OIOS

Office of Internal Oversight Services

INTERNAL AUDIT DIVISION

REPORT 2014/033

Audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon

Overall results relating to the effective pilot implementation of the Umoja system were initially assessed as partially satisfactory. Implementation of six important recommendations remains in progress.

FINAL OVERALL RATING: PARTIALLY SATISFACTORY

9 May 2014
Assignment No. AT2013/519/02

CONTENTS

AUDIT REPORT

Audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon

I.   BACKGROUND

1.   The Office of Internal Oversight Services (OIOS) conducted an audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon (UNIFIL).

2.   In accordance with its mandate, OIOS provides assurance and advice on the adequacy and effectiveness of the United Nations internal control system, the primary objectives of which are to ensure (a) efficient and effective operations; (b) accurate financial and operational reporting; (c) safeguarding of assets; and (d) compliance with mandates, regulations and rules.

3.   In 2008, the General Assembly, in its resolution 63/262, formally approved the implementation of Umoja, an administrative reform initiative of the United Nations Secretariat that includes a thorough streamlining of the Organization's business processes.

4.   Umoja is an implementation of the SAP enterprise resource planning (ERP) software, an application that supports management activities related to finance, budget, human resources, supply chain, central support services, and other core business functions. This integrated transactional system will replace and integrate numerous existing legacy information systems in use across the Secretariat.

5.   Umoja was originally intended to support the adoption of the International Public Sector Accounting Standards (IPSAS). However, due to some delays experienced during its implementation, in 2012 the Secretariat decided to use the existing legacy information systems, and parts of Umoja, to generate IPSAS compliant opening balances before the full deployment of Umoja. As a result, the implementation of Umoja included an interface with the Galileo system. Galileo maintained data related to inventory and most fixed assets, and was enhanced to enable IPSAS compliance. In the current deployment, Umoja only maintained data related to real estate assets (including real estate assets under construction, excluding prefabricated buildings) and intangible assets.

6.   The deployment of Umoja was divided into phases (Foundation, Extension I, and Extension II), modules, and clusters.

7.   Umoja was first implemented in UNIFIL on 1 July 2013, with the infrastructure, new end-to-end business processes, testing, change management, and a live production and support environment (including interfaces to legacy systems). UNIFIL performed administrative support functions for the Office of the United Nations Special Coordinator for Lebanon (UNSCOL) using Umoja. Therefore, UNIFIL staff were the primary users of Umoja.

8.   Comments provided by UNIFIL, the Umoja Office, the Department of Field Support (DFS), and the Office of Programme Planning, Budget and Accounts (OPPBA) are incorporated in italics.

II.   OBJECTIVE AND SCOPE

9.   The audit was conducted to assess the adequacy and effectiveness of the governance, risk management and control processes put in place by UNIFIL, the Umoja Office and OPPBA in providing reasonable assurance regarding the **effective pilot implementation of the Umoja system in UNIFIL.**

10.   The audit was selected because of the high risks associated with the implementation of the Umoja pilot, and the potential impact of its results on the next deployment in the other locations.

11.   The key controls tested for the audit were: (a) risk management and strategic planning mechanisms; (b) performance monitoring indicators and mechanisms; and (c) information and communications technology (ICT) support system. For the purpose of this audit, OIOS defined these key controls as follows:

(a)   **Risk management and strategic planning mechanisms** – controls that provide reasonable assurance that risks relating to the pilot implementation of Umoja in UNIFIL are identified and assessed, and that action is taken to mitigate them;

(b)   **Performance monitoring indicators and mechanisms** – controls that provide reasonable assurance that metrics, indicators and mechanisms are established to monitor the implementation of Umoja; and

(c)   **ICT support system** – controls that provide reasonable assurance that the Umoja system addresses the business needs of the Organization.

12.   The key controls were assessed for the control objectives shown in Table 1. Certain control objectives shown in Table 1 as "Not assessed" were not relevant to the scope defined for this audit.

13.   OIOS conducted this audit from 5 August to 25 October 2013. The audit covered the period from January to October 2013.

14.   OIOS conducted an activity-level risk assessment to identify and assess specific risk exposures, and to confirm the relevance of the selected key controls in mitigating associated risks. OIOS reviewed the design and implementation of processes, procedures, and plans, interviewed Umoja project staff, business users in UNIFIL, UNSCOL and other stakeholders, and tested the system (authorizations, security settings, configuration, transactions, and ICT infrastructure).

15.   In particular, OIOS: (i) analyzed project documentation; (ii) interviewed relevant staff members in UNIFIL, UNSCOL and at the Headquarters; and (iii) tested the effectiveness of governance arrangements, project management, system development life cycle, procurement activities, system analysis, design, testing, and data conversion.

III.   AUDIT RESULTS

16.   The governance, risk management and control processes examined in UNIFIL, the Umoja Office and OPPBA were assessed as **partially satisfactory** in providing reasonable assurance regarding the **effective pilot implementation of the Umoja system in UNIFIL.** OIOS made 17 important recommendations in the report to address issues identified in the audit. UNIFIL, DFS, the Umoja Office and OPPBA had adopted some good practices for the implementation of Umoja, including the establishment of a dedicated support team, direct involvement of UNIFIL senior management in the project, creation of a local steering committee, and preparation of lessons learned. However, there were some control weaknesses in the overall system configuration, data conversion, change management and system support. These included: (a) inadequate preparation for the deployment of finance processes and change management; (b) weak monitoring systems for finance data; (c) missing and duplicated

conversion data and production data; (d) rejected/inaccurate data from interfaced systems; and (e) inconsistencies across various reports on the data and terms related to system support.

17.   UNIFIL, the Umoja Office, OPPBA and DFS accepted and provided evidence of implementing 11 recommendations and are in the process of implementing six recommendations.

18.   The initial overall rating was based on the assessment of key controls presented in Table 1 below. The final overall rating is **partially satisfactory**.

<p align="center">Table 1: Assessment of key controls</p>

Business objective	Key controls	Control objectives			
		Efficient and effective operations	**Accurate financial and operational reporting**	**Safeguarding of assets**	**Compliance with mandates, regulations and rules**
Effective pilot implementation of the Umoja system in UNIFIL	(a) Risk management and strategic planning mechanisms	Partially satisfactory	Partially satisfactory	Not assessed	Partially satisfactory
	(b) Performance monitoring indicators and mechanisms	Partially satisfactory	Partially satisfactory	Not assessed	Partially satisfactory
	(c) ICT support system	Partially satisfactory	Partially satisfactory	Not assessed	Partially satisfactory
FINAL OVERALL RATING: PARTIALLY SATISFACTORY					

A.   Risk management and strategic planning mechanisms

Inadequate preparation for the deployment of finance processes and change management

19.   The finance module and processes of Umoja were a critical component, as they led the financial reporting process and the Organization's ability to comply with IPSAS requirements and reporting. OIOS reviewed the configuration and implementation of control processes in the finance module of Umoja and identified the following weaknesses:

(i)   The activities for the preparation of data required for Umoja and IPSAS had not been adequately coordinated; and

(ii)   Inadequate time was spent on training the finance staff on Umoja due to the concurrent closing of accounts for IPSAS implementation and the implementation of Umoja.

20.   Although UNIFIL was able to operate and process transactions in Umoja, there was a risk that during the upcoming cluster rollouts in the remaining 15 peacekeeping missions, staff members could experience significant issues that could lead to transaction processing delays, and the inability to generate correct and timely financial reports.

> **(1) The Umoja Office should: (i) prepare and make available an integrated IPSAS/Umoja plan to the peacekeeping missions scheduled for the next cluster implementations; and (ii) schedule multiple training sessions of the same courses for minimizing the risk of staff missing out on essential training.**
>
> *The Umoja Office accepted recommendation 1 and stated that the Project Management Office of IPSAS and DFS met regularly to coordinate the activities to mitigate conflicts in the plans with regard to workshops, meetings and end user training. However, no minutes of meetings were produced. The Umoja Office addressed the weaknesses identified and created an integrated Umoja/IPSAS combined work plan that can be used going forward for the next cluster rollouts.* Based on the actions taken and documentation provided by the Umoja Office, recommendation 1 has been closed.

Inadequate documentation of instructions for financial month-end closure

21.   Procedures and instructions for month-end closing should be documented and distributed to all relevant staff.

22.   UNIFIL staff had not received adequate instructions for completing month-end closing tasks. As of October 2013, the month-end closing of July through September 2013 was still pending. This condition could lead to financial processing delays, and the inability of the Organization to generate correct and timely financial reporting data.

> **(2) OPPBA should document and distribute to all relevant offices instructions on month-end closure procedures.**
>
> *OPPBA accepted recommendation 2 and stated that the Accounts Division issued month-end closure instructions to the missions on 8 January 2014.* Based on the actions taken and documentation provided by the Accounts Division, recommendation 2 has been closed.

Delayed role mapping and undefined ownership of data

23.   The access of staff to systems should be mapped against current and expected roles prior to the deployment in production.

24.   Role mapping for the roles associated with the cashier and treasury functions in UNIFIL was done too late in the process and was not at a sufficient level of detail. Furthermore, the responsibility and ownership to process and record data pertaining to business partners in Umoja was not clearly defined. This condition could lead to the inability of staff to perform their functions in a timely and reliable manner.

> **(3) The Umoja Office should: (i) ensure that a detailed role mapping exercise is completed in each office with adequate lead time prior to the implementation of Umoja; and (ii) define the ownership of data pertaining to business partners.**
>
> *The Umoja Office accepted recommendation 3 and stated that access mapping for Cluster 3 is in progress, and provided a work plan detailing the tasks to be completed for user access mapping and workflows.* Recommendation 3 remains open pending receipt of documentation showing: (i) the completion of the role mapping exercise; and (ii) the assignment of ownership of business partner data.

25.   Documented evidence supporting transactions and payments in Umoja should be recorded and uploaded in the system.

26.   UNIFIL staff was unable to attach/upload evidential documentation supporting transactions/payments. This condition could limit the completeness of records and the availability of audit trail information.

> **(4) The Umoja Office should: (i) address the limitations presented by the system for recording/uploading evidential documentation supporting transactions/payments; and (ii) provide users with adequate training and guidelines.**
>
> *The Umoja Office accepted recommendation 4 and provided documented evidence of the controls implemented.* Based on the actions taken by the Umoja Office, recommendation 4 has been closed.

B.   Performance monitoring indicators and mechanisms

Weak monitoring mechanisms for cleansing of Umoja finance data

27.   The implementation of Umoja required significant efforts in data cleansing from several offices, and these efforts will continue to be a critical requirement after initial stages of the implementation across all locations. Data cleansing activities need to be closely monitored to ensure their accuracy and integrity on an ongoing basis.

28.   OIOS did not find control mechanisms in place for monitoring the cleansing of Umoja finance data, which should have included details about: (i) the terms (i.e., target, trend, etc.) associated with the items being monitored; (ii) frequency of reporting; (iii) responsibilities; and (iv) actions expected to be taken by each party involved.

29.   Given the lack of adequate monitoring of finance information, there was a risk of delay and inadequate response to any exception that occurred during the implementation of Umoja, which could negatively impact the preparation of financial statements.

> **(5) The Umoja Office, in coordination with the Office of Programme Planning, Budget and Accounts, should provide clear instructions to all offices for monitoring the collection and preparation of financial data, defining: (i) the terms (i.e., target, trend, etc.) associated with the items being monitored; (ii) frequency of reporting; (iii) responsibilities; and (iv) actions expected to be taken by each party involved.**
>
> *The Umoja Office and OPPBA accepted recommendation 5 and provided evidence of the monitoring instructions issued in January 2014 for the month-end procedures.* Based on the actions taken by the Umoja Office and OPPBA, recommendation 5 has been closed.

Unprocessed parked documents

30.   The Umoja system had a feature that allowed users to park transactions for future processing. These transactions should have been approved by a valid approver to release and process them. Parked documents should not be allowed to remain in the system indefinitely.

31.   In UNIFIL, there were 83 general ledger transactions and 20 vendor line item records parked. The process for releasing parked documents was not clear, and the identified transactions were still in "parked status" in the system as of October 2013, with some of them since July 2013. Furthermore, the responsibility and ownership to process parked documents and records pertaining to business partners in Umoja was not clearly defined.

32.   The presence of parked documents and the lack of additional explanations about their nature and processing modalities could expose the Organization to the risk of transactions not being processed in the system in a timely manner and/or left unaccounted, leading to inaccurate financial reporting and non-compliance with IPSAS.

> **(6) UNIFIL should review and finalize the status of the transactions currently parked in Umoja, and issue detailed responsibilities for clearing parked documents and reporting in Umoja.**
>
> *UNIFIL accepted recommendation 6 and stated that the parked documents have been cleared. UNIFIL will continue to monitor and review parked transactions regularly as part of the month end exercise.* Based on the actions taken by UNIFIL, recommendation 6 has been closed.

C.   Information and Communications Technology support system

Configuration of Umoja

33.   Access controls should enable the determination of who has access to specific data and functions in Umoja at a given time; and include mechanisms for identifying, authenticating, and authorizing users. A series of detailed tests were conducted in the Umoja system to determine whether the configuration of the automated controls ensured that appropriate authorizations were granted to staff members for performing their functions in system administration and support, finance, and procurement. Some weaknesses were identified in the following areas:

(i) The Umoja system contained instances of critical transactions that were either not restricted to a limited number of users, or were assigned to users with inadequate types of accounts (i.e., with generic accounts). These critical transactions allowed users to create, change, delete, or reverse important data.

(ii) Anonymous accounts (user accounts automatically delivered when the software was first installed) were not locked in the Umoja system. In accordance with the identity principle, any user account should have been assigned to one individual or should have been locked.

(iii) Generic accounts were enabled in the Umoja system. However, given that generic accounts were not assigned to specific individual users, they prevented the establishment of clear accountabilities about the use of the system.

(iv) The Umoja system contained several instances of access assigned to users with an extended duration or open ended. The access given to staff members should have been based on the duration of their employment and, in any case, should have not been open ended.

(v) Tolerance limits were not used in the Umoja system. The definition of tolerances would strengthen the controls on user authorizations by restricting access to specific transactions for posting financial documents and processing business partners.

34. There was a risk that these conditions may lead to undetected unauthorized activities in the system.

> **(7) The Umoja Office should: (i) review the details (type of users and accounts assigned, duration of assignment, generic accounts, etc.) of each critical authorization assigned and ensure that they are consistent with the functional requirement of each function; (ii) ensure that generic accounts with critical authorizations are either disabled or supported by adequate controls for constant identification of the users and logging of their activities; and (iii) ensure that every authorization is assigned with an appropriate end date.**
>
> *The Umoja Office accepted recommendation 7 and stated that a user access mapping and workflow process is in place, and documented evidence of the controls implemented has been provided to OIOS.* Recommendation 7 remains open pending receipt of: (i) critical transaction codes (allowing users to create, change, delete, and reverse important data), mapped against the authorized user identification codes, ensuring that no generic identifications are authorized to perform such transactions; (ii) evidence showing that generic accounts with critical authorizations are either disabled or logged and monitored; and (iii) a list of authorization end-dates.

Incomplete contract records

35. Converted data files must be processed completely and accurately to ensure that all records converted in the new system are complete.

36. The implementation of Umoja required the conversion of data from several legacy systems, including that containing contract information. In the post-load contract header and item file - a data conversion file that contained detailed data of UNIFIL current contract agreements – there were 17 missing sequence numbers (gaps). Out of a sequential number range from 4700000001 through 47000000267, records 4700000002 to 4700000009 and records 470000011 to 470000019 were missing. This condition indicated that these records were not included in the data converted in the Umoja production environment.

> **(8) The Umoja Office should, in coordination with UNIFIL, review, determine, and correct the cause of the missing data records in the contract header and item description file.**
>
> *The Umoja Office accepted recommendation 8 and clarified that a line or contract would not be migrated when: (i) material master record was not created; (ii) a contract line item was made obsolete in the contract; or (iii) a contract was owned by the Procurement Division – thereby the Procurement Division would have been responsible for deciding if the data element should have been migrated. The Umoja Office also stated that as of 25 March 2014, there were no pending contract items for missions, including UNIFIL, and that this analysis was performed as part of the readiness for Cluster 1.* Recommendation 8 remains open pending receipt of documented evidence showing the approval of the Procurement Division authorizing the exclusion of the missing records.

Inadequate data cleansing for critical data

37.   Currency codes, quantities and amounts are critical data fields that should be reviewed and cleansed before and after data conversion scripts are executed due to their potential financial implications in financial reporting.

38.   There were several instances of incorrect currency codes in the contracts data. For example, an amount of $4.7 billion was listed for a five year rental of premises contract that, instead, should have been quoted in Lebanese Pounds. UNIFIL had identified and corrected the amount after the data was uploaded in Umoja and prior to going live. However, several instances of these types of questionable amounts remained in the upload file. Also, the purchase order file contained the UNIFIL purchase orders that were converted from the SUN accounting system to Umoja. Out of 416 purchase order records, there were two instances where the quantity and dollar amount were in the opposite field. This would indicate that training and instructions for data cleansing needed to be strengthened. The inaccuracy of this type of data could result in skewed results of average cost calculations and inaccurate IPSAS reporting data.

> **(9)   The Umoja office should document and distribute to all relevant offices, detailed data cleansing instructions for the business partners file, and post validation scripts of purchase orders and contracts.**
>
> *The Umoja Office accepted recommendation 9 and stated that post validation scripts of purchase orders and contracts were issued to the missions and relevant process owners. As part of the data governance structure, the process owners were responsible for data objects and for preparing the necessary guidelines to support the data cleansing activities within the deployment site. The Umoja Office also stated that it has worked with process owners to mitigate the risks related to discrepancies identified during the conversion process, and provided the most recent instructions for data cleansing, and copies of emails and memoranda sent to the process owners.*   Based on the actions taken and documentation provided by the Umoja Office, recommendation 9 has been closed.

Absence of adequate evidence of post-load data validation

39.   Post-load data files should be retained to perform data validation exercises and to provide complete audit trails.

40.   Most of the Umoja data conversion files were retained and available for review. However, there were no post-load data files available for accounts payable and accounts receivable. Therefore, these files could not be audited using automated methods, and only a limited online review of the data could be performed. This condition limited the ability to conduct an adequate check for duplicates, missing sequence numbers, and missing data.

> **(10) The Umoja Office should require that all post-upload files are retained by each office after every data conversion is completed.**
>
> *The Umoja Office accepted recommendation 10 and provided documented evidence describing the rules to be followed for post-upload validation extracts.* Based on the actions taken by the Umoja Office, recommendation 10 has been closed.

Manual processing of annual leave data

41.   Annual leave data should be recorded in a timely and accurate manner for the preparation of IPSAS compliant financial statements. Annual leave data in peacekeeping missions was recorded using the new "eLeave" application developed by DFS.

42.   The deployment of the new application "eLeave" was delayed in UNIFIL and UNSCOL, and annual leave balances were still calculated manually using a combination of Excel sheets and the old legacy system (Matrix). Given that accurate annual leave balances are required for IPSAS compliance, delays and inaccuracies in processing this data could have a negative impact on the preparation of the financial statements, therefore the implementation of the new "eLeave " application should be completed prior to further rollouts to minimize the need and risk of relying on manually maintained data.

> **(11) DFS should complete the implementation of the new "eLeave" application prior to the rollout of the "Cluster 2 foundations" to minimize the need and risk of relying on manually maintained data.**
>
> *DFS accepted recommendation 11 and confirmed that the "eLeave" application has been implemented in Cluster 2 missions and continue to address issues with the transfer of time and attendance data from the Integrated Management Information System (IMIS) and "eLeave" (part of the Field Support Suite) into Umoja, to establish opening leave balances that are IPSAS compliant.* Based on the information provided by DFS, recommendation 11 has been closed.

Missing post-go live production data

43.   Once data is converted in a new system, adequate control measures should be configured in the production environment to ensure that transactions are processed on the basis of reliable and approved control mechanisms.

44.   For the conversion of purchase orders, there were several instances where the "approver" of the legacy purchase orders were set to a default value of "C_CONV06", instead of the actual name of the person who approved them (i.e., in the legacy system, Mercury). These purchase orders were automatically given "approved" status in the conversion, based on the fact that they were already approved in Mercury. Given that the approver of a purchase order was a critical data field, and that both SUN and Mercury systems were retired, the exclusion of this information in the conversion would eventually result in the loss of an audit trail for purchase orders imported from the UNIFIL legacy systems.

> **(12) The Umoja Office should, in coordination with the substantive offices, review and determine the impact of not converting the approver name of purchase orders from the legacy system to Umoja.**
>
> *The Umoja Office accepted recommendation 12 and provided evidence that during the conversion of Cluster 2 purchase orders, the approver name from the legacy systems (i.e., Mercury/IMIS) was included in the extracts provided by legacy system administrators. This name was parsed into the "Header Text 1" field of the converted purchase order for reference purposes. This value was also included in a text field that was mapped by the conversion program to the Supplier Relationship Management (SRM) module of Umoja into the "Note to Supplier" data field, which was also on the purchase order.* OIOS reviewed the evidence provided by the Umoja Office and noted that although the approver name was now added in the data fields, the approver name was not correctly recorded in the appropriate field reserved for the actual approver name in the purchase orders. The generic

conversion name "C_CONV06" still existed in the approver name data field. OIOS is of the opinion that data fields should be used as intended, providing the data required in the required format because this could prevent the Organization from generating correct and reliable reports. Recommendation 12 remains open pending receipt of evidence demonstrating that the approver names have been converted into the appropriate data fields of Umoja.

Limitations of procurement-related data fields

45.　　Data fields designed to record procurement-related information should be adequately configured to ensure that all relevant data is recorded and maintained.

46.　　There were several instances where procurement staff members were not able to adequately populate in Umoja the text of descriptions in the purchase order line items. This issue was caused by a size limitation in the purchase order data field in Umoja. In addition there were several instances where the inadequacies in the length of data fields for the "Invitation to bid" process resulted in procurement staff members applying extensive changes to legal bidding documents outside of the system, prior to sending them to prospective applicants. It was also noted that the Umoja system defaulted the name of the buyer as the person to submit the bid to, which was in violation of the separation of duties principle established in the Procurement Manual. Given that this data field was not editable in Umoja, buyers were forced to make changes outside Umoja to add item descriptions and specifications, as well as instructions for where to respond to the bid process.

47.　　These workaround solutions slowed-down the procurement process and presented potential negative implications once the system is rolled-out in the other office locations.

(13) The Umoja Office should address the limitations of data fields designed to record in the system: (i) the purchase order item description; (ii) invitation to bid process; and (iii) default buyers' names.

The Umoja Office accepted recommendation 13 and stated that change control requests have been submitted and the issues are being addressed accordingly. The Umoja Office submitted copies of the change requests submitted. Recommendation 13 remains open pending receipt of evidence demonstrating the completion of the recommended actions to resolve the limitation of data fields.

Rejected/inaccurate data from interfaced systems

48.　　The introduction of Umoja was accompanied by several interfaces with some legacy systems. The accuracy of interfaced data was critical in preventing errors in data processing through all the systems involved, and to ensure accurate reporting. In particular, the main system interfaces established for the first phase of the Umoja implementation were:

(i)　　Automated, for:

a.　Purchase orders and receipts of property and equipment from Umoja to Galileo; and

b.　Journal entries from Galileo to IMIS;

(ii)　　Manual, for recording in Galileo the vehicles acquired through the legacy vehicle acquisition system; and

(iii)   Pending implementation, for IPSAS journal entries from Umoja to IMIS.

49.   A review of the system interfaces between Umoja and Galileo for purchase orders and receipts of property and equipment showed that two instances of items purchased in Umoja were rejected during the interface process because the "material ID" was a required data field in Umoja but not in Galileo. UNIFIL users were able to manually identify these instances due to the limited number of transactions to be reviewed. However, the manual identification of rejected transactions may become a serious challenge once the system is deployed on a global scale. Based on the results of the tests conducted, there was a risk that the acquisition of some of the assets recorded in Umoja and vehicles from the vehicle acquisition system could be missing from Galileo, and therefore result in inaccurate IPSAS reporting.

---

(14) The Umoja Office should: (i) address and resolve the problem associated with the "material identification code (i.e., ID)" field that is preventing a correct interface of data from Umoja to Galileo; and (ii) include instructions for this control process in the training materials for the next Umoja rollout.

The Umoja Office accepted recommendation 14 and provided evidence that it has engaged with the Property Management Unit of DFS, the Property Management Unit at the United Nations Logistics Base in Brindisi, trainers, and local process experts to ensure that this issue is adequately communicated and reinforced during training. Based on actions taken by the Umoja Office, recommendation 14 has been closed.

Inaccurate calculation of depreciation schedules

50.   The adoption of IPSAS requires accurate calculation of the depreciation of assets for financial reporting.

51.   There were several instances where the depreciation schedules in Galileo appeared to be accelerated. For example, items purchased and recorded in Umoja in July 2013 – after the go-live date – appeared in Galileo with a depreciation of three months as of 10 September 2013, instead of two months. Based on the results of the tests conducted, there was a risk that the depreciation of assets could be calculated inaccurately in Galileo, leading to inaccurate IPSAS reporting in the general ledger.

---

(15)   OPPBA should analyze the depreciation schedules in Galileo for accuracy and ensure that the calculations are correct for IPSAS reporting purposes.

OPPBA accepted recommendation 15 and stated that the review of the methodology for depreciation in Galileo was completed in 2013. This area was reviewed and confirmed by the Board of Auditors during its audit of Galileo enhancements for IPSAS. Based on the response provided by OPPBA, recommendation 15 has been closed.

Unconfirmed completion of the interface between Umoja and IMIS

52.   Data interfaces between systems must be complete and accurate.

53.   A parallel general ledger was established in IMIS for generating IPSAS-compliant financial reports at the end of the financial year (June 2014). However, in the case of UNIFIL, some of the IPSAS-related data resided in Umoja. It was expected that the same condition will apply to the remaining 15 peacekeeping missions that went live with Umoja on 1 November 2013. The interface for transferring the

required IPSAS data from Umoja into IMIS was not yet implemented, and the required IPSAS general ledger entries from Umoja could be missing in IMIS, leading to inaccurate reporting.

> **(16)   The Umoja Office should ensure that the automated interface from Umoja to IMIS for the IPSAS general ledger data is timely completed, tested, and implemented.**
>
> *The Umoja Office accepted recommendation 16 and stated that the functional acceptance testing for this interface was completed on 19 August 2013.* Recommendation 16 remains open pending receipt of evidence demonstrating that the interface between Umoja and IMIS has been actually implemented and is in the live production environment for the IPSAS general ledger.

Inconsistent information presented in the reports related to system support

54.   Reports related to system support should be consistent and reliable. At UNIFIL, there were some discrepancies in the data and terms included in various reports generated for UNIFIL (i.e., Ramp-up phase and lessons learned report; and Support status review report) and monitored during the pilot implementation, as well as inactive user accounts (i.e., accounts created but never used).   There was a risk that management could make incorrect decisions on the basis of the information contained in these reports.

> **(17)   UNIFIL, in coordination with the Umoja Team, DFS and OICT, should: (i) define standard procedures for tracking, monitoring, extracting and reporting information and metrics about the use of Umoja with a consistent data source, terminology, and rating of issues; and (ii) monitor and review the status of user logins on a regular basis.**
>
> *The Umoja Office accepted recommendation 17 and stated that together with UNIFIL it addressed the issues identified through regular production support meetings, video teleconferences, and cross checking of statistics. Subsequently, the Umoja Office refined and improved the report. UNIFIL checked daily the "Umoja system support report" against the statistics provided locally. The latest reports were comprehensive and showed consistent data. A new report was developed that provided the statistics of service requests raised by UNIFIL and showed resolved/closed or cancelled by month. Summary and detailed daily reports were circulated in the Mission and used by the various functional areas to monitor open tickets and assist in resolving them as appropriate.* Based on actions taken by the Umoja Office, recommendation 17 has been closed.

IV.   ACKNOWLEDGEMENT

55.   OIOS wishes to express its appreciation to the Management and staff of UNIFIL, the Umoja Office, OPPBA and DFS for the assistance and cooperation extended to the auditors during this assignment.

(*Signed*) David Kanja
Assistant Secretary-General for Internal Oversight Services

STATUS OF AUDIT RECOMMENDATIONS

Audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon

Recom. no.	Recommendation	Critical[1]/ Important[2]	C/ O[3]	Actions needed to close recommendation	Implementation date[4]
1	The Umoja Office should: (i) prepare and make available an integrated IPSAS/Umoja plan to the peacekeeping missions scheduled for the next cluster implementations; and (ii) schedule multiple training sessions of the same courses for minimizing the risk of staff missing out on essential training.	Important	C	Action completed.	Implemented
2	OPPBA should document and distribute to all relevant offices instructions on month-end closure procedures.	Important	C	Action completed.	Implemented
3	The Umoja Office should: (i) ensure that a detailed role mapping exercise is completed in each office with adequate lead time prior to the implementation of Umoja; and (ii) define the ownership of data pertaining to business partners.	Important	O	Provide documented evidence of: (i) the completion of the role mapping exercise; and (ii) the assignment of ownership of business partner data.	30 April 2015
4	The Umoja Office should: (i) address the limitations presented by the system for recording/uploading evidential documentation supporting transactions/payments; and (ii) provide users with adequate training and guidelines.	Important	C	Action completed.	Implemented
5	The Umoja Office, in coordination with the Office of Programme Planning, Budget and Accounts, should provide clear instructions to all offices for monitoring the collection and preparation of financial data, defining: (i) the terms (i.e., target, trend, etc.) associated with the items being	Important	C	Action completed.	Implemented

---

[1] Critical recommendations address significant and/or pervasive deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of control and/or business objectives under review.

[2] Important recommendations address important deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

[3] C = closed, O = open

[4] Date provided by the Department of Management in response to recommendations.

STATUS OF AUDIT RECOMMENDATIONS

Audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon

Recom. no.	Recommendation	Critical[1]/ Important[2]	C/ O[3]	Actions needed to close recommendation	Implementation date[4]
	monitored; (ii) frequency of reporting; (iii) responsibilities; and (iv) actions expected to be taken by each party involved.				
6	UNIFIL should review and finalize the status of the transactions currently parked in Umoja, and issue detailed responsibilities for clearing parked documents and reporting in Umoja.	Important	C	Action completed.	Implemented
7	The Umoja Office should: (i) review the details (type of users and accounts assigned, duration of assignment, generic accounts, etc.) of each critical authorization assigned and ensure that they are consistent with the functional requirement of each function; (ii) ensure that generic accounts with critical authorizations are either disabled or supported by adequate controls for constant identification of the users and logging of their activities; and (iii) ensure that every authorization is assigned with an appropriate end date.	Important	O	Provide documented evidence showing: (i) critical transaction codes (allowing users to create, change, delete, reverse important data) mapped against the authorized user identification, ensuring that no generic identifications are authorized to perform such transactions; ii) generic accounts with critical authorizations are disabled or audit logging of such accounts are recorded and monitored; and (iii) a list of authorization end-dates.	30 April 2015
8	The Umoja Office should, in coordination with UNIFIL, review, determine, and correct the cause of the missing data records in the contract header and item description file.	Important	O	Provide documented evidence showing the approval of the Procurement Division authorizing the exclusion of the missing records.	30 April 2015
9	The Umoja office should document and distribute to all relevant offices, detailed data cleansing instructions for the business partners file, and post validation scripts of purchase orders and contracts.	Important	C	Action completed.	Implemented
10	The Umoja Office should require that all post-upload files are retained by each office after every data conversion is completed.	Important	C	Action completed.	Implemented
11	DFS should complete the implementation of the new "eLeave" application prior to the rollout of the "Cluster 2 foundations" to minimize the need and risk of relying on manually maintained data.	Important	C	Action completed.	Implemented
12	The Umoja Office should, in coordination with the	Important	O	Provide documented evidence demonstrating	30 April 2015

STATUS OF AUDIT RECOMMENDATIONS

Audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon

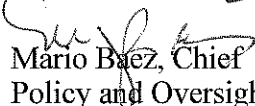| Recom. no.	Recommendation	Critical[1]/ Important[2]	C/ O[3]	Actions needed to close recommendation	Implementation date[4]
	substantive offices, review and determine the impact of not converting the approver name of purchase orders from the legacy system to Umoja.			that the approver names have been converted into the appropriate data fields.	
13	The Umoja Office should address the limitations of data fields designed to record in the system: (i) the purchase order item description; (ii) invitation to bid process; and (iii) default buyers' names.	Important	O	Provide documented evidence demonstrating the completion of the recommended actions to resolve the limitation of data fields.	30 April 2015
14	The Umoja Office should: (i) address and resolve the problem associated with the "material identification code (i.e., ID)" field that is preventing a correct interface of data from Umoja to Galileo; and (ii) include instructions for this control process in the training materials for the next Umoja rollout.	Important	C	Action completed.	Implemented
15	OPPBA should analyze the depreciation schedules in Galileo for accuracy and ensure that the calculations are correct for IPSAS reporting purposes.	Important	C	Action completed.	Implemented
16	The Umoja Office should ensure that the automated interface from Umoja to IMIS for the IPSAS general ledger data is timely completed, tested, and implemented.	Important	O	Provide documented evidence demonstrating that the interface between Umoja and IMIS has been actually implemented and is in the live production environment for the IPSAS general ledger.	30 April 2015
17	UNIFIL, in coordination with the Umoja Team, DFS and OICT, should: (i) define standard procedures for tracking, monitoring, extracting and reporting information and metrics about the use of Umoja with a consistent data source, terminology, and rating of issues; and (ii) monitor and review the status of user logins on a regular basis.	Important	C	Action completed.	Implemented

APPENDIX I

Management Response

United Nations · Nations Unies

TO:
A:
Mr. Gurpur Kumar, Deputy Director
Internal Audit Division
Office of Internal Oversight Services

DATE: 1 April 2014

THROUGH:
S/C DE:
Christian Saunders, Director
Office of the Under-Secretary-General for Management

FROM:
DE:
Mario Baez, Chief
Policy and Oversight Coordination Service
Office of the Under-Secretary-General for Management

SUBJECT:
OBJET:
Confidential: Draft report on an audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon (Assignment No. AT2013/519/02)

1.   With reference to the above subject and in response to your memorandum dated 7 March 2014 addressed to Mr. Takasu and Major-General Serra, please find the following consolidated comments from the Department of Management (DM), Department of Field Support (DFS) and United nations Interim Force in Lebanon (UNIFIL), to the recommendations on the subject draft report in the attached Appendix I.

2.   It will be appreciated if these comments are taken into consideration when finalising the report.

3.   Thank you for the opportunity to provide our comments on the draft report.

14-00901

Audit of the pilot implementation of the Umoja system at the United Nations Interim Force in Lebanon
(Assignment No. AT2013/519/02)

Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	The Umoja Office should: (i) prepare and make available an integrated IPSAS/Umoja plan to the peacekeeping missions scheduled for the next cluster implementation; and (ii) schedule multiple training sessions of the same courses for minimizing the risk of staff missing out on essential training.	Important	Yes	Team Lead, Project Management Office, Umoja	Implemented	Documented evidence of the controls implemented has been provided to OIOS. Umoja, IPSAS PMO and DFS met regularly to coordinate the activities to mitigate conflicts in the plans with regard to workshops, meetings and end user training. However, no minutes of meetings were produced.
2	OPPBA should document and distribute to all relevant offices instructions on month-end closure procedures.	Important	Yes	Director, Accounts Division, OPPBA	Implemented	Accounts Division issued month-end closure instructions to the missions on 8 January 2014.
3	The Umoja Office should: (i) ensure that a detailed role mapping exercise is completed in each office with adequate lead time prior to the implementation of Umoja; and (ii) define the ownership of data pertaining to business partners.	Important	Yes	Team Lead, Organizational Change Management, Umoja	30 May 2014	Cluster 3 access mapping is in progress. Documented evidence of the controls implemented so far has been provided to OIOS.
4	The Umoja Office should: (i) address the limitations presented by the system for recording/uploading evidential documentation supporting	Important	Yes	Team Lead, Organizational Change Management,	Implemented	(i) Relevant transactions allow for attachments to be uploaded directly to the SAP transaction itself. Documented evidence of the controls implemented has

[1] Critical recommendations address significant and/or pervasive deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of control and/or business objectives under review.
[2] Important recommendations address important deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
8	The Umoja Office should, in coordination with UNIFIL, perform further clean-up of the business partners file to eliminate the 26 instances of duplicate staff and the 315 instances of duplicate business partners.	Important	No	Team Lead, Technical Solutions, Umoja	N/A	Umoja Comments: The relevant Business Partner records were blocked in Umoja. Payments cannot be processed against any archived or blocked business partner account number. DFS comments: DFS wishes to clarify that the 26 UNIFIL staff members referred to in paragraph 43 (i) of the draft report relate to retirees created in Umoja with their old index numbers before the system went live and before OHRM had issued a centralised index number. Later, when a centralised index number was created for retirees, the Umoja team in New York archived the old business partner numbers. It should be noted that payments cannot be processed against any archived business partner's account number. UNIFIL comments: Concerning the 315 business partners, UNIFIL reiterates that the duplicate names relate to international staff members, many of whom had two bank accounts – one for the local/ Lebanese bank account and the other one for the overseas bank account. This is a normal practice in field missions in which, international Staff are allowed to maintain two bank accounts, one for the local salary portion and the other for the international salary portion as outlined in the salary distribution form. However, in

Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	transactions/payments; and (ii) provide users with adequate training and guidelines.			Umoja		been provided to OIOS. (ii) The user's guidelines to upload documents directly to SAP transactions are available on iSeek.
5	The Umoja Office, in coordination with the Office of Programme Planning, Budget and Accounts, should provide clear instructions to all offices for monitoring the collection and preparation of financial data, defining: (i) the terms (i.e., target, trend, etc.) associated with the items being monitored; (ii) frequency of reporting; (iii) responsibilities; and (iv) actions expected to be taken by each party involved.	Important	Yes	Director, Accounts Division, OPPBA	30 April 2014	Month-end instructions were issued by the Accounts Division in January 2014 and year-end instructions are currently being drafted for issuance in April 2014.
6	UNIFIL should review and finalize the status of the transactions currently parked in Umoja.	Important	Yes	N/A	Implemented	OIOS has closed the recommendation as implemented in the draft report.
7	The Umoja Office should: (i) review the details (type of users and accounts assigned, duration of assignment, generic accounts, etc.) of each critical authorization assigned and ensure that they are consistent with the functional requirement of each function; (ii) ensure that generic accounts with critical authorizations are either disabled or supported by adequate controls for constant identification of the users and logging of their activities; and (iii) ensure that every authorization is assigned with an appropriate end date.	Important	Yes	Team Lead, Technical Solutions, Umoja	Implemented	A User Access Mapping and Workflow Process is in place. Documented evidence of the controls implemented has been provided to OIOS.

Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						all the cases, the Vendor ID Number and the Unique Identification Number remain the same. Documented evidence of these numbers has been provided to OIOS.
9	The Umoja Office should, in coordination with UNIFIL, review, determine, and correct the cause of the missing data records in the contract header and item description file.	Important	Yes	Team Lead, Organizational Change Management/ Production Support team, Umoja	Implemented	The reasons that a line or contract would not be migrated are: 1) Material Master record was not created - this was rectified within 2 weeks of the migration. 2) A contract line item was made obsolete in the contract. 3) A contract was owned by UN Procurement Division - thereby PD would have been responsible for deciding if the data element should have been migrated. As of 25 March 2014, there are no pending contract items for Missions, including UNIFIL. This analysis was performed as part of readiness for Cluster 1.
10	The Umoja office should document and distribute to all relevant offices, detailed data cleansing instructions for the business partners file, and post validation scripts of purchase orders and contracts.	Important	Yes	Team Lead, Deployment, Umoja	Implemented	Post validation scripts of purchase orders and contracts were issued to the missions and relevant Process Owners. As part of the data governance structure, the Process Owners were responsible for data objects and for preparing the necessary guidelines to support the data cleansing activities within the deployment site. The Umoja Office has worked with Process Owners to mitigate the risks related to discrepancies identified during the conversion process.

Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						Documented evidence of the controls implemented has been provided to OIOS.
11	The Umoja Office should require that all post-upload files are retained by each office after every data conversion is completed.	Important	Yes	Team Lead, Deployment, Umoja	Implemented	Documented evidence of the controls implemented has been provided to OIOS.
12	DFS should complete the implementation of the new "eLeave" application prior to the rollout of the "Cluster 2 foundations" to minimize the need and risk of relying on manually maintained data.	Important	Yes	N/A	Implemented	OIOS has closed the recommendation as implemented in the draft report.
13	The Umoja Office should, in coordination with the substantive offices, review and determine the impact of not converting the approver name of purchase orders from the legacy system to Umoja.	Important	Yes	Team Lead, Deployment, Umoja	Implemented	Documented evidence of the controls implemented has been provided to OIOS.
14	The Umoja Office should address the limitations of data fields designed to record in the system: (i) the purchase order item description; (ii) invitation to bid process; and (iii) default buyers' names.	Important	Yes	Team Lead, Solution Architect, Umoja	30 June 2014	Change control requests have been submitted and the issues are being addressed accordingly. Documented evidence of the controls implemented has been provided to OIOS.
15	The Umoja Office should test and implement a process to prevent double-charging of associated costs related to the acquisition of assets.	Important	No	Team Lead, Deployment, Umoja	N/A	Actual cost of the asset and actual associated costs are charged to separate General Ledger accounts in Umoja. The standard 20 per cent associated cost as determined by the IPSAS rule is calculated on the actual cost of the asset (excluding the actual associated costs) and therefore,

Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						there is no duplication of costs relating to the asset recorded in Galileo.
16	The Umoja Office should: (i) address and resolve the problem associated with the "material identification code (i.e., ID)" field that is preventing a correct interface of data from Umoja to Galileo; and (ii) include instructions for this control process in the training materials for the next Umoja rollout.	Important	Yes	Team Lead, Deployment, Umoja Team Lead, Organizational Change Management, Umoja	Implemented	Documented evidence of the controls implemented has been provided to OIOS.
17	OPPBA should analyze the depreciation schedules in Galileo for accuracy and ensure that the calculations are correct for IPSAS reporting purposes.	Important	Yes	Director, Accounts Division, OPPBA	Implemented	The review of the methodology for depreciation in Galileo was identified initially as part of the project to enhance Galileo for IPSAS-compliance, which was completed in 2013. This area was reviewed and confirmed by the Board of Auditors during its audit of Galileo enhancements for IPSAS.
18	The Umoja Office, in coordination with all parties involved in Umoja implementation (i.e. business/process owners, subject matter experts working in Umoja, Umoja staff, system integrators, etc.) should: (i) consider building an interface for automating the transferring of data related to vehicles from the vehicle acquisition system to Galileo to prevent the probability of errors and omissions in manual data input; and (ii) address this risk and justify its mitigation or acceptance.	Important	No	N/A	N/A	Goods and services receipts for UNIFIL are processed in Umoja. Similarly, vehicles are received in Umoja and the transaction is recorded in Galileo via an interface between Umoja and Galileo. While some additional data related to a vehicle (e.g. registration) may be manually entered from the vehicle acquisition system, building an interface for this purpose would not be advisable given the plan to decommission Galileo.
19	The Umoja Office should ensure that the automated interface from Umoja to	Important	Yes	Team Lead, Technical	Implemented	Umoja interface to IMIS for UNIFIL has been implemented and is in operation.

Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	IMIS for the IPSAS general ledger data is timely completed, tested, and implemented.			Solutions, Umoja		Functional acceptance test for the interface was completed on 19 August 2013.
20	UNIFIL, in coordination with the Umoja Team, DFS and OICT, should: (i) define standard procedures for tracking, monitoring, extracting and reporting information and metrics about the use of Umoja with a consistent data source, terminology, and rating of issues; and (ii) monitor and review the status of user logins on a regular basis.	Important	Yes	N/A	Implemented	OIOS has closed the recommendation as implemented in the draft report.