screen AP20. OIOS is concerned that purchase orders, which are approval documents, are not raised for all administrative expenses.

52. For example, invoice ref. 9119849 dated 20 May 2005 for \$137,139.10 (for which purchase order ref. 9890 had been raised) was processed using the direct payments screen AP20 instead of the invoice-matching screen MA40. As a result, the purchase order remained unclosed, and even the payment ref. 6668 had been made on 26 May 2005, the amount was still being reflected as an unliquidated obligation in the budget figures. During the audit, the error was corrected by the FSS staff by closing the purchase order manually.

53. Such possible errors can be critical since they result in incorrect budget status information, which is needed for decision-making. As well, such errors could result in inefficient use of resources in the reconciliation process. Appropriate controls should be implemented to ensure that all administrative expenses are correctly reflected in the respective budget lines.

54. All administrative expenses should be supported by a system purchase order both to evidence approval of the expenditure and to enable proper system processing. UNJSPF should also consider establishing edit checks to ensure that screen AP20 does not accept administrative expense entries. Appropriate budgetary control reporting capabilities should also be established which should include reports showing budgetary control exceptions.

Recommendation 8

OIOS recommends that the UNJSPF management:

- (i) Consider enhancing the Lawson system to facilitate generation of an obligation only after ensuring its funding sufficiency; and
- (ii) Require purchase orders for all administrative expenditures as a control for obligating funds and to ensure that expenditures are processed using

the correct screens and hence charged to the correct budget lines. (AS 2005/800/01/08)

55. *UNJSPF accepted recommendation 8 and decided from January 2006 to process all payments related to budget expenditure through the UN-IMIS system. Recommendation 8 is therefore considered to be overtaken by events and has been closed in OIOS' database.*

B. GENERAL CONTROLS

(i) Security

56. Good information security standards call for an appropriate security environment that ensures availability, confidentiality, and integrity of information in the system. An effective security framework governing security access should be implemented and regularly maintained. Management should set clear direction and demonstrate their support for information security through the issue of a corporate information security policy.

UNJSPF security standards and environment are adequate

57. OIOS is pleased to note that the UNJSPF maintains adequate logical security for all Lawson system modules in operation. The audit found that a proper security policy and procedures are in place. There is a two-step access process into Lawson; first to the operating system and then to the application system.

58. Password restrictions and access control using biometrics technology (iris scanning to access the data center and single log on using fingerprint scanning at every terminal) have been implemented. In addition, tokens are used for remote access to the systems. As well, user logs are used to monitor user activities. IT facilities supporting critical or sensitive business activities are housed at the data center where the equipment is physically protected from security threats and environmental hazards. Incidents affecting security are reported as quickly as possible.

Need for a centralized user management system

59. Requests to access the system are sent to the system administrator through the help desk which assigns work tickets to the requests. The security administrator creates the User-ID with a password that must be changed at the first log on. Once created, a message is sent to the Lawson administrator who then creates a logical log in for the user. The user profile, class and group are all assigned at this level. There are also password duration and length restrictions. However, the current system is manual and therefore inefficient and prone to errors.

60. Also, different individuals control the different systems' logical access. The application developers control Lawson access controls, whereas the security administrators manage the system access control. OIOS acknowledges the complex environment in which the Fund operates given the disparate systems in use and is of the view that a centralized user management system would enhance the management of the various users' accounts in the different systems.

Recommendation 9

OIOS recommends that the UNJSPF management consider acquiring or developing in-house an automated centralized user management system that would assign and update users' profiles in a more efficient manner. (AS 2005/800/01/09)

61. *The Fund accepted recommendation 9 and explained that a centralized and automated user profile management will be possible with the implementation of an Enterprise Resource Planning (ERP) system. In the interim, IMSS has introduced several systems and technologies including biometrics, which provide unique user profiles and protect mission-critical systems from unauthorized access. OIOS considers the implementation of this recommendation as not yet started.*

Investment Management Service security controls should be strengthened

62. While there is prevalent use of biometrics technology at the UNJSPF Secretariat, the same technology is not available at the Investment Management Service (IMS). Users at the IMS still access the system via IDs and passwords. To the extent that IMS is the arm that manages and safeguards the investment assets of the Pension Fund, OIOS is of the view that the security levels at the IMS should be strengthened. At a minimum, the security standards should be standardized with those of the UNJSPF Secretariat.

Recommendation 10

OIOS recommends that the Director of the Investment Management Service strengthen the level of security controls in IMS, including mapping the security standards to those in place in the UNJSPF Secretariat. (AS 2005/800/01/10)

63. *The Investment Management Service agreed with recommendation 10. IMS initially raised a requisition for the requirements in October 2005 but did not obtain Procurement Services' commitment due to time and staff restrictions. IMS however re-entered the requisition in February 2006 and indicated that they will work in close coordination with the Fund Secretariat in implementing the most suitable solution of strengthening its security controls. OIOS has recorded the implementation of this recommendation as being in progress and will close the recommendation once a solution has been identified and implemented by the IMS and the Fund Secretariat.*

(ii) Control over the Lawson database

64. Continuous data auditing involves periodic monitoring, recording, analyzing, and reporting of database activity. However, OIOS found that the Database Administrator (DBA), who is responsible for monitoring the database environment, has not been performing this function, since the DBA functions are currently limited to resource allocation in the Lawson database. Rather, the application developers and the Revere consultants actually manage the Lawson database, as they create the

database tables and make changes to the database outside of the DBA function. Due to this situation, the DBA did not know who had access to the DB2-instance owner, which represented a security risk for the Fund.

65. In commenting on the DBA's functions with regard to the Lawson database, the application development team stated that since the database was part of the Lawson software suite, the DBA has limited functions for this database. In OIOS' view, however, control of the entire system should reside in-house and the DBA, at a minimum, needs to be involved in decisions on production issues such as the number of instances to create, and in the administration of the database including granting and restricting access to the users. The audit also established that the application developers have full access to the Lawson database table. In OIOS opinion, this represents an internal control weakness.

Recommendation 11

OIOS recommends that control of the Lawson database be managed in-house as part of the Data Base Administrator's responsibilities. (AS 2005/800/01/11)

66. *The Fund advised that the Lawson database management is now the responsibility of the IMSS Database Administrator.* OIOS considers this recommendation implemented and it has been closed in OIOS' database.

(iii) Archiving and purging

67. Mission-critical applications collect enterprise business data that must be managed for long periods of time and protected from loss. However, maintaining all this data online in production databases can affect the efficiency of processes needed to optimize performance, conduct routine maintenance and to ensure data recovery in the event of a disaster.

68. Archiving is a process to store historical data to off-line media with the capability to reload that data back into the production system or alternate systems, as required whereas purging is a process for deleting obsolete data from databases. OIOS found that no file purging or archiving policy or process currently exists for Lawson. This can cause inefficient use of resources as old files are still retained in the on-line system taking up space on the system. It could also cause the system to slow down and to possibly run out of disk space.

Recommendation 12

OIOS recommends that IMSS develop and implement a purging and archiving policy and procedures to ensure efficient utilization of the Lawson system resources. This policy should be communicated to the various users so they are aware of the process. (AS 2005/800/01/12)

69. *The Fund accepted recommendation 12 and advised that, as part of the preparatory work for issuing the Request for Proposals for the Lawson Upgrade project, the policy regarding archiving was reviewed. When the upgrade has been completed, data for the previous three biennia will be maintained as fully accessible on the database and any older data will be archived.* OIOS has recorded in its database that the implementation of this recommendation has not yet started.

(iv) Segregation of duties

70. Effective segregation of duties represents a vital part of an organization's internal control system to ensure that no single individual inappropriately handles all aspects of a transaction or business process, thus preventing unauthorized actions or access to records.

71. In a computing environment, segregation of duties calls for separation of incompatible functions. To reduce the risk that fraud or errors could occur and go undetected, duties and responsibilities for authorizing, processing, recording and reviewing data as well as initiating, modifying, migrating and testing of programs should be separated. Responsibilities for application and systems development should be segregated from computer operations, security, database administration and quality assurance functions.

72. The audit disclosed that all application developers have full access and update rights to the production environment. Further, due to the lack of a quality control function, the application developers perform the function of migrating programs into the live system. This poses a risk that improper program changes could be made, or computer data and systems resources could be altered or damaged. OIOS considers this to be a serious weakness in internal controls and believes that appropriate segregation of duties controls be established.

Recommendations 13 and 14

OIOS recommends that the UNJSPF management:

- (i) Take appropriate action to restrict application developers' access to the production system in order to maintain an appropriate segregation of duties (AS 2005/800/01/13); and
- (ii) Identify suitable staff outside the application development group to carry out the quality control function including migrating tested systems into the production environment. (AS 2005/800/01/14)

73. *The Fund accepted recommendations 13 and 14 and advised that IMSS will introduce a quality control function for migrating system changes to the production environment. This change will become effective with the upgrade of the Lawson system, expected to be completed in the 2006-2007 biennium.* OIOS therefore considers the implementation of these recommendations as not started.

(v) Application change management

Controls over change requests

74. Applications change controls are an essential part of an organization's overall security environment. Failure to properly manage application changes can result in vulnerabilities as well as lost time from resolving issues more than once. A lack of control over such changes could also present an opportunity for unauthorized persons to gain access to or damage the system.

75. Change requests are currently made via the help desk function but are also done directly by the application developers depending on whether the case is an exigency. However, there is currently no documented approval of these requests, which could potentially allow unauthorized changes to be effected. Also, some of the change requests are made via telephone. In OIOS' opinion, a formalized change request process should be put into place, which should include a documented request made by the user section and authorization by a designated official. A mechanism also needs to be established to analyze the effect of application changes on other users.

User testing

76. To ensure the integrity of the change management process, there should be three discrete and distinct environments; development, user testing and production. No changes to a production environment should be made, be it software upgrade or code modifications, without testing the effects of those changes in a test environment where end users will not be affected.

77. OIOS is of the view that one of the key aspects of the successful implementation of a project that significantly imparts on existing operations is to ensure that affected users fully understand, learn and embrace the new changes that may be brought by the program enhancement. OIOS was informed that all changes are tested with the users before being introduced into the live environment. However, the audit found that there are no sign off forms to evidence the users' acceptance of system changes after testing.

Recommendations 15 and 16

OIOS recommends that IMSS put into place a system that will ensure that:

- (i) All change requests are documented and duly authorized by a responsible IMSS officer (AS 2005/800/01/15); and
- (iii) Formal and documented user acceptance of the change prior to implementation in the production environment. (AS 2005/800/01/16)

78. *The Fund accepted recommendations 15 and 16, however, implementation of these recommendations has not started since implementation will be accomplished with the upgrade of the Lawson system.*

(vi) System support

79. The United Nation's contract with Lawson Inc. includes a provision for support of the software for any errors, malfunctions or defects that may arise in the system that would prevent it from performing in accordance with the specifications. Since the Lawson system's introduction in 1999, Lawson's vendors have provided maintenance and support of the main Lawson system applications in use at the UNJSPF, whereas customization and enhancements support has been done in-house with the assistance of the consulting firm, The Revere Group Ltd.

Latest version of the Lawson system has not been implemented

80. Lawson's latest software release is version 8.1 however, the UNJSPF is still using version 7.2, since the upgrade was never implemented. According to the Chief of IMSS, this was due to the delays by the UN Procurement Division in identifying a suitable vendor to perform the upgrade. However, the UNJSPF is still using Lawson application version 7.2.1. and Lawson environment version 7.3.1.

81. OIOS is concerned that the system has not been upgraded since the Lawson vendor included a reminder in its maintenance invoice for the period 24 November 2003 to 23 November 2004, that indicated its support for the 7.2.1 application and 7.3.1 environment releases would be discontinued in May 2004. Notably, as required by the contract arrangements, the UNJSPF has continued to pay the annual maintenance and support fee of \$77,000 but has not been receiving the support.

82. The current situation where the existing version of the Lawson system is not being supported exposes the Fund to a potential risk in the event of a significant system malfunction. In OIOS' view it is in the UNJSPF's interests to upgrade the system to the latest version as soon as possible to avert this potential risk and to provide users with the added functionality of the new web-enabled software.

83. OIOS is also concerned that the application developers do not support the Lawson users in the Investment Management Service. In addition, they do not receive any training on any new features of the system. Interviews with the IMS users indicated that there was a need for additional support and training to help ensure efficiency in their operations.

Support for COBOL Language

84. New technology drives many requests for improvements to existing, stable applications. Some technology products have been around for years and appear to be a good choice. However, closer inspection reveals that they are based on old and limited technology. This shortcoming may prevent the vendor from adding new functionality such as customization for future requirements or remote access.

85. The Lawson Software runs on a RS/6000 platform using the AIX operating system. The application language is a COBOL-like Lawson proprietary language and the DBMS is DB2. This is technology that has been around for years and has been functioning well. However, this technology may be limited in that it may not support desirable functionalities such as customer relationship management, internet enabled reporting and support for wireless devices.

86. In spite of COBOL's success with legacy systems, many COBOL users are looking to move all or part of their applications from COBOL to a newer programming language. Interoperability is critical and end-users demand for the latest user interfaces with a better and more modern look and feel. They also demand that the language support web access and transactions across a wide variety of platforms. As COBOL is an antiquated programming language, companies are pressing for applications to be provided in languages that completely support new and emerging technologies.

87. Although the UNJSPF currently has qualified staff to support the COBOL language, OIOS is of the view that the primary disadvantage of continuing to use COBOL for the core logic is the inability to find other people with the skills and willingness to maintain COBOL code. As stated above, OIOS supports upgrading the system to the new Lawson version 8.1, which is Java-based and will support the latest technology, support and maintenance requirements.

Recommendation 17

OIOS recommends that the UNJSPF management upgrade to the latest Lawson release to ensure vendor support as well as to move to the more modern Java programming language.
(AS 2005/800/01/17)

88. *The Fund accepted recommendation 17, however, its implementation has not started because Java will be used as the primary programming language in the Lawson upgrade, and this project has been approved for the 2006-2007 biennium.* The recommendation is recorded as not started in the OIOS recommendations database.

(vii) Documentation and Training

89. The Lawson accounting processes and procedures should be well documented. Such documentation would include written procedures and instructions related to the administration, operation, and security of the accounting system. Once developed, the documentation serves as a guide for new employees as well as a reference for ongoing activities.

90. The Lawson system procedures documentation resides in a subsystem called 'Quick Place.' However, this documentation has not been kept up to date, and the relevant business owners have not formally approved most of these documents. The banking procedures, for example, are those for the old banking arrangements that were superseded in 2004. Also, some users rely on procedures documented by their predecessors that they themselves have developed. Incomplete documentation can lead to over reliance on the knowledge of key employees thus resulting in lost time and effort. Furthermore, documentation that has not been approved and formally promulgated can affect operational efficiency.

91. The UNJSPF security policies and standards are contained in a document, which was developed in 2002 based on ISO 17799. OIOS is pleased to note that the standards document covers overall information security policies, including security standards for the Fund's computing environment. However, the standards document was still in draft form as of the date of the audit.

92. The establishment of formal policies and procedures will help to ensure that pertinent Lawson application standards and procedures are available to all users and are applied consistently. The UNJSPF needs to consider identifying a suitable function to develop and maintain the documentation. Detailed procedures manuals used in staff training should be developed to reflect current procedures. As well, the system manuals should be those of the latest releases so as to ensure adequacy of guidance to users. Currently, several versions of the system manuals are in use.

93. A formal training program should also be implemented for all of the new users of the system. New system users should sign off to evidence having received training on how to use the system. In OIOS view, adept individuals should be identified in each Unit to serve as focal points to provide training to new users and to serve as a resource in their respective functional areas.

Recommendations 18 -20

OIOS recommends that the UNJSPF management:

- (i) Identify and assign to a responsible staff member in each Unit the duties of developing, maintaining and documenting the Lawson system procedures (AS 2005/800/01/18);
- (ii) Establish a formal approval process to ensure the completeness and validity of Lawson system and procedures documentation (AS 2005/800/01/19); and
- (iii) Develop a formal training program on Lawson procedures, which includes mandatory training for new users and periodic training for existing users. (AS 2005/800/01/20)

94. *The Fund accepted recommendation 18 and explained that, with the GA's approval of additional resources within Financial Services Section (FSS), particularly the P3 post in the Accounts Unit, the main responsibility for procedural documentation and the use of Lawson will be focused in FSS. It is intended that the staff identified in the Accounts Unit and the Chief of FSS will review the input from staff of other units such as the contents of Accounting Manual and related procedures and coordinate the efforts.* OIOS considers the implementation of this recommendation as not started.

95. *The Fund also accepted recommendation 19 and advised that the Quick place documentation is maintained as up-to-date as possible. However, its completeness and procedures for approval will be reviewed as part of the work to be undertaken in revising the Accounting Manual.* OIOS considers the implementation of this recommendation as not started.

96. *The UNJSPF management disagreed with recommendation 20 and stated that a full workshop was held in June 2005 for all professional staff in FSS and relevant staff in IMSS. The OIOS audit team also received a brief overview training covering most of the main Lawson functionality, the material of which will be held as reference resource. As part of the Fund's emphasis on the training efforts for staff, it will be up to Unit Chiefs to determine priorities for their staff, including remedial work and to organize appropriate training material and resources for their units. The Fund also believes that this would have been facilitated had the request for Business Analyst within FSS been approved by the Standing Committee. As this was not the case, time will have to be found within the normal scheduled work for preparation and review of material.*

97. While acknowledging the UNJSPF's comments concerning Lawson training, OIOS still believes that formalizing the training programs would be a good practice for the Fund, especially with an aim of ensuring that all new users receive appropriate training from designated trainers. While on

the job training is desirable and cost effective, it can carry forward any inefficient practices of those providing the training. OIOS believes that the Fund should include training on the Lawson system to new users as part of the induction process. Although it may not always be practicable to designate individuals to perform the training, the Fund could make available function specific training materials via available IT tools such as the intranet. As such, OIOS is reiterating recommendation 20 for reconsideration by the UNJSPF management.

(viii) Lawson Screens

98. Good quality screens enable viewing of as much information as possible without having to do extensive drilling down into item. Good screens also act as good controls for data entry and processing, since errors can be easily identified. The screens should provide good visual descriptions of the transactions, indicate whether the transaction amount is a debit or a credit, and include totals.

99. The audit found that Lawson screens do not contain enough detail, resulting in the need to frequently drill down to obtain the transaction details. Most users interviewed voiced their frustration while using the screens to obtain information. In particular, the vendor activity screen was found to be particularly user-unfriendly. This screen does not indicate vendor balances, does not show whether an amount is a credit or a debit, and does not contain good descriptions of the transactions. Use of this screen calls for a thorough understanding of the system and the accounting entries affected.

100. Other weaknesses noted on the Lawson screens included:

- Voided items are not properly identified as such;
- Receivable and payable amounts are netted without providing the ability to see the gross balances; and
- The screens generally provide inadequate descriptions of transactions.

101. The user screens should be designed to allow a reviewer to pick out any anomaly in the transaction without having to engage in too much research. Also, in view of the arduous transaction investigations that are often required to be made by UNJSPF staff, the screens should be enhanced to render themselves easy to use. In the view of OIOS, at a minimum, the following fields should be included:

- Direction of the transaction, i.e. whether it's a debit or a credit: A positive or negative sign as found in most screens would still have to be interpreted by the reviewer and hence does not foster efficiency. Common practice is to have two columns; one for debit amounts and another for credit amounts.
- Related general ledger account titles: This would help identify posting errors that may be made by incorrectly selecting accounts. Currently, only the account number is displayed and a user of the document would have to refer to the account description details. Again, this display does not help reviewers to quickly identify posting errors.
- Transaction totals: All screens should have transaction totals. For instance, a review of the vendor activity screen should indicate the total outstanding for the vendor selected which, in turn, would facilitate the reconciliation process.

- Indicator of transaction validity: There should be an indicator on all screens informing the user of the validity of the transaction. Other systems either (i) color code the transactions with common practice portraying cancelled/voided transaction in red or (ii) contain a small status check box which would either be shown as cancelled-yes or cancelled-no.

Recommendation 21

OIOS recommends that the IMSS consider upgrading the existing Lawson screens to include pertinent details such as totals, debit and credit columns, General Ledger account titles, validity status of transactions, and more specific descriptions of transactions. (AS 2005/800/01/21)

102. *UNJSPF agreed with recommendation 21 and stated that the screen format, presentation and content will be revised as part of the upgrade scheduled for 2007. It is the Fund's understanding that the screen presentation (of data) will be much improved when the later version of the Lawson software is implemented.* OIOS considers the implementation of this recommendation as not yet started.

(ix) Application development team needs to be strengthened

103. The application development team handles all of the customizations and system enhancements requested by Lawson users. This team is currently staffed with three programmers one of whom dedicates half of his/her time to Lawson and the other half to other applications. OIOS observed that there were a large number of user requests in the process of being fulfilled by the relatively small application development staff.

104. To complement staffing resources, the Fund uses, on a full time basis, consultants from The Revere Group Ltd. Notwithstanding the capacity building role of these consultants, there remains a risk that the institutional knowledge gained by the consultants will not be passed on fully to the applications development team and will be lost when the project is implemented and the external consultants leave.

105. The recommended upgrade to the latest Lawson version will further strain the staffing resources. Although the current staff in the Application Development Unit has competently delivered support and maintenance for the Lawson system in the past, there is a need to review the adequacy of staffing resources.

Recommendation 22

OIOS recommends that the UNJSPF management strengthen the application development team to enable them to cope with the large workload necessitated by the extensive customization of the Lawson system as well as the impending upgrade of the system. (AS 2005/800/01/22)

106. *The Fund agreed with recommendation 22 and indicated that the Lawson upgrade will require increased consulting resources that are taken into consideration in the Request for Proposal (RFP)*

recently delivered to the UN Procurement Service. The Fund will also consider the need to additional posts to maintain the customized Lawson system once the upgrade is completed. The request for additional posts, if necessary, will be presented to the Standing Committee in 2007 for recruitment in the 2008-2009 biennium. OIOS considers the implementation of this recommendation as not yet started.

C. APPLICATION CONTROLS

107. Application controls comprise the structure, policies and procedures that apply to individual application systems, such as accounts payable, inventory, payroll or benefits. For the purposes of this document, application controls encompass both the routines contained within the computer program code, and the policies and procedures associated with user activities, such as manual measures performed by the user to determine that data were processed accurately by the system. Application controls help to ensure that transactions are valid, properly authorized, and completely and accurately processed by the computer. They are commonly categorized as input, processing and output controls.

(i) Good application controls

108. All data should be authorized before it is entered into the Lawson system. The UNJSPF has two main sources of data; from legacy or other applications via interfaces and data entry by users. OIOS found that good input controls currently exist. Each module has a specific business unit associated with it and users are trained on how the system works and what data is to be entered into each user screen. The business units have a three-tier approval system. One user enters the data, another audits and the third person approves and releases the transaction. This feature has been built into the Lawson system so that only a person with level 3 authorization can approve the entries into the General Ledger.

(ii) Ambiguous error messages

109. Transactions detected with errors are controlled to ensure that they are corrected and reentered in a timely manner. When an error occurs during data entry, Lawson error messages usually indicate what the error is and what corrective action is necessary. The system does not allow the users to continue to the next step without correcting the error.

110. However, OIOS found that in some cases, Lawson's error messages tend to be ambiguous thus making it harder for users to correct the mistakes. Users therefore often have to consult the IT help desk to investigate and make corrections on the unclear messages. Although Lawson has a pretty good utility that allows application development staff to change the text on the error message based on requests from the users, the process is time consuming for both the user group and the IT development team.

111. Neither the user nor the IT development team is in a position to know all possible error messages until they are encountered. Other similar organizations normally designate a business analyst who would analyze the users' needs and present them to the application development team. The same individual would also be in a position to identify the required changes and updates, perform the cost benefit analysis, and prepare business justifications before putting up a request for changes.

Recommendation 23

OIOS recommends that the UNJSPF management designate a business analyst to be responsible for management of user requirements, and to act as a liaison between the user groups and IMSS. (AS 2005/800/01/23)

112. *The Fund agreed with recommendation 23 and stated that they requested for such post, Business Analyst within FSS, in the 2006-2007 Budget, but that this post was not approved by the Standing Committee. Although the Fund recognized the requirement they must abide by the decisions of its governing entities. The Fund will submit further requests as the occasion arises.* In view of the above comments, OIOS considers this recommendation as not started.

(iii) More edit checks needed

113. OIOS found that in some cases, user-related problems might go undetected until the end of the transaction when it is to be released to the General Ledger. Commonly, errors are introduced as a result of keying in incorrect invoice groups or using incorrect screens when processing the transactions. In one instance, a user had processed an invoice for which a purchase order had been raised via screen AP20 instead of the MA40 screen, which is used to match the invoices with the purchase orders. This distorted the budget figures, as the correct budget codes were not applied.

114. In OIOS' opinion, the Lawson system requires entry-level users to have an understanding of the system's nuances. For instance, one has to know that there are two designations for the vendor types; one is administrative and is entered manually, and the other is system generated directly from PENSYS. In another instance, users have to know that record only payments (RONY) use pay group 9, however, a user can enter another pay group, say 5, and the system will accept the transaction.

115. While acknowledging that additional edit checks have cost implications, in view of the fact that preventive controls are less expensive than detective controls, it would be desirable to secure the system with more inbuilt controls. Therefore, OIOS believes that a cost-benefit analysis is needed in this regard. In the meantime, IMSS should ensure that errors arising from users' lack of knowledge about the system are noted so that they can make arrangements for the necessary user training.

Recommendation 24

OIOS recommends that the Lawson system controls be enhanced to include more edit checks that would serve to prevent common errors before they are introduced into the processing environment. (AS 2005/800/01/24)

116. *The Fund accepted recommendation 24 and stated that the Lawson upgrade project will include the introduction of additional edits as required by FSS.* OIOS therefore considers implementation of this recommendation as not yet started.

(iv) Need for adequate audit trails

117. An audit trail is a reference accompanying an entry, or posting, to an underlying source document or record. The Lawson system does not keep adequate audit trails of most transactions. For example, the system does not keep records of administrators deleting users from system. As several individuals have administrator rights and can update users' profiles, an audit trail should be maintained of the last person to modify an individual's profile.

118. Another area lacking a proper audit trail involves checks returned by the bank. The checks are rebooked into the system by creating a new transaction. The system is not able to match such new transactions with the old check being cancelled and in the vendors' activity reports; both the voided and valid checks are displayed in a similar way. For example, two payments Ref 22237 and Ref 22268 were reflected in the vendor activity report of Vendor 2761 as valid, even though payment Ref 22237 had been voided. Further, the system does not keep a trail of purchase orders processed in the system, and of those that are uploaded from IMIS, which makes it difficult to trace the origin of the purchase orders.

119. OIOS found that in some Lawson screens such as the data entry level, the system does not maintain a log of individuals creating and modifying documents. Rather, it indicates the last user to modify the document as having created it. As the auditors are usually the last to modify the documents before they are released, they would be indicated on the documents as the operators. To the extent that the auditors are supposed to review the work of the data entry staff, this level of identification suffices. However, if there is a need to trace responsibility to the individual who actually prepared and reviewed a transaction, the current process would not permit this.

120. Audit trails are useful both for maintaining security and for recovering lost transactions. Without a proper audit trail, the users cannot effectively track changes to key data fields for comprehensive process control. Also, without a good audit trail, accountability is not easily established.

Recommendations 25 and 26

OIOS recommends that IMSS:

- (i) Review the adequacy of the system's audit trails to ensure accountability, system security and the completeness of transactions, (AS 2005/800/01/25) and
- (ii) Consider modifying the system to record the identity of the users creating documents in order to establish an accountability trail for the transactions. (AS2005/800/01/26)

121. *The Fund accepted recommendations 25 and 26. As indicated in the response to recommendation 25, the Lawson upgrade project will include an analysis of the adequacy of audit trails and, if necessary, the inclusion of new data tracking mechanisms. Concerning recommendation 26, the Fund advised that the existing Lawson system provides logs of all user transactions that can be*

displayed on request. The display of these logs will be made more user-friendly as part of the Lawson upgrade. Thus, the implementation of these recommendations will take place when the Lawson upgrade takes place and has not yet been started.

(v) Tracking of software changes

122. OIOS found that in software updates and development, Lawson utilities do not provide for the creation of in-house versions of the software, thus making it difficult to maintain the changes to the source code. These updates have to be carefully managed by the developers. The source code is stored in the production directory with a date and stamp, and the developers have to know when the latest change was made.

123. In addition, the development security does not create an audit trail of who changed what and when. This poses a potential risk of unauthorized changes being made to the system without any trail. Also, in the event that developers do not log the changes effected, any new bugs would have to be resolved by going through unnecessary code. Any security violators in this case would also be hard to detect. In addition, as Lawson software is a proprietary product, there are no tools available in the marketplace to combat this.

Recommendation 27

OIOS recommends that IMSS work with the Lawson vendors to develop a system for tracking software changes. (AS/2005/800/01/27)

124. *UNJSPF accepted recommendation 27 and stated that IMSS will work with Lawson during the upgrade to establish an improved change management tool to track all changes. OIOS considers implementation of this recommendation as not started.*

D. PROCUREMENT RELATED TO THE LAWSON SYSTEM

125. The total amount to date of contract awards related to the Lawson Accounting System is approximately \$5.2 million of which \$3.3 million were with The Revere Group, Ltd. (Revere) and \$1.9 million with the Lawson Associates, Inc. dba Lawson Software (Lawson Associates). Contracts valued at \$2.3 million were procured through the now United Nations Procurement Service (UNPS)¹ and contracts valued at \$2.9 million were directly procured by the UNJSPF. Relevant extracts of United Nations procurement policies and procedures followed by the UNPS and the direct procurement authority granted to the CEO of the UNJSPF are shown in Annex II.

(i) Direct procurement authority granted to the Secretary/Chief Executive Officer

126. As an interagency body and subsidiary organ of the General Assembly, the UNJSPF is not bound to follow the regulations and rules of any of its member organizations. However, the Fund's practice is to adhere as much as possible to the Financial Regulations and Rules of the United Nations.

¹ The UN Procurement Service has undergone several organizational changes since 1996 when it was called the Purchase and Transportation Division. For purposes of this report, OIOS has used the current title of the United Nations Procurement Service (UNPS).

In conducting the procurement of goods and services, the UNJSPF has generally utilized the appropriate UN offices and procedures in carrying out contracting and procurement activities.

127. In 1996, after study of the need to develop practical arrangements to deal with procurement situations where the Secretary needed to act on his own authority, the Board recommended and the General Assembly approved, at its 51st session, approved resolution 51/217, which *inter alia* requested the Secretary-General to continue to make available to the Fund the United Nations machinery for contracting and procurement. Under this arrangement, the recommendations of the United Nations Procurement Office and Headquarters Committee on Contracts were to be submitted to the Secretary (and CEO) for decision. It was also agreed that the Secretary would act on his own authority in the following situations which the Board expected to be quite rare:

- a. The UNPS could not complete the procurement process within the required time-frame;
- b. The Secretary was unable to accept a particular recommendation made by UNPS or by the Headquarters' Committee on Contracts; or
- c. The UNPS informed the Secretary that a particular contract or procurement could not be carried out by that office

128. The UNJSPF has continued to follow these guidelines since their introduction in 1996 and has incorporated the guidelines in General Procedure #56/Rev.1. In the view of OIOS, however, the guidelines are not clear as to what exceptions to the normal procurement procedures may be made by the UNJSPF when exercising this authority. OIOS therefore believes that the guidelines should be re-examined with a view towards ensuring that emergency procurements are made in a timely manner while at the same time preserving the transparency of the procurement process.

Review of contract awards related to the Lawson system implementation

129. OIOS reviewed twenty-one contracts/amendments between the UNJSPF and The Revere Group, and seven contracts/maintenance renewals with Lawson Associates since 1999. Among these contracts, seven were procured through UNPS (i.e. four with Revere and three with Lawson) and all others were directly procured by the UNJSPF either on an emergency or exceptional basis.

130. The audit noted that there were 17 Lawson system related contract awards to Revere amounting to approximately \$2.6 million that were made by the UNJSPF using its direct procurement authority. The audit determined that Requisition 11011 for Lawson System support had been raised and logged into IMIS on 6 February 2004 following which the UNJSPF submitted to the UNPS the Statement of Work and Technical Evaluation Criteria. OIOS was provided with several items of correspondence between the UNJSPF and the UNPS on the status of this requisition. Notably, the UNPS was only able to finalize the procurement action and send the purchase order in July 2005. In the meantime, the UNJSPF was required to enter into 12 direct contracts/amendments with Revere for Lawson System support which OIOS found to be justified.

131. For the other five direct procurement cases, approval was obtained from the CEO for direct procurement citing that "timing constraints had forced the UNJSPF to use the special authority granted to the CEO of the Fund to enter into contracts directly with vendors." In one of the cases, the lead-

time necessary for UNPS to procure said services was cited. For the five cases, which spanned the period from March 2002 to December 2003, OIOS did not find any documentation to support that the UNJSPF attempted to procure the services through UNPS.

132. In the view of OIOS, although the direct procurement of the cases may have been justified based on the critical need for these services, none of the cases met the requirements for direct procurement outlined in (a) to (c) in Paragraph 90 above. OIOS also notes that large number of direct procurements with The Revere Group (17 contracts/amendments totaling \$2.6 million) would appear to go against the Board's expectation that such cases would be quite rare. In the opinion of OIOS, the guidelines concerning direct procurement need to be reviewed and amplified in order to provide clearer guidance to the Secretary/Chief Executive Officer for using this authority.

Recommendation 28

The UNJSPF management, in cooperation with the UN Procurement Service, should review the existing guidelines for conducting direct procurement and propose to the UN Joint Staff Pension Board any changes to the guidelines considered necessary to guide the Secretary/Chief Executive Officer when using this authority. The guidelines should be codified in a revised UNJSPF General Procedure that comprehensively addresses the policies and procedures applicable for the conduct of direct procurement. (AS/2005/800/01/28)

133. *The UNJSPF management disagreed with recommendation 28 as they are of the opinion that current criteria for direct procurement are clear. Management believes that in the few instances where direct procurement is utilized, the files should document the process and reasons for such action. Like any other management responsibilities, procurement activities should be under tight internal control and subject to internal and external audit as part of management accountability. Management stressed that a lack of flexibility in the decision making process, due in particular to rigid set of criteria, would be contrary to the interests of the Fund. The recent experience of the UPS procurement process, and the delays incurred, showed that following even a "normal" process can put the Fund at risk. Flexibility and discretion, with all necessary controls, is a requirement. For the Fund, time is of the essence and this criteria is apparently absent from UNPS objectives.*

134. OIOS continues to believe that the guidelines for direct procurement should be reviewed, since the audit found that the case described above, i.e., the long term direct procurement of services from the Revere Group, Inc. (17 contracts/amendments totaling \$2.6 million) does not appear to be in the spirit of the direct procurement authority granted to the CEO by the Pension Board. Also, the guidelines are not clear, for example, as to whether the direct procurement cases should be presented to the Headquarters Committee on Contracts for review before the contract awards are made. OIOS is reiterating this recommendation for further consideration by the UNJSPF management.

Lawson Associates not formally registered as a UN vendor

135. The initial contract between the United Nations and the Lawson Associates, Inc. was signed on 19 February 1999. The terms and conditions of the contract were set forth in Lawson Software Product License Agreement thereby not using the usual format meeting all the elements of a contract.

136. Lawson Associates was provisionally registered as a vendor. After calling for bids/proposals, the proposed award was reviewed by the HCC on 8 December 1998, and the contract was awarded to Lawson on 4 June 1999 on the basis of lowest acceptable proposal. Since it had not completed the formal registration process, however, Lawson Associates was blocked by Procurement Registry. Between 24 November 1999 and 30 November 2003, the renewal of Lawson System maintenance as evidenced by four invoices, was processed and paid directly by the UNJSPF on an emergency basis. However, thereafter, renewal of the contract and payment of invoices of the software maintenance was made through UNPS, where on exceptional basis, Lawson was unblocked.

137. OIOS noted that the exceptions took place with the knowledge of both UNPS and the UNJSPF, as evidenced by the correspondence between the UNJSPF and UNPS on the necessity of having the vendor registered. In one memo dated 6 November 2003, a staff member from UNPS stated that their records indicated that the vendor registration packet had been sent to the vendor back in 1999, but UNPS had no record of the vendor having submitted the completed form and required documentation. OIOS noted that as of the time of the audit, Lawson Associates had still not been formally registered as a vendor.

138. OIOS believes that there is a risk to the UNJSPF if Lawson Associates is not officially registered. All formally registered vendors are evaluated by UNPS based on the registration documentation submitted by the vendor, such as the company's incorporation and general information, financial information including an audited copy of the balance sheet and income statements, technical capability, and information on services offered, the firm's experience and qualifications, list of affiliations, and professional indemnity coverage, all of which are also useful references for gauging commercial viability.

Recommendation 29

The UNJSPF management should request for the UN Procurement Service to formally register Lawson Associates prior to renewing or awarding any new contracts. (AS/2005/800/01/29)

139. *The Fund disagreed with recommendation 29 and stated that the UNJSPF relies on the UN Procurement Service (UNPS) to procure goods and services according to their policies, procedures and standards.* OIOS wishes to point out that the Lawson Accounting System is being considered as the enterprise-wide resource planning system for the UNJSPF and as such, the need to have Lawson Associates properly registered as a United Nations vendor is further heightened. Moreover, since the Fund is now using IMIS to process its administrative expense payments, unless Lawson is registered, it will require repeated unblocking of the vendor to effect the payments through IMIS. OIOS therefore believes that the UNJSPF should initiate the action to have Lawson Associates formally registered

with the UNPS and is reiterating this recommendation for further consideration by the UNJSPF management.

Risk of placing duplicate purchase orders for the same services

140. The existing procedures used for conducting direct procurement pose a risk of contracting more than once for the same services. The audit determined that in the period just before the UN Procurement Section had completed the process of contracting a vendor for the Lawson System support, a direct purchase order Ref. DP00073 for \$82,080 had been issued to cover Lawson support in the period 1 July-30 September 2005. The same amount was billed by The Revere Group and paid to the vendor in November 2005.

141. In July 2005, the UNPS having completed the contracting process for the RSNQ initiated by the UNJSPF in February 2004, also raised a purchase order with Revere to provide Lawson support for the period 1 July- 31 December 2005. Although this amount had not been paid as of the completion of the audit fieldwork, OIOS is concerned about the potential for duplicate payments based on the raising of two purchase orders for the same services. The UNJSPF management needs to review the purchase orders and establish whether they cover the same or different services.

142. OIOS acknowledges the difficulties encountered by the Fund in the procurement process. However, in view of the risks posed when conducting procurement of services through UNPS and using its direct procurement authority, OIOS is of the opinion that the Fund should establish controls to safeguard against issuing two purchase orders for the same services when using both the UNPS and direct procurement.

Recommendation 30

The UNJSPF management should establish a control mechanism to ensure that duplicate purchase orders are not issued by UNJSPF and UNPS for the same services. (AS/2005/800/01/30)

143. *The Fund disagreed with recommendation 30. The UNJSPF management believes that they are following some procedures providing for solid control mechanism to ensure that duplicate purchase orders are not issued by the UNJSPF and UNPS for the same services. The procedure involves the UNJSPF Contract Officer's continuous liaison with UNPS for all IMSS procurement actions and update to IMSS Chief and project managers on the status of each requisition and estimated timeframe to completion. All direct procurement requests along with supporting documentation and relevant purchase orders (PO) are submitted to the UNJSPF Executive Officer for revision prior to CEO's approval of the PO. The process of multiple revisions insures that no duplicate PO's are issued to any vendor for the same service for the same period of time. After careful consideration of the comments provided by the UNJSPF management OIOS has reconsidered recommendation 30, and it has been withdrawn.*

Headquarters Committee on Contracts review of contract awards

144. General Procedure #56/Rev.1 outlines the authority granted to the CEO of the UNJSPF to directly procure goods and services. The same procedure also points out that there is an added need for the Headquarters Committee on Contracts (HCC) to review all contracts over \$200,000.

145. The audit identified the following Purchase Orders in excess of \$200,000 issued directly to the Revere Group for Lawson System support services. No RFPs were issued for these contracts, nor were they submitted to the Headquarters Committee on Contracts for review.

Purchase order reference	Date	Amount (in US\$)
600104	30/04/04	942,400
DP00008	26/01/04	336,400
DP00020	21/05/04	333,440

146. Furthermore, the procurement rules require that the HCC review any proposed award to a single contractor in respect of a single or series of related requisitions which in total exceed \$200,000. OIOS is therefore of the view that the series of direct contract awards made to The Revere Group for Lawson System support for the period January 2004 to September 2005 totaling \$1,428,010 should also have been subjected to HCC's review.

147. When the UNJSPF conducts direct procurement, there is a structural lack of proper segregation of duties between the requisitioner and the procurement function. OIOS is of the view that the UN procurement rules and the requirement for HCC's review of contract awards totaling over \$200,000 were designed to help ensure the transparency of the procurement process and to reduce the risk of potential abuse. OIOS therefore believes that until such time that a review is made of the UNJSPF direct procurement guidelines as proposed by OIOS in recommendation 28 above, all direct procurement awards totaling over \$200,000 should be presented to the HCC for review to ensure transparency of the process.

Recommendation 31

OIOS recommends that the UNJSPF management, in cooperation with the UN Procurement Service, ensure that all contracts in excess of \$200,000 awarded using the Fund's direct procurement authority are presented to the Headquarter Committee on Contracts (HCC) for review prior to any contractual commitment being made. To formalize the previous direct procurement awards to The Revere Group, Ltd. which totaled over \$200,000, all such contracts could be presented to HCC on an *ex-post facto* basis. (AS/2005/800/01/31)

148. *Although reaffirming its commitment to GA's mandate relating to procurement as referred by the resolution A. Res. 51/217 (refer to paragraph 127), the UNJSPF did not explicitly comment on whether it accepted OIOS' recommendation to ensure that all contracts in excess of \$200,000 awarded using the Fund's direct procurement authority are presented to the Headquarter Committee*

on Contracts (HCC) for review prior to any contractual commitment being made. Nonetheless, the UNJSPF informed that the UN Procurement Service (UNPS), together with the UNJSPF, presented to the HCC on 28 February 2006 an analysis of all UNJSPF direct procurement actions undertaken with the Revere Group Ltd. since 2002. The HCC recommended that the latest contract, a five-month extension, be approved and stated that all subsequent contracts initiated by the UNJSPF and presented to the HCC be forwarded to the Fund's CEO, with their comments, for his approval, in accordance with the UN General Assembly mandate on direct procurements with the Fund.

149. OIOS remains of the view that HCC review of all contracts in excess of \$200,000 is both desirable to provide transparency in the decision process, and an integral part of the procedures agreed upon between the former UNJSPF CEO and the Assistant Secretary-General for Central Support Services. OIOS therefore reiterates this recommendation for further consideration by UNJSPF management.

(ii) Documentation of supporting invoices

150. Contractors work should be closely monitored for compliance with contract terms and statements of work. In addition, documentation supporting payments should provide adequate information for reviewers to certify and approve the payments. During the audit, OIOS found no documentation to support that the IMSS had monitored the services provided by the Lawson Associates and The Revere Group. Furthermore, the invoices received from The Revere Group were rather general as they only contained names of the individuals rendering the services and the total number of hours charged and did not have any supporting documentation.

151. The reference numbers quoted on the invoices cannot be directly tied to the contracts issued. Invoice Number 00041627, for example, bills for 324 hours @ \$160 per hour for Project BOS:ERP:UN:Lawson Extension Project 4. These Extension Project numbers cannot be easily referenced to the contracts. Inadequate descriptions make the review process more difficult. In OIOS' opinion, the invoices should relate the descriptions of goods or services charged to those contracted for, and in the case of services billed on an hourly basis, they should provide the detailed time charges to support the total hours billed.

Recommendation 32

OIOS recommends that the IMSS document its efforts to monitor the work of the Lawson service providers, and request them to provide itemized bills which make specific reference to contracts and purchase orders being charged and support the number of hours billed.
(AS/2005/800/01/32)

152. *The Fund agreed to recommendation 32 and indicated that the Lawson service providers now submit invoices with detailed descriptions of services performed.* OIOS considers this recommendation to be implemented and it has been closed in the OIOS recommendation database.

on Contracts (HCC) for review prior to any contractual commitment being made. Nonetheless, the UNJSPF informed that the UN Procurement Service (UNPS), together with the UNJSPF, presented to the HCC on 28 February 2006 an analysis of all UNJSPF direct procurement actions undertaken with the Revere Group Ltd. since 2002. The HCC recommended that the latest contract, a five-month extension, be approved and stated that all subsequent contracts initiated by the UNJSPF and presented to the HCC be forwarded to the Fund's CEO, with their comments, for his approval, in accordance with the UN General Assembly mandate on direct procurements with the Fund.

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E. BUSINESS CONTINUITY AND DISASTER RECOVERY

153. A disaster recovery plan (DRP) covers both the hardware and software required to run mission critical business applications and the associated processes to transition smoothly in the event of a natural or human-caused disaster. The purpose of having a business continuity plan (BCP) or process is to maintain, resume and recover the business; which in the UNJSPF case means the continuation of normal servicing of pension participants and beneficiaries. The best approach to both disaster recovery and business continuity focuses primarily on planning and prevention on an enterprise-wide basis.

154. OIOS was informed that a comprehensive disaster recovery policy and process exists and that a disaster recovery test is carried out every year with the vendor under a maintenance contract. However, a detailed review of the plan was not within the scope of the current audit. There is a cumulative backup of the entire system on a daily basis, and a complete backup every Friday with its off-site storage of the backup tapes. Some of the systems in New York are replicated in the UNJSPF Geneva office, and the DRP provides for continuation of benefit payments by the Geneva office based on the prior month's payroll.

155. Testing of the facilities that are maintained as part of the DRP has been conducted in both the New York and Geneva offices, but this testing covered only payroll processing and not how all business processes would be resumed in the event of a disaster. Without a sound BCP which considers all critical business units including personnel and physical work space, the Fund may not be able to resume servicing its clients at acceptable levels. OIOS will review the scope of the BCP as part of an audit planned for 2006.

Procurement of an uninterrupted power supply (UPS) unit

156. OIOS found that there is need for better protection of the computer installations by use of high quality uninterrupted power supply (UPS) unit. The UPS currently installed is not functional as established during the last blackout at the Secretariat. The UN Facilities Management and Support Section which manages the current UPS at the UN premises where the current UNJSPF servers are located, initiated the procurement action to procure another UPS.

157. As at the time of the audit, the UPS had not been delivered which exposes the computer equipment of the Fund to the risk of damage in the event of a power surge or possibly in the event of a power blackout. Due to the criticality of the UPS, the Fund should review the procurement stage of the UPS and if there is found to be undue delay, the Fund should consider directly procuring one of their own. Also, in view of the assets and operations being protected, the UPS acquired should be the more modern ones that can collect and report on relevant information such as battery charging, remaining operating life, raised temperature, and fires. Such UPS are also able to shut down files automatically by remote control, if there is a mains failure.

Recommendation 33

OIOS recommends that UNJSPF management expedite the procurement of the uninterrupted power supply (UPS) unit to ensure continued protection of the business resources. (AS/2005/800/01/33)

158. *The Fund accepted recommendation 33. The UNJSPF Uninterrupted Power Supply (UPS) is now installed and fully operational in spite of excessive undue delays of over four months in procuring the device and associated services. OIOS considers this recommendation as implemented and it has been closed in the OIOS recommendation database.*

V. ACKNOWLEDGEMENT

159. We would like to express our appreciation for the assistance and cooperation extended to the auditors by the staff of the UNJSPF during the course of this audit.



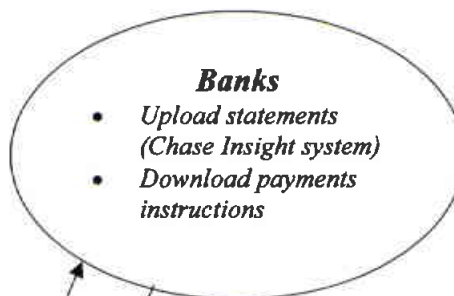
Dagfinn Knutsen
Acting Director
Internal Audit Division I, OIOS

LAWSON INTERFACES

PENSYS

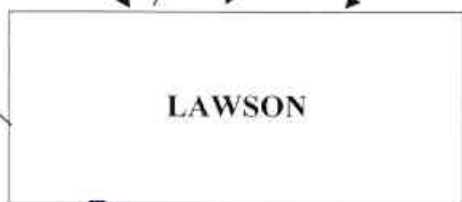
(Mainframe)

- LA10 : Participant (Vendor) Data Interface
- LA20NY : PENSYS Daily Payments Interface New York
- LA20GV : PENSYS Daily Payments Interface New York Geneva Payments
- LA20GVCHF : PENSYS Daily Payments Interface Geneva CHF
- LA30P : Payroll Open Invoices Interface
- LA30H : Payroll Historical Invoices Interface
- LA40 : Exchange Rates Interface
- LA50 : Separation Master Data Interface



Investment Management Services

- LA60 : IMS Data Interface (report)
- LA60U : IMS Data Interface (update)



UN-IMIS

- LA70 : Download IMIS data to Lawson
- LA70R : Download IMIS data to Lawson (rerun)
- LA71 : Requisition Load (report)
- LA72 : Obligation Load (report)
- LA73 : Expenditure Load (report)
- LA71U : Requisition Load (update)
- LA72U : Obligation Load (update)
- LA73U : Expenditure Load (update)



Procurement Policies and Procedures (extracts)

1. The United Nations Procurement Manual section 12.1.1 states: Cases to be reviewed by the Headquarters Committee on Contracts are subject to the general principles of Financial Regulations 5.12 and 5.13 as well as the applicable Financial Rules. When any of the following categories of procurement actions, irrespective of whether the action originated at HQ or in a Mission /OAH is applicable to a proposed award, in accordance with the UN FRR the recommendation of the HCC and prior approval of the ASG/OCSS shall be obtained prior to any contractual commitment being made:

- (a) Any proposed award to a single contractor in respect of a single or a series of related requisitions which in total exceeds US\$200,000 (HCC threshold) during a calendar year, or such amount as determined from time to time by the ASG/OCSS. For purposes of determining if the HCC threshold has been reached, there shall be no aggregation of multiple awards and proposed awards in a calendar year;
- (b) Any proposed amendment, modification or renewal of a contract previously reviewed by the HCC, where the amendment, modification, or renewal, increases the contractual amount by more than twenty (20) percent (20% rule) or US\$200,000 whichever is lower;
- (c) Any proposed amendment or modification of a contract previously reviewed by the HCC where, in the judgment of the Procurement Officer, such amendment in relation to the criteria on which the original award was made may significantly affect the procurement process or the original contractual terms;
- (d) Any proposed amendment, modification or renewal of a contract not previously submitted to the HCC where, during a calendar year, the aggregate amount now exceeds the HCC threshold; and
- (e) Any other matter relating to a contract referred to the HCC by the USG/DM, ASG/OCSS or other officials duly authorized under Financial Rule 105.13.

2. UN Financial Regulation 5.12 states: “Procurement functions include all actions necessary for the acquisition, by purchase or lease, of property, including products and real property, and of services, including works. The following general principles shall be given due consideration when exercising the procurement functions of the United Nations: (a) Best value for money; (b) Fairness, integrity and transparency; (c) Effective international competition; and (d) the interest of the United Nations.”

3. UN Financial Regulation 5.13 states: “Tenders for equipment, supplies and other requirements shall be invited by advertisement, except where the Secretary-General deems that, in the interests of the Organization, a departure from this regulation is desirable.”

A. Procurement through UNPS

4. UNJSPF’s General Procedure No. 48 dated 12 September 1995 on processing contracts and procurement requests states the following summarized steps:

- (a) The Section Chief or Executive Officer, after checking availability of funds, submits a proposed contract or procurement request in the Procurement Database to the Chief of Operations or Secretary of the UNJSPB for approval;

- (b) The Chief of Operations reviews, recommends approval or disapproval or modification of the proposal;
- (c) If approved, the contract or request is transmitted to the Executive Officer for submission to the CPTS (Commercial Purchasing and Transportation Services, Procurement Division - now the UN Procurement Service or UNPS);
- (d) The Procurement Database should reflect all stages: submission to CPTS or any follow ups, action/approval by CPTS or Committee on Contracts, contract extension, final completion of the contract and receipt of items or completion of services;
- (e) No contract should be implemented or extended without the formal approval by CPTS or by the Secretary of the Board in the event that CPTS action is not forthcoming in a timely manner or if the CPTS conclusion/recommendation is not accepted by the Secretary;
and
- (f) Payment of invoices are prepared by the Executive Officer after approval of the Section Chief except those IMSS-related charges for contractors, software, etc. which pass for preliminary approval Chief of IMSS through the Chief of Operations. The Procurement database will record receipt, processing and payment of all invoices.

B. Direct Procurement by the UNJSPF

5. UNJSPF Report of the UNJSPB Supplement No.9 (A/51/9) 1996 section B Procurement arrangements for UNJSPF, paragraph 111 states “Accordingly, the Board decided to recommend that the General Assembly request the Secretary-General to continue to make available to the Fund the UN machinery for contracting and procurement (i.e. the services of the UNPS and the Headquarters Committee on Contracts). Under this arrangement, reviews and recommendations with respect to the Fund’s contracting and procurement action, made by United Nations/PTD or the HCC, would be submitted directly to the Secretary for decision.”

6. Paragraph 112 of above-mentioned Board report states: “The Board also agreed to authorize the Secretary to continue to act on his own authority in the following special situations (which the Board expected to be quite rare):

- a. United Nations PS could not complete the process within the required time-frame;
- b. The Secretary was unable to accept a particular recommendation made by United Nations PS or by the Headquarters Committee on Contracts; or
- c. United Nations PS informed the Secretary that a particular contract or procurement could not be carried out by that office.

The Board requested the Secretary to report to the Standing Committee on cases where he had to proceed with contracting or procurement actions in the circumstances described in (a) to (c) above.²

² At its 48th session, the UNJSPB decided that it was not necessary for the Secretary to submit to the Board or the Standing Committee annual reports on procurement actions taken under the Secretary’s authority since these would normally be reviewed by either the internal or the external auditors.

7. General Assembly Resolution (A/RES/51/217) dated 5 March 1997 section V. 4. states: The General Assembly: “Requests the Secretary-General to continue to make available to the Fund the United Nations machinery for contracting and procurement, as recommended by the United Nations Joint Staff Pension Board in paragraph 111 of its report.”
8. Based on an arrangement between the UNJSPF and UN Procurement Division on direct procurement by the UNJSPF as noted by the ASG/Central Support Services on 12 August 1999, the UNJSPF can directly procure up to \$25,000; however, such cases should be reviewed on a case by case basis since the UNJSPF does not want to be locked into undertaking direct procurement for small contracts. For contracts above \$25,000, there is an ITB or RFP prepared unless there is a proprietary issue or justification to do otherwise. For contracts over \$200,000, there is an added need for the Headquarters Committee on Contracts review.
9. UNJSPF General Procedure No.56/Rev.1 dated 30 September 1999 on Guidelines for undertaking direct procurement action: item #1 states: “At its 51st session the General Assembly approved by resolution 51/217, the 47th Pension Board’s recommendation that the Secretary-General continue to make available to the Fund the UN machinery for contracting and procurement (i.e. the services of the UN Purchase and Transportation Division [UN/PTD] and the Headquarters Committee on Contracts). Under this arrangement, reviews and recommendations with respect to UNJSPF contracting and procurement actions, made by UN/PTD or the HCC would be submitted directly to the Secretary for decision.”
10. General Procedure No. 56/Rev.1 Item 2 indicates that exceptions to the normal procurement (i.e. General Procedure No. 48) should be minimal and below are four scenarios as regards exceptions:
- (a) there might be great urgency in undertaking unforeseen procurement, with a completion date required before the normal procurement procedures could be followed;
 - (b) when the UNJSPF already made a request and the UN/PTD indicates that the procurement cannot take place during the time frame required;
 - (c) when the Secretary is unable to accept a particular recommendation made by the UN/PTD or by the Committee on Contracts; or
 - (d) when items under \$25,000 are to be procured. Refer to exchange of memorandum between Mr. Niwa to Mr. Gieri dated 28 July 1999 and 12 August 1999 (paragraph 9).