

INTERNAL AUDIT DIVISION

AUDIT REPORT

UNODC Programme and Financial Information Management System (ProFi)

Additional steps are needed to ensure segregation of duties, clarity in roles of data owners, and confidentiality and integrity of data and application systems

12 August 2008 Assignment No. AE2007/361/01 INTEROFFICE MEMORANDUM

MEMORANDUM INTERIEUR

OFFICE OF INTERNAL OVERSIGHT SERVICES ** BUREAU DES SERVICES DE CONTRÔLE INTERNAL INTERNAL AUDIT DIVISION ** DIVISION DE L'AUDIT INTERNAL

To: Mr. Antonio Maria Costa, Director-General

DATE: 12 August 2008

A: United Nations Office at Vienna

REFERENCE IAD: 08- 01455

Dagfinn Knutsen, Director
Internal Audit Division, OIOS

SUBJECT: Assignment No. AE2007/361/01 - Audit of UNODC Programme and Financial Information OBJET: Management System (ProFi)

- 1. I am pleased to present the report on the above-mentioned audit.
- 2. In order for us to close the recommendations, we request that you provide us with the additional information as discussed in the text of the report and also summarized in Annex 1.
- 3. Your response indicated that you did not accept recommendation 6. In OIOS' opinion however, this recommendation seeks to address a significant risk area. We are therefore reiterating it and requesting that you reconsider your initial response based on the additional information provided in the report.
- 4. Please note that OIOS will report on the progress made to implement its recommendations, particularly those designated as high risk (i.e., recommendations 1, 6 and 15) in its annual report to the General Assembly and semi-annual report to the Secretary-General.

cc: Mr. Chris Kirkcaldy, Chief, FRMS, Division of Management, UNODC

Mr. Phillip Kruss, Chief, UNODC Information Technology Service

Mr. Swatantra Goolsarran, Executive Secretary, UN Board of Auditors

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INTERNAL AUDIT DIVISION

FUNCTION

"The Office shall, in accordance with the relevant provisions of the Financial Regulations and Rules of the United Nations examine, review and appraise the use of financial resources of the United Nations in order to guarantee the implementation of programmes and legislative mandates, ascertain compliance of programme managers with the financial and administrative regulations and rules, as well as with the approved recommendations of external oversight bodies, undertake management audits, reviews and surveys to improve the structure of the Organization and its responsiveness to the requirements of programmes and legislative mandates, and monitor the effectiveness of the systems of internal control of the Organization" (General Assembly Resolution 48/218 B).

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EXECUTIVE SUMMARY

UNODC Programme and Financial Information Management System (ProFi)

OIOS conducted an audit of the Programme and Financial Information Management System (ProFi) at the United Nations Office on Drugs and Crime (UNODC). The overall objective of the audit was to determine whether: the Information Technology Service (ITS) is adequately organized and responsibilities have been clearly assigned and segregated; data owners have a clear understanding of their role and responsibilities in ensuring the quality of data and the effectiveness of the application system; new releases and upgrades have been properly reviewed and staff received adequate training; and appropriate confidentiality and integrity of data and application systems has been maintained. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

ProFi is UNODC's Enterprise Resource Planning (ERP) document management and workflow system that provides financial and substantive information for drugs and crime projects. It works with the Integrated Management Information System (IMIS) of the United Nations to meet accounting and financial management requirements of UNODC.

The overall conclusion of the audit was that more needs to be done to ensure segregation of duties, clarify roles and responsibilities for the data owners, review the version of the system and ensure that appropriate levels of confidentiality and integrity of data and application systems have been achieved. These include addressing the following:

- Ensuring full segregation of duties among the in-house ProFi administrative team;
- Establishing a dedicated ProFi User support and training team within the Financial Resources Management Service (FRMS). The team should be responsible for performing various reconciliations, training users, and monitoring Field Offices in financial reporting;
- Streamlining workflow procedures between the Field Offices management ledgers and the PeopleSoft Financials to enable speedier and more accurate consolidation of data than is the case at the moment;
- Ensuring that FRMS retains and exercises data ownership of the various financial areas of ProFi with the assistance of ITS. FRMS should be responsible for data definition responsibilities, data creation/capture responsibilities, data usage, data distribution and data security;

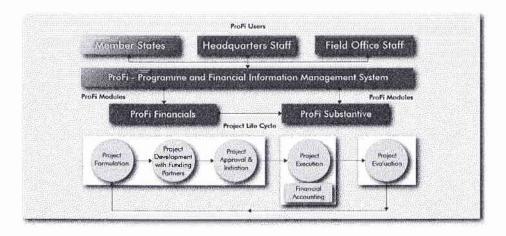
- Conducting a risk assessment to assess the implications of discontinuing the maintenance contract and to justify the nonupgrading of the core application system;
- Strengthening data security and retention controls by establishing security and data retention policies; and
- Undertaking any future ProFi developments on the basis of ability to interface with the proposed UN-wide Enterprise Resource Planning (ERP) system. They should be compliant with International Public Sector Accounting Standards and should consider current duplication of information management systems (ProFi and IMIS).

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I. INTRODUCTION

- 1. The Office of Internal Oversight Services (OIOS) conducted an audit of the Programme and Financial Information Management System (ProFi) of the United Nations Office on Drugs and Crime (UNODC) in Vienna. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.
- 2. The present organizational structure of UNODC is regulated by ST/SGB/2004/6 of 15 March 2004 entitled "Organization of the United Nations Office on Drugs and Crime", in conjunction with the Secretary-General's bulletin ST/SGB/1997/5, entitled "Organization of the Secretariat of the United Nations" and ST/SGB/2004/5, entitled "Organization of the United Nations Office at Vienna".
- 3. Together with the UN's Integrated Management Information System (IMIS), ProFi is UNODC's Enterprise Resource Planning (ERP) document management and workflow system that provides financial and substantive data for drugs and crime projects. ProFi was implemented in July 2002 using PeopleSoft Version 7.62. So far, four modules have been deployed, which are: ProFi Financials, ProFi Substantive, ProFi Transactions and ProFi Web Reports.
- 4. ProFi Financials works in tandem with IMIS to meet the fundamental accounting and financial management requirements of UNODC. It focuses on capturing and delivering financial data related to pledges, collections, allocations and expenditures. A new feature for reconciliation of inter-office vouchers (IOVs) - the e-IOV reconciliation module - has been added to the package to record and report, on a monthly basis, expenditures incurred by projects administered by UNDP in the field. ProFi Substantive is the fundamental workflow instrument and repository of information relating to operational activities through all phases of the UNODC project life cycle. This is handled through Lotus Notes. It includes the non-financial aspects of UNODC project activities. ProFi Transactions enables UNODC Field Offices to record financial transactions through local UNODC bank accounts. ProFi Web Reports provides reporting services to Member States and UNODC personnel. A graphical presentation of the interrelationships between the stakeholders and the ProFi modules is shown below.



- 5. UNODC has incurred expenditures amounting to approximately \$4.8 million since 2001 on development and implementation costs of the ProFi System.
- 6. Comments made by UNODC are shown in *italics*.

II. AUDIT OBJECTIVES

- 7. The main objectives of the audit were to determine whether:
 - (a) The Information Technology Service is adequately organized and responsibilities have been clearly assigned and segregated;
 - (b) Data owners have a clear understanding of their role and responsibilities in ensuring the quality of data and the effectiveness of the application system;
 - (c) New releases and upgrades have been properly reviewed and staff received adequate training; and
 - (d) Appropriate confidentiality and integrity of data and application systems has been maintained.

III. AUDIT SCOPE AND METHODOLOGY

- 8. The audit focused on the ProFi system used by UNODC and its outposted locations, and covered activities for the period January 2005 to date.
- 9. The audit assessed risks and tested the adequacy and effectiveness of internal controls in place to manage the identified risks. Tools and techniques used in the audit included interviews with responsible staff, review of available documents and relevant records, and various analytical procedures. A questionnaire was also issued to all users to obtain general user information, impact and criticality of ProFi system and user support.

IV. AUDIT FINDINGS AND RECOMMENDATIONS

A. Roles and responsibilities

10. The ProFi team consists of the Coordinator who reports through the Information Management Unit (IMU) Chief to the Information Technology Service (ITS) Chief. There is one Professional Staff and ten General Service (GS) staff directly offering support to ProFi System in ITS. The general assessment was that there is an adequate staffing complement to support, maintain and implement the system. However, there is no dedicated unit within the Financial Resources Management Service (FRMS) team for user support and

training on ProFi Financials and ProFi Transactions. This is addressed in the relevant section of the report.

Duties should be fully segregated

11. UNODC has developed an in-house capability with well-trained core staff of three who have been carrying out the maintenance functions of the ProFi System. However, this organization setup has resulted in the pairing up of certain functions within this systems administration group that would have otherwise been segregated. For example, systems development, operations, security and administration are routinely performed interchangeably by the systems administrators resulting in lack of segregation of duties.

Recommendation 1

- (1) The UNODC Chief, Information Technology Service should review the current organization arrangements and ensure full segregation of duties between systems administration and systems development and implementation.
- 12. The UNODC Administration accepted recommendation 1 and stated that the segregation of duties will be implemented through an official instruction from the Chief of ITS to relevant ProFi team staff members. Recommendation 1 remains open pending issuance of an official instruction regarding segregation of duties to relevant ProFi team staff members.

FRMS requires additional dedicated staff resources

- 13. In 2003, UNODC's re-organization called for the Department for Management to be an integral part of the Drugs and Crime Programme. Additional responsibilities were vested in FRMS, ITS and HRMS to support the increasingly large and complex activities carried out by UNODC in the field. UNODC identified more effective modalities of executing programmes in the field and considered that the opening of bank accounts offered an opportunity to obtain savings in project support costs paid to external executing agencies such as the United Nations Development Programme (UNDP).
- 14. ProFi Transactions was set up to improve the recording, reporting and monitoring of project activities executed through UNODC bank accounts. The need to monitor, reconcile and coach Field Office users on how to use ProFi Transactions tools, increased FRMS and ITS workloads. Manual intervention is required to record and reconcile locally-received contributions, interest income and bank charges before consolidation, requiring additional staff resources.
- 15. Through interviews with users and review of available documentation, including queries from field officers, OIOS established that additional dedicated staff resources may be required in FRMS. This staff should specialize in ProFi Financials and Transactions and perform the various reconciliations which ITS is routinely requested to perform and which should be the responsibility of the users

in FRMS as data owners. The additional resources will be required to monitor the proper functioning of the system in all field offices, to provide day-to-day support and to provide functional training as to the use of ProFi. By so doing, ITS ProFi resources will be fully dedicated to systems maintenance and implementation.

Recommendation 2

- (2) The UNODC Chief, Financial Resources Management Service should establish a ProFi dedicated team within the Financial Resources Management Service whose role would be to carry out all required reconciliations, act as a focal point for queries from the field, and provide user training for all users and continuously monitor financial reporting activities in the field.
- 16. The UNODC Administration accepted recommendation 2, provided that additional funds can be raised for this purpose. Recommendation 2 remains open pending establishment of a ProFi dedicated team within the Financial Resources Management Service.

Unclear data ownership of financial information

17. There were unclear roles and responsibilities between ITS and FRMS regarding data ownership of financial information. Although FRMS is responsible for data integrity, the ownership seems to be under ITS. It is not clear what ITS' role is in enabling FRMS to ensure proper guarding of financial data integrity, accuracy, correctness and completeness. This needs to be clarified.

Recommendation 3

- (3) The **UNODC** Chief, Financial Resources Management Service should retain and exercise data ownership of the various financial areas of ProFi with the assistance of the Information Technology Service and should be responsible for data definition responsibilities, data creation/capture responsibilities, usage, data data distribution and data security.
- 18. The UNODC Administration accepted recommendation 3, provided that additional funds can be raised for this purpose. Recommendation 3 remains open pending receipt of documentation showing that FRMS has been designated as the data owner of ProFi.

B. Logical access controls

Core application

19. The access policy on ProFi is governed mainly by the PeopleSoft Security platform. The main levels of access are divided into four groups: ProFi

administrator group, ProFi power users, ProFi read only users and ProFi special purpose users. The information on who-can-do-what is built into the system in accordance with the user group classification. Workflow determines access rights, but in the absence of a security policy on ProFi, it is not clear who determines who can perform specific functions.

Lack of enforceable password standards for PeopleSoft Tools

- 20. OIOS observed that UNODC has no password policy. Although staff members have unique passwords to access the application directly via PeopleSoft, there are no enforceable password standards for PeopleSoft Tools 7.62. OIOS observed the following weaknesses in connection with password management:
 - Users are not obliged to use a combination of letters and digits, but in an email sent to users on a six monthly basis, they are advised to choose a password composed of letters and numbers;
 - Repeated login attempts to enter the system do not result in logging off or shut down.
 - > The password rules are not mandated by automated system controls. For instance, there is no lock out after six failed logon attempts.
- 21. Failed login attempts are logged, but there was no evidence of their review by the Security Officer.

Recommendation 4

- (4) The UNODC Chief, Information Technology Service should prepare security and password policies for ProFi. The password policy should include procedures for the regular review of login attempts by the security administrator.
- 22. The UNODC Administration accepted recommendation 4. Recommendation 4 remains open pending receipt of documentation on security and password policies.

Access to Web Reports needs to be routinely monitored and validated

- 23. Member States and their missions have read-only access to ProFi Web Reports through the internet. Member States representatives apply online when they need access to ProFi reports. UNODC receives the online applications and sends an email to the respective mission or ministry requesting confirmation that the applicant is indeed an official of the mission or ministry.
- 24. OIOS noted that once such access is given, there is no system to revoke the rights even if the applicant is no longer authorized to continue with the privilege. With increased threat from hackers and other malicious individuals, the site needs to be more closely monitored. Monitoring of usage should include periodic validation of persons accessing the site.

Recommendation 5

- (5) The UNODC Chief, Information Technology Service should routinely monitor usage of the web and periodically validate those accessing the portal with their respective missions, in order to strengthen security.
- 25. The UNODC Administration accepted recommendation 5 and stated that the annual verification of existing Member States user accounts will be carried out with automatic reminders to existing current ProFi account holders to confirm their requirement to continue to use ProFi web reports. In case no user confirmation is received, relevant missions in Vienna will be informed of user account deletion to be effected within a 30 days period from the date of the communication. Recommendation 5 remains open pending confirmation by UNODC that the annual verification process has been established to monitor and validate web access.

C. Change management

Discontinuation of the maintenance contract without a risk assessment

26. According to available documentation, UNODC implemented PeopleSoft Version 7.62 in July 2002. The suppliers are currently running Version 8.2 and hence discontinued supporting Version 7.62. Management explained that due to the high costs involved with upgrading PeopleSoft, they have decided to maintain the same version which has worked very well for them. Furthermore, three staff members have been trained in maintaining the system and so far no other maintenance problems have arisen which could be attributed to the version in use. However, OIOS is of the opinion that UNODC should have carried out a risk assessment to support the decision to do away with a maintenance contract and to maintain the same version of PeopleSoft. The assessment should also consider the additional costs of upgrading to a new version, should the need arise in future.

Recommendation 6

- (6) The UNODC Chief, Information Technology Service should carry out a risk assessment to assess the implications of discontinuing the maintenance contract for PeopleSoft and the decision to forego upgrading of the core application system.
- 27. The UNODC Administration did not accept recommendation 6, stating that several meetings to conduct a thorough risk assessment were undertaken prior to a final decision to not upgrade the software and to rescind the maintenance contract. ProFi has been running smoothly without maintenance support since PeopleSoft stopped support for the software version in use. The ProFi team has built up through training, the relevant expertise to face any serious outage. ITS feels that a written post-facto risk assessment will not add

any value to the current ProFi operations. In the opinion of OIOS, continuing with a software version that is no longer supported poses a significant risk to UNODC. OIOS therefore reiterates recommendation 6, which remains open pending receipt of a risk assessment of the implications of discontinuing the maintenance contract and the decision to forego upgrading of the core application system.

Adequate systems documentation

- 28. UNODC does not apply development standards such as BSI 6592 (Guidelines for documentation of computer based application systems) or BS ISO-IEC 18019 (Guidelines for design and preparation of user documentation for application software).
- 29. Management explained that it had not been carrying out any systems development work as such, but had been actively carrying out systems implementation. This required modifications to the systems and were adequately recorded, documented and permanently stored in Lotus Notes databases. OIOS tracked the documentation for the Unliquidated Obligations for External Financial reporting agencies, and these were found to be adequate.

D. Reporting

Financial reports extracted from two systems results in duplication of effort

30. The UNODC financial statements are prepared based on information extracted from both IMIS and ProFi. IMIS covers the Headquarters segments and ProFi covers the Field Office segments. For the Crime Fund, IMIS contains both the headquarters segments and field segments. The ProFi interface brings IMIS expenditure information to ProFi for both Crime and Drug funds' headquarters segments. All Crime funded activities are housed in ProFi in order to provide read-only access to Member States and allow programme managers in the field to work with their projects following the same day-to-day procedures used for Drug funded field office activities. Expenditure data for Crime funded field segments recorded in ProFi are manually retrieved via ProFi reports and consolidated in IMIS by journal voucher. The result is that UNODC ends up with financial information extracted from two sources, i.e., IMIS for the Crime Fund and ProFi for the Drug Fund, resulting in duplication of effort.

Recommendation 7

- (7) The UNODC Chief, Financial Resources Management Service should explore the means of reducing duplication and improving the consolidation of financial data through a single financial management system.
- 31. The UNODC Administration accepted recommendation 7 and stated that FRMS is currently reviewing the structure and data requirement to assess alternative consolidation methods. In view of the upcoming UN ERP replacement and the transfer of ProFi and IMIS finance functionality into this

system, emphasis will until then be on finding an efficient process to minimize manual processes and human errors within the current systems. Recommendation 7 remains open pending the introduction of a single financial system by UNODC.

FOML Bank segment lacks a trial balance report

32. The Field Office Management Ledger (FOML) was integrated with the Bank Account Modules, namely ledgers reflecting Cash, Projects (Expenditure), Receivables (including revaluation loss), and Payables (including revaluation gains). Currently the Bank account execution modality delivers timely reconciliations; however, the ledgers do not have a trial balance report which could simplify the consolidation of results among different locations and/or projects before information is uploaded into ProFi Financials. Consolidation would also ensure additional integration and consistency of data across multiple applications and sources. ITS management explained that discussions were underway with FRMS to create an additional report to support the production of a trial balance.

Recommendation 8

- (8) The UNODC Chief, Financial Resources Management Service, in collaboration with the Information Technology Service, should develop a workflow that ensures the most efficient way of producing the consolidated accounts. In particular, the Field Office Management Ledger Bank module should be made capable of producing its own trial balances which will ensure additional integrity of data consolidated in ProFi.
- 33. The UNODC Administration accepted recommendation 8 and stated that FRMS and ITS are working on a series of changes and reports required for the better management of field office data. These include the mapping of data to enable the generation of trial balance, reports to enable reconciliation (bank, expenditure, UNDP e-IOV). Recommendation 8 remains open pending mapping of data by UNODC to enable the generation of trial balances in Field Offices.

ProFi Financials procedures and process controls require improvement

34. The FOML works in 44 locations in the field with close to 1,000 users with many different combinations of PC/network and Power Supply and different time zones. Some of the errors identified in the FOML Bank module are due to local LAN connection problems and user errors. For instance four vouchers out of 16,019 handled by the FOML Bank module in 2007 were reported to be system errors. These included duplicate receivables (DV-1ZA-2007-12-023; and DV-1ZA-2007-12-012). Other discrepancies totalling eight were classified as user errors. For example, the cash ledger opening balance and closing balance did not match because the user approved the voucher after having closed the financial period (JV-1CO-2007-11-036).

35. The FOML platform serves as the system recording, tracking and reporting financial workflows and processes carried out in the field. Financial transactions recorded in FOML are (in the case of bank transactions) reconciled on a monthly basis. Data reconciled in FOML is then loaded through a native Lotus Notes/PeopleSoft interface into the ProFi Financials/accounting software platform. OIOS review concluded that, while the system produces good substantive programme reports, some FOML workflows could be reviewed and updated. For instance, "save conflicts," resulting from a document being approved by two different persons, an approving officer and the alternate, can be prevented by amending the procedures so that a document is approved only once.

Recommendation 9

- (9) The UNODC Chief, Information Technology Service in collaboration with the Financial Resources Management Service, should review workflow procedures and enhance process controls and other systems checks to prevent duplicate approvals that currently bypass the ProFi system logic.
- 36. The UNODC Administration accepted recommendation 9. Recommendation 9 remains open pending receipt of documentation from UNODC showing that the workflow procedures and enhancement of process controls have been reviewed.

Enhancing financial reporting and monitoring

37. OIOS observed that there is a need for monthly financial reports to be produced, reviewed and monitored in FRMS so that exception items can be followed up at an early stage. The only monthly reports currently produced are the bank account reconciliations, which are used to request replenishment of cash in the field. Extending this to monthly accounts will improve the overall quality of financial data at year-end. This will require FRMS to identify the additional tools which should be provided by ITS to enable the monthly production of financial reports.

Recommendation 10

- (10) The UNODC Chief, Financial Resources Management Service in conjunction with the Information Technology Service should introduce the production of monthly financial reports in order to improve the overall quality of financial reporting at the year-end and improve efficiency in the production of end of year financial accounts reports.
- 38. The UNODC Administration accepted recommendation 10 and stated that the requested additional reports will facilitate reconciliation of accounts; the trial balance will assist the monthly monitoring process, which will enable an improved efficiency in the preparation of year-end financial statements.

Recommendation 10 remains open pending confirmation by UNODC that monthly financial reports are being produced.

Periodic user surveys for performance improvement

39. OIOS developed a user satisfaction survey questionnaire which was circulated to all 1,000 substantive users in 44 field locations. The survey included enquiries on impact and criticality, utilization and limits of the ProFi system, and adequacy of technical support. Due to the low response and time constraints, the results of the survey have not been incorporated in this report. However, in an effort to improve the performance of the system and monitor user satisfaction, UNODC should conduct a periodic user satisfaction survey and use and publicize the results on the intranet with a view to continuously improve the performance of ProFi.

Recommendation 11

- (11) The UNODC Chief, Information Technology Service, should conduct periodic user satisfaction surveys to support continuous performance improvement of ProFi.
- 40. The UNODC Administration accepted recommendation 11 and stated that a user satisfaction survey will be prepared and shared with all UNODC staff in HQ and in the Field. Recommendation 11 remains open pending evidence of the introduction of periodic user satisfaction surveys.

E. Data retention/backup/recovery

Electronic transmission required to back up offsite data

- 41. UNODC ITS business continuity procedures exist for all critical systems used by applications including data bases and their configurations. These systems include core infrastructure components such as routers, cabling, internet firewall, Lotus Notes/email, NOVELL (authentication), telecommunications (phone), power, and air-conditioning (data centres). The procedures are also extended to essential services which must remain operational, otherwise the impact on medium or long-term operations is severe. ProFi falls under the latter category (essential services).
- 42. At the time of the audit, incremental back-ups were done four times a week (Monday to Thursday) and full back-ups on Fridays/weekends. The last full-back-up of every month is then stored at an offsite facility maintained by Iron Mountain outside of Vienna. The maximum data loss is one month (2 week average). The back-up tapes retained within the Vienna International Centre (VIC) are stored at a separate location to the two main data centres. It would require the full and total destruction of the VIC to destroy up to one month of data. Nonetheless, to minimize the impact of data loss in the event of a disaster, it would be essential to move data electronically every week to the offsite facility.

Recommendation 12

- (12) The UNODC Chief, Information Technology Service should review the current process of backing up offsite data and introduce an electronic transmission to reduce the impact of loss in the event of a disaster.
- 43. The UNODC Administration accepted recommendation 12 and stated that a procedure to back-up ProFi transaction logs electronically in an off-site location will be implemented. Recommendation 12 remains open pending the introduction of a system of backing up ProFi transaction logs in an offsite location.

Formal data retention policy and recovery procedures are needed

- 44. The back-ups are stored on magnetic tapes and hence have a shelf life of two to three years. However, for the ProFi system, all transactional information is historically stored in the ERP database as well. The data retention practice at UNODC is to store all information indefinitely.
- 45. In the case of recovery procedures, the systems are tested every 6 to 12 months depending on the system and complexity of the task. The tests involve a complete simulated failure of the system and test fail-over and restoration of the system. Any problems are noted and appropriate changes are made to the procedures. If necessary, the test is repeated. The disaster recovery procedures are thus regularly evaluated. These practices need to be formalized in a retention policy.

Recommendation 13

- (13) The UNODC Chief, Information Technology Service should prepare a formal retention policy including a retention schedule with retention requirements per data class kept on the ProFi system.
- 46. The UNODC Administration accepted recommendation 13 and stated all data is kept for as long as is technically possible. A policy will be established in this regard. Recommendation 13 remains open pending the introduction of a retention policy by UNODC.

<u>Hardware/software redundancy and the Crisis Management Plan should provide</u> for swift resumption of services

47. The policy of ITS is to make all services as redundant as possible both at hardware and software levels. Hardware redundancy has been achieved through the creation of two independent data centres: one at the Vienna International Centre Building C-1/26 and C-1/14, and the other in the container (L-Building). These data centres are independently connected (by cables, routers and switches) and independently powered (different building and different diesel generator).

- 48. Software redundancy entails pairing the service (hot or warm stand by) or having the service clustered in such a way that a failover is transparent to the end user or failure is not noticed. The ProFi system uses two application servers and two database servers, one primary and one secondary. The secondary is also a warm-standby and must be manually invoked. This takes a maximum of ten minutes. The ProFi reporting structure also consists of a primary and a secondary and is also a warm-standby with a manual fail-over procedure.
- 49. There is currently no provision for a scenario where the entire Vienna International Centre is destroyed or rendered unusable. This includes a complete breakdown of ITS communications infrastructure (cabling, power, building ventilation). In such a situation ProFi would, or could, stop completely. A Crisis Management Plan exists which covers a variety of scenarios which cater for disasters/events that affect the Vienna International Centre (VIC), Vienna or all of eastern Austria. However, this plan has not been tested to ensure swift resumption of services in case of total destruction of the VIC.
- 50. It should be noted, however, that all field office data i.e. workflow processes information, expenditure vouchers, project documents, official correspondence, etc. are entered via Lotus Notes in the Field Office suite of applications available to all field offices staff and are also retained in the respective field offices. Common data are replicated into all field offices, and these data would not be lost if the Vienna International Centre were destroyed. Additionally, most of the data entered into ProFi would at least partially be available via the IMIS system (which replicates data weekly) and could be reimported into a new ProFi system.

Recommendation 14

- (15) The UNODC Chief, Information Technology Service should ensure that the Information Technology component of the Crisis Management Plan is tested to ensure swift resumption of services in case of a disaster resulting in the total destruction of the Vienna International Centre.
- 51. The UNODC Administration accepted recommendation 14 and stated that the first of such tests (large scale telecommuting) is scheduled for the next 1 to 2 months. A test for resumption of services in case of total destruction of the VIC is not foreseen as long as there is neither a backup data centre nor a backup building for staff to resume work. Recommendation 14 remains open pending receipt of documentation from UNODC showing the results of the large scale telecommuting tests.

F. Future developments

The UN-wide ERP solution

52. The consideration of any future developments of ProFi System (Financials, Document Management and Workflow) should be based on three critical factors, namely:

- ➤ Ability to interface with the new UN-wide ERP system;
- Full compliance with International Public Sector Accounting Standards (IPSAS); and
- > Reduction in multiplicity of accounting systems.
- 53. The current ProFi system is a flexible product that already interfaces with IMIS and UNDP's PeopleSoft-based Atlas system. OIOS also noted that the Chief, ITS is an associate member of the Steering Committee for the development of the UN ERP solution. This offers an opportunity for UNODC to ensure that future developments take into account system interoperability.

Enhancement of ProFi needs to be compliant with IPSAS

54. Any system planned for development or enhancement of ProFi should be fully compliant with IPSAS. In this regard, OIOS noted that UNODC is a programme of the UN Secretariat and would follow the instructions of the UN Controller in this regard. Furthermore, UNODC would be required to apply the reengineered business processes emerging from the implementation of the UN wide ERP. Therefore, UNODC should identify work processes and tools that will need to be changed in order to comply with IPSAS which is scheduled for implementation by 2010. To achieve this comprehensively, a local committee made up of members from ITS, FRMS and other substantive users, should be constituted and tasked to identify areas that will need modifications in ProFi Financials, ProFi Substantives and ProFi Transactions.

Recommendation 15

- (16) The UNODC Chief, Financial Resources Management Service should form a team to identify enhancements in ProFi Financials, ProFi Substantive and ProFi Transactions required to meet International Public Sector Accounting Standards compliance objectives and facilitate integration with the UN-wide Enterprise Resource Planning system.
- 55. The UNODC Administration accepted recommendation 15 provided that additional funds can be raised for this purpose. Recommendation 15 remains open pending the setting up a team by UNODC to identify ProFi enhancements that will meet the requirements of IPSAS.

Review of two accounting systems required

56. The continued use of IMIS and ProFi results in some duplication. Given that IMIS is being replaced by the new UN-wide ERP system, UNODC must review the future costs and benefits of its continuous use of two accounting systems and make a determination as to what are the most essential investments in developmental and corrective actions. Since it is not clear as to when the UN-wide ERP system will be implemented, OIOS makes no recommendation at this point but UNODC needs to keep this issue under constant review.

V. ACKNOWLEDGEMENT

57. We wish to express our appreciation to the Management and staff of UNODC for the assistance and cooperation extended to the auditors during this assignment.

STATUS OF AUDIT RECOMMENDATIONS

Dogom		Diely	Diely	10		Implementation
necolli.	Recommendation	category	rating	o (Actions needed to close recommendation	date ²
1	The UNODC Chief, Information Technology Service should review the current organization arrangements and ensure full segregation of duties between systems administration and systems development and implementation.	Operational	High	0	Issuance of an official instruction regarding segregation of duties to relevant ProFi team staff members.	31 December 2008
2	The UNODC Chief, Financial Resources Management Service should establish a ProFi dedicated team within the Financial Resources Management Service whose role would be to carry out all required reconciliations, act as a focal point for queries from the field, and provide user training for all users and continuously monitor financial reporting activities in the field.	Operational	Medium	0	Establishment of a ProFi dedicated team within the Financial Resources Management Service.	31 December 2008
ε.	The UNODC Chief, Financial Resources Management Service should retain and exercise data ownership of the various financial areas of ProFi with the assistance of the Information Technology Service and should be responsible for data definition responsibilities, data creation/capture responsibilities, data usage, data distribution and data security.	Information	Medium	0	Documentation showing that FRMS has been designated as the data owner of ProFi.	31 December 2008
4	The UNODC Chief, Information Technology Service should prepare security and password policies for ProFi. The password policy should include procedures for the regular review of login attempts by the security administrator.	Operational	Medium	0	Documentation on security and password policies.	31 December 2008
S	The UNODC Chief, Information Technology Service should routinely monitor usage of the web and periodically validate those accessing	Operational	Medium	0	Confirmation by UNODC that the annual verification process has been established to monitor and validate web access.	31 December 2008

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Recom. no.	Recommendation	Risk category	Risk rating	0,0	Actions needed to close recommendation	Implementation date ²
	the portal with their respective missions, in order to strengthen security.					
9	The UNODC Chief, Information Technology Service should carry out a risk assessment to assess the implications of discontinuing the maintenance contract for PeopleSoft and the decision to forego upgrading of the core application system.	Information	High	0	Risk assessment of the implications of discontinuing the maintenance contract and the decision to forego upgrading of the core application system.	Not indicated
7	The UNODC Chief, Financial Resources Management Service should explore the means of reducing duplication and improving the consolidation of financial data through a single financial management system.	Information resources	Medium	0	Introduction of a single financial system by UNODC.	31 December 2008
∞	The UNODC Chief, Financial Resources Management Service, in collaboration with the Information Technology Service, should develop a workflow that ensures the most efficient way of producing the consolidated accounts. In particular, the Field Office Management Ledger Bank module should be made capable of producing its own trial balances which will ensure additional integrity of data consolidated in ProFi.	Operational	Medium	0	Mapping of data by UNODC to enable the generation of trial balances in Field Offices.	31 December 2009
6	The UNODC Chief, Information Technology Service in collaboration with the Financial Resources Management Service, should review workflow procedures and enhance process controls and other systems checks to prevent duplicate approvals that currently bypass the ProFi system logic.	Operational	Medium	0	Documentation from UNODC showing that the workflow procedures and enhancement of process controls have been reviewed.	31 December 2008
10	The UNODC Chief, Financial Resources Management Service in conjunction with the Information Technology Service should introduce the production of monthly financial reports in order to improve the overall quality of financial reporting at the year-end and improve efficiency in the production of end of	Financial	Medium	0	Confirmation by UNODC that monthly financial reports are being produced.	31 December 2008

Docom		Diel	Diel	10		Implementation
no.	Recommendation	category	rating	0.0	Actions needed to close recommendation	date ²
	year financial accounts reports.					
11	The UNODC Chief, Information Technology Service, should conduct periodic user satisfaction surveys to support continuous performance improvement of ProFi.	Information	Medium	0	Evidence of the introduction of periodic user satisfaction surveys.	31 December 2008
12	The UNODC Chief, Information Technology Service should review the current process of backing up offsite data and introduce an electronic transmission to reduce the impact of loss in the event of a disaster.	Information	Medium	0	Introduction of a system of backing up ProFi transaction logs in an offsite location.	31 December 2008
13	The UNODC Chief, Information Technology Service should prepare a formal retention policy including a retention schedule with retention requirements per data class kept on the ProFi system.	Operational	Medium	0	Introduction of a retention policy by UNODC.	31 December 2008
14	The UNODC Chief, Information Technology Service should ensure that the Information Technology component of the Crisis Management Plan is tested to ensure swift resumption of services in case of a disaster resulting in the total destruction of the Vienna International Centre.	Information resources	Medium	0	Documentation from UNODC showing the results of the large scale telecommuting tests.	31 December 2008
15	The UNODC Chief, Financial Resources Management Service should form a team to identify enhancements in ProFi Financials, ProFi Substantive and ProFi Transactions required to meet International Public Sector Accounting Standards compliance objectives and facilitate integration with the UN-wide Enterprise Resource Planning system.	Information	High	0	Setting up a team by UNODC to identify ProFi enhancements that will meet the requirements of IPSAS.	31 December 2009

^{1.} C = closed, O = open2. Date provided by UNODC in response to recommendations.