



INTERNAL AUDIT DIVISION

REPORT 2013/123

Audit of Managing for Systems, Resources and People System interfaces

Overall results relating to the effective management of manual and electronic controls, built to ensure the consistency, completeness and accuracy of data transferred across different MSRP interfaces were initially assessed as partially satisfactory. Implementation of five important recommendations remains in progress.

**FINAL OVERALL RATING:
PARTIALLY SATISFACTORY**

**16 December 2013
Assignment No. AR2012/166/02**

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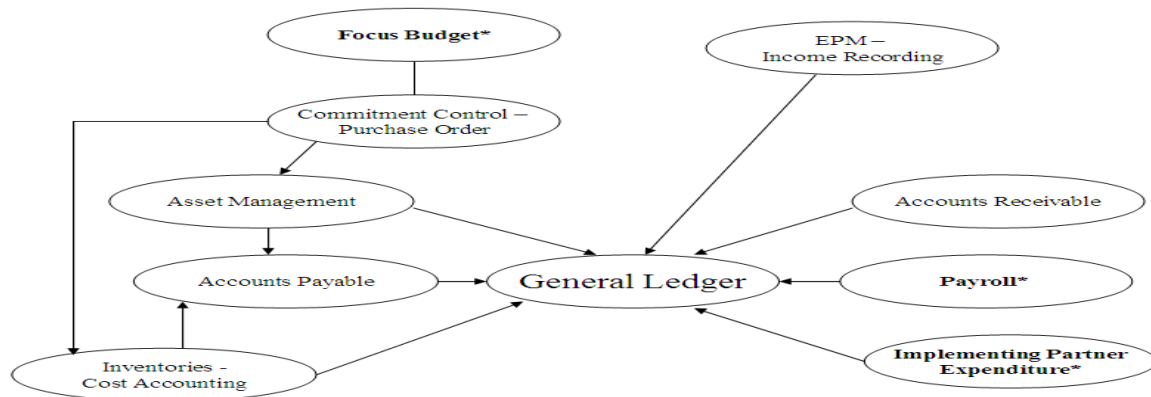
AUDIT REPORT

Audit of Managing for Systems, Resources and People System interfaces

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of Managing for Systems, Resources and People system (MSRP) interfaces.
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. MSRP is a suite of administrative applications whose main modules, and how they interface, are shown in figure 1. Effective controls need to be in place to ensure the consistency, completeness and accuracy of manual and electronic data that is transferred from one module to another.

Figure1



* Not covered in this audit as explained in the Audit Scope and Methodology

4. MSRP, which was implemented in 2004, was configured/customized to record and process data and produce reports and financial statements to meet its unique operational and reporting requirements within the framework of United Nations Systems Accounting Standards (UNSAS). In 2012, UNHCR adopted the International Public Sector Accounting Standards (IPSAS). Necessary modifications were then carried out in MSRP to facilitate its implementation. These changes required re-engineering of some processes/internal controls relating to functions such as accounting for voluntary contributions (income) and accounting for inventories of relief items and property, plant and equipment.

5. Comments provided by UNHCR are incorporated in *italics*.

II. OBJECTIVE AND SCOPE

6. The audit was conducted to assess the adequacy and effectiveness of UNHCR governance, risk management and control processes in providing reasonable assurance regarding **the effective**

management of manual and electronic controls built to ensure the consistency, completeness and accuracy of data transferred across different MSRP interfaces.

7. This audit was included in IAD's 2012 risk-based annual work plan because of the risks presented by incomplete and inaccurate data being generated by MSRP and its impact on UNHCR's financial statements, especially in light of the changes made to the system as part of IPSAS implementation.

8. The key control tested for the audit was Information and Communications Technology (ICT) systems data integrity. For the purpose of this audit, OIOS defined ICT systems data integrity as the controls that are designed to provide reasonable assurance that data transferred between interfacing MSRP modules is accurate and complete, and measures are in place to identify errors and take related corrective action in a timely manner.

9. The key control was assessed for the control objectives shown in Table 1 of the Assessment of key controls table.

10. OIOS conducted this audit from 1 May to 28 June 2013. The audit covered the transactions processed in 2012 in the following modules: (a) commitment control; (b) accounts payable; (c) asset management; (d) inventories (cost accounting); (e) accounts receivable; (f) income recording; and (g) general ledger.

11. 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. Through interviews, analytical reviews and tests of controls, OIOS assessed the existence and adequacy of internal controls and conducted necessary tests to determine their effectiveness.

12. An in-depth review was performed of the interfaces between the accounts payable, asset management, inventories and general ledger modules. This included analysis of the data passing across the following interfaces related to: procurement of property, plant and equipment, core relief items and transport costs for 2012. The analysis started from purchase orders to accounts payable, to asset management and to the general ledger module. For testing purposes, the audit reviewed a sample of assets (including heavy vehicles) and core relief items like soap, blankets and tents. The in-depth review also compared the recording of contributions and donations in-kind in Enterprise Project Management (EPM) with the general ledger records. In particular, the audit reviewed the following major procurement scenarios and the effect on different modules that have emerged because of IPSAS implementation:

- Purchase orders (POs) where goods were received and paid for (inventories or assets);
- POs where documents of title to goods were received and paid for (in-transit);
- POs where goods were received but not yet paid for (accrual);
- POs where documents of title to goods were received but not yet paid for (accrual); and
- POs where the vendors are yet to act (commitments - note in the financial statements).

13. Data consistency between Focus and commitment control, and payroll to general ledger was not covered in this audit. It was covered in previous OIOS audit assignments whose recommendations are being implemented. Implementing partner expenditure upload to the general ledger is performed at

country offices using a spreadsheet based interface to clear the instalments (advance) payments processed through the accounts payable module. This aspect was not covered in this audit as it is regularly covered in OIOS’ audits of UNHCR field offices.

III. AUDIT RESULTS

14. The UNHCR governance, risk management and control processes examined were assessed as **partially satisfactory** in providing reasonable assurance regarding **effective management of manual and electronic controls built to ensure the consistency, completeness and accuracy of data transferred across different MSRP interfaces**. OIOS made five recommendations in the report to address issues identified in the audit.

15. ICT systems data integrity was assessed as partially satisfactory because the following weaknesses needed to be addressed: (i) the absence of validation checks/tolerance limits to prevent/detect situations where the quantity received against a purchase order significantly exceeded the quantity ordered; (ii) failure to use the asset management module to record some transport (and other direct) costs, which were part of asset costs in the general ledger; (iii) failure to correctly record some transport costs for donations in-kind; and (iv) mismatches between the income data recorded in the EPM and the general ledger.

16. The initial overall rating was based on the assessment of key controls presented in Table 1 below. The final overall rating is **partially satisfactory** as implementation of five important recommendations remains in progress.

Table 1: Assessment of key controls

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 management of manual and electronic controls built to ensure the consistency, completeness and accuracy of data transferred across different MSRP interfaces	ICT systems data integrity	Partially satisfactory	Partially satisfactory	Partially satisfactory	Partially satisfactory
FINAL OVERALL RATING: PARTIALLY SATISFACTORY					

A. Information and communications technology systems data integrity

Data inconsistencies across purchase orders, accounts payable, inventories and general ledger modules resulted in erroneous liabilities

17. An enterprise resources planning system like MSRP should have in-built controls for ensuring the accuracy and completeness of data across modules. For example, procurement data moves across different modules: purchase orders, accounts payable, inventories and eventually to the general ledger. However, audit tests identified some data inconsistencies where the quantities received exceeded ordered quantities.

18. Recording of receipt of goods triggers the accrual of a liability to the organization and generally, the quantities received should match, subject to a set tolerance level such as ± 5 per cent, the quantities ordered. The validation controls in the system should prevent a user from entering a quantity received that is significantly higher than the quantity ordered, or enable detection when such an error occurs.

(1) The UNHCR Division of Emergency, Security and Supply should:

- i. establish a tolerance limit for the variation between quantity ordered and quantity received; and**
- ii. ensure that an exception report is developed and implemented in MSRP to identify situations where the variations between the ordered quantities and received quantities of relief items exceed the tolerance level or are significant and initiate measures to rectify them.**

UNHCR accepted recommendation 1 and stated that it would activate the existing tolerance limits in MSRP. Until this was done UNHCR would generate and review exception reports identifying instances where quantities received exceed the quantities ordered. Recommendation 1 remains open pending receipt of evidence confirming the development of the exception report and generation of exceptions along with the action taken in instances where the variations between the quantities ordered and quantities received exceeded the set tolerance limit.

Need to correct data inconsistencies between purchase orders, accounts payable, asset management and general ledger modules

19. Instances were observed where there was a mismatch in transport costs data in the purchase orders, the general ledger and the asset management modules. Since the transport costs were between 20 to 30 per cent of the procurement costs (in the examples below), there was a risk that these errors could cumulatively be significant. Two examples of the problems observed involved the purchase of:

- ten refurbished trucks at \$31,000 each, with transportation costs of \$10,000 per truck, whose total cost was recorded as \$31,000 in the asset management module instead of \$41,000; and
- three buses at \$67,000 each, with transportation costs of \$12,000 per bus, whose total cost was recorded as \$67,000 in the asset management module instead of \$79,000.

20. An additional impact of this error was related to depreciation, which was not correctly calculated as indicated below:

- The correct 2012 depreciation charge was \$20,493 for the ten trucks purchased and put to use in June 2012. However, only \$15,519 was recorded.
- The 2013 depreciation charge for the three buses was \$23,625 or \$7,875 per bus. However, only \$6,643 per bus was recorded. (There was no depreciation charge in 2012 as they were received and put to use in December 2012).

21. Though the transportation costs were not added to the property, plant and equipment values in the asset management module, they were however correctly added to the asset accounts values in the general ledger. In effect, corrections were initiated in the general ledger directly without processing them through the subsidiary ledger, thereby creating variances between the general ledger and the asset management module. UNHCR explained that this route had been followed since the asset management module was already closed for the year.

(2) The UNHCR Division of Financial and Administrative Management, in consultation with the Division of Emergency, Security and Supply should: (i) determine what additional controls need to be introduced to minimize the likelihood of users not linking transportation costs with purchase orders for assets; and (ii) review and take appropriate corrective actions for instances where there are mismatches in the data in the MSRP purchase orders, general ledger and asset management modules.

UNHCR accepted recommendation 2 and stated that it would pursue an automated solution to link transportation costs with purchase orders for assets in the context of MSPR upgrade. In the meantime, UNHCR would continue to review and rectify the mismatch of records across the purchase orders, asset register and general ledger. Recommendation 2 remains open pending receipt of evidence confirming the implementation of the automated process that links the transportation cost to the corresponding asset procurement in the upgraded MSRP and rectification of identified mismatches.

Need to ensure that transport costs on donations in-kind are added in the cost accounting module

22. OIOS observed the following cases where transport cost components were not correctly added to the value of goods in-kind in the cost accounting module:

- A significant part of an in-kind contribution of \$542,000 was related to receipt of 160 tents valued at about \$400,000 (including transport). However, the cost accounting module entry for this item disclosed the tents' cost as \$250,000, which did not include transport.
- The entries in the cost accounting module relating to multiple relief items, valued at about \$560,000 (including transport costs of \$79,300), did not include the transport costs.

23. In both cases, the costs in the general ledger were for the full amount (goods & transport). The cost accounting module values did not include the transport cost and were thus incorrect. By excluding the transport costs in these cases, the valuation of inventory was not in accordance with UNHCR policies and was understated.

(3) The Division of Emergency, Security and Supply in consultation with the Division of External Relations should explore what options are available to ensure that transport costs for donations in-kind are consistently added in the cost accounting module.

UNHCR accepted recommendation 3 and stated that it would develop a solution to ensure that transport costs for donations in-kind are consistently added to the cost accounting module. Recommendation 3 remains open pending receipt of evidence confirming that the donations in-kind recorded in the cost accounting module reflect the direct transportation costs as well.

Mismatch between contributions recorded in the Enterprise Project Management and the general ledger modules

24. At the time of the audit in May 2013, OIOS noted that variances existed between the income data recorded in the EPM and the general ledger modules. Though they were resolved/reconciled at the end of 2012, there was a risk that such inconsistencies would nevertheless remain at any point in time during the course of a financial year. OIOS reviewed the income/accounts receivable recording processes and noted the following causes for the variances:

- The importing of income data from the EPM into the accounts receivable and general ledger modules was done on a weekly rather than real-time basis. However, contribution recording or modification took place in EPM throughout the week thereby exposing the income data in the general ledger to the risk of being ‘out of date’.
- There was a team of staff members in DFAM that performed a set of tasks that included downloading income data in Excel sheets and subjecting them to a number of manual checks, including data comparisons and reconciliations. The DFAM team entered data in almost 15 fields, per contribution, in the accounts receivable module. Though the relevant data was already available in the EPM, the system did not export the data to the accounts receivable module to facilitate data validation before updating the general ledger. In 2012, the cumulative number of data fields re-entered by DFAM was over 15,000.

25. Despite the ongoing data validation efforts by DFAM, the probability of data mismatches between the income recorded in the general ledger and contribution records in the EPM was high, and hence there was a risk that the income reports generated by MSRP had some errors.

(4) The Division of Financial and Administrative Management in consultation with the Division of External Relations should revise the income/accounts receivable recording process so that the general ledger reflects the contributions recorded in the EPM on a real-time basis.

UNHCR accepted recommendation 4 and stated that currently data in EPM and the general ledger is being reconciled weekly. As part of the MSRP upgrade in 2014, UNHCR would define the systems reconciliation criteria and pursue an automated real time reconciliation between them. Recommendation 4 remains pending receipt of evidence confirming the implementation of automated reconciliation process between the EPM and the general ledger in the upgraded MSRP.

Need to segregate primary and secondary transport costs

26. In the course of verifying integrity of data, OIOS observed the following issue which has been included because of the materiality of the amounts involved.

27. Under UNSAS all goods and assets were expensed when purchased and hence no special treatment was necessary or required for the related transport cost. However, under IPSAS the primary transport costs (from supplier to stockpile/warehouse) should form part of the cost of inventories and assets while the secondary transportation costs (onward from stockpile/warehouse) should be recorded as expenditure. In the MSRP supply chain module, primary and secondary transportation costs were not distinguished: they had the same item code.

28. In 2012, the value of all purchase orders processed for transportation was \$31.5 million. This included over \$6 million for inventories, about \$3 million for assets and other transportation costs of about \$22.5 million, which were mainly for airlifting from the stockpile locations to operational areas and charged to expenditure accounts and other local transport costs. UNHCR had used the same item code for primary and secondary transportation costs, with the risk that coding errors in POs would result in primary transport cost being incorrectly expensed thereby affecting inventory and asset valuations.

(5) The UNHCR Division of Emergency, Security and Supply should create another distinct item code for secondary transport in the supply chain module and map it to the transport cost account (610460) in the general ledger for segregation and better control over direct and secondary transport costs.

UNHCR accepted recommendation 5 and stated that it would set up a new item code for secondary transport cost and map it to the appropriate cost account. Recommendation 5 remains open pending receipt of evidence confirming the establishment of a new account code to record secondary transport costs.

IV. ACKNOWLEDGEMENT

29. OIOS wishes to express its appreciation to the Management and staff of UNHCR 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 Managing for Systems, Resources and People System interfaces

Recom. no.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
1	The UNHCR Division of Emergency, Security and Supply should: (i) establish a tolerance limit for the variation between quantity ordered and quantity received; and (ii) ensure that an exception report is developed and implemented in MSRP to identify situations where the variations between the ordered quantities and received quantities of relief items exceed the tolerance level or are significant and initiate measures to rectify them.	Important	O	Evidence confirming the development of the exception report and generation of exceptions along with the action taken in instances where the variations between the quantities ordered and quantities received exceeded the set tolerance limit.	31 December 2013
2	The UNHCR Division of Financial and Administrative Management, in consultation with the Division of Emergency, Security and Supply should: (i) determine what additional controls need to be introduced to minimize the likelihood of users not linking transportation costs with purchase orders for assets; and (ii) review and take appropriate corrective actions for instances where there are mismatches in the data in the MSRP purchase orders, general ledger and asset management modules.	Important	O	Evidence confirming the implementation of the automated process that links the transportation cost to the corresponding asset procurement in the upgraded MSRP and rectification of identified mismatches	31 December 2014
3	The Division of Emergency, Security and Supply in consultation with the Division of External	Important	O	Evidence confirming that the donations in-kind recorded in the cost accounting module reflect	31 January 2014

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 United Nations High Commissioner for Refugees in response to recommendations.

STATUS OF AUDIT RECOMMENDATIONS

Audit of Managing for Systems, Resources and People System interfaces

Recom. no.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
	Relations should explore what options are available to ensure that transport costs for donations in-kind are consistently added in the cost accounting module.			the direct transportation costs as well.	
4	The Division of Financial and Administrative Management in consultation with the Division of External Relations should revise the income/accounts receivable recording process so that the general ledger reflects the contributions recorded in the EPM on a real-time basis.	Important	O	Evidence confirming the implementation of automated reconciliation process between the EPM and the general ledger in the upgraded MSRP.	31 December 2014
5	The UNHCR Division of Emergency, Security and Supply should create another distinct item code for secondary transport in the supply chain module and map it to the transport cost account (610460) in the general ledger for segregation and better control over direct and secondary transport costs.	Important	O	Evidence confirming the establishment of a new account code to record secondary transport costs.	31 December 2013

APPENDIX I

Management Response

MANAGEMENT RESPONSE

Audit of Managing for Systems, Resources and People System interfaces

Rec. no.	Recommendation	Critical ⁵ / Important ⁶	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	<p>The UNHCR Division of Emergency, Security and Supply should:</p> <p>(i) establish a tolerance limit for the variation between quantity ordered and quantity received; and</p> <p>(ii) ensure that an exception report is developed and implemented in MSRP to identify situations where the variations between the ordered quantities and received quantities of relief items exceed the tolerance level or are significant and initiate measures to rectify them.</p>	Important	Yes	Chief of SOSS in DESS/SMLS	31 December 2013	UNHCR will activate the existing tolerance limits in MSRP. Until this is done UNHCR will generate and review exception reports identifying instances where quantities received exceed the quantities ordered.
2	<p>The UNHCR Division of Financial and Administrative Management, in consultation with the Division of Emergency, Security and Supply should:</p> <p>(i) determine what additional controls need to be introduced to minimize the likelihood of users not linking transportation costs with purchase orders for assets; and (ii) review and take appropriate corrective actions for instances where there are mismatches in the data in the MSRP purchase orders,</p>	Important	Yes	Head, Accounts and Financial Service (AFS)	31 December 2014	UNHCR will pursue an automated solution to link transportation costs with purchase orders for assets in the context of MSRP upgrade. In the meantime, UNHCR will continue to review and rectify the mismatch of records across the purchase orders, asset register and general ledger.

⁵ 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.

⁶ 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.

MANAGEMENT RESPONSE

Audit of Managing for Systems, Resources and People System interfaces

Rec. no.	Recommendation	Critical ⁵ / Important ⁶	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	general ledger and asset management modules.					
3	The Division of Emergency, Security and Supply in consultation with the Division of External Relations should explore what options are available to ensure that transport costs for donations in-kind are consistently added in the cost accounting module.	Important	Yes	Chief of Section, Governmental Donors and Fundraising Analysis	31 January 2014	UNHCR will develop a solution to ensure that transport costs for donations in-kind are consistently added to the cost accounting module.
4	The Division of Financial and Administrative Management in consultation with the Division of External Relations should revise the income/accounts receivable recording process so that the general ledger reflects the contributions recorded in the EPM on a real-time basis.	Important	Yes	Head, Accounts and Financial Service (AFS) & Head , Donor Relations and Resource Mobilization Service (DRRMS)	31 December, 2014	Currently, data in EPM and GL is reconciled weekly. As part of the MSRP upgrade in 2014, UNHCR will define the systems reconciliation criteria and pursue an automated real time reconciliation between EPM and GL.
5	The UNHCR Division of Emergency, Security and Supply should create another distinct item code for secondary transport in the supply chain module and map it to the transport cost account (610460) in the general ledger for segregation and better control over direct and secondary transport costs.	Important	Yes	Chief of Business Support Section in DESS	31 December 2013	UNHCR will set up a new item code for secondary transport and map it to the appropriate cost account.