



INTERNAL AUDIT DIVISION

AUDIT REPORT 2013/037

Audit of fuel management in United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO)

Overall results relating to fuel management in MONUSCO were initially assessed as partially satisfactory. Implementation of two important recommendations remains in progress

FINAL OVERALL RATING: PARTIALLY SATISFACTORY

8 May 2013
Assignment No. AP2012/620/08

CONTENTS

	<i>Page</i>
I. BACKGROUND	1
II. OBJECTIVE AND SCOPE	1-2
III. AUDIT RESULTS	2-4
A. Regulatory framework	2-4
IV. ACKNOWLEDGEMENT	5
ANNEX I Status of audit recommendations	
APPENDIX 1 Management response	

AUDIT REPORT

Audit of fuel management in United Nations Organization Stabilization Mission in the Democratic Republic of the Congo

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of fuel management in the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO).
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. Fuel is sourced and managed under two contracts entered into in July and December 2010, with a combined Not-to-Exceed (NTE) amount of \$202 million. The contractors operated in 14 locations and had the responsibility to provide, transport, store and dispense fuel to MONUSCO-designated equipment and to maintain fuel operating stock and strategic reserves. On a monthly basis, MONUSCO paid contractors the invoiced amount of fuel dispensed, as well as fixed operational and maintenance fees. MONUSCO also directly managed nine smaller locations, which were not included in the fuel contracts.
4. The Fuel Unit was headed by a Chief at the P-4 level and had 47 approved posts. Expenditure for aviation fuel, petroleum, oil and lubricants for the years 2010/11 and 2011/12 was \$132 million and \$126 million, respectively.
5. Comments provided by MONUSCO are incorporated in italics.

II. OBJECTIVE AND SCOPE

6. The audit was conducted to assess the adequacy and effectiveness of MONUSCO governance, risk management and control processes in providing reasonable assurance regarding the **effective management of fuel**.
7. The audit was included in the 2012 OIOS risk-based work plan because of the criticality of timely and uninterrupted provision of fuel for the implementation of the MONUSCO mandate.
8. The key control tested for the audit was regulatory framework. For the purpose of this audit, OIOS defined this control as the one that provides reasonable assurance that policies and procedures: (i) exist to guide fuel operations; (ii) are implemented consistently; and (iii) ensure the reliability and integrity of financial and operational information.
9. The key control was assessed for the control objectives shown in Table 1.
10. OIOS conducted the audit from August to November 2012. The audit covered the period from 1 July 2010 to 31 October 2012.

11. The audit team conducted an activity-level risk assessment to identify and assess specific risk exposures, and to confirm the relevance of the selected key control 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. The audit team visited fuel sites in Bukavu, Bunia, Entebbe, Kamina and Kinshasa.

III. AUDIT RESULTS

12. The MONUSCO governance, risk management and control processes examined were initially assessed as **partially satisfactory** in providing reasonable assurance regarding the **effective management of fuel**. OIOS made five recommendations to address issues identified. MONUSCO had adequate and effective controls over the management of fuel contracts, and invoices were processed in a timely basis. However, there was a need: to enhance MONUSCO’s standard operating procedures (SOPs) for maintaining generator tanks; to better control and monitor fuel consumption by contingents; to conduct an assessment to identify possible redundant contingent-owned equipment due to the introduction of turnkey contracts; and to improve controls to adequately safeguard fuel in storage.

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

Table 1: Assessment of key controls

Business objective	Key control	Control objectives			
		Efficient and effective operations	Accurate financial and operational reporting	Safeguarding of assets	Compliance with mandates, regulations and rules
Effective management of fuel	Regulatory framework	Partially satisfactory	Partially satisfactory	Partially satisfactory	Partially satisfactory
FINAL OVERALL RATING: PARTIALLY SATISFACTORY					

A. Regulatory framework

Standard operating procedures were in place, but needed to be enhanced to include procedures for maintaining generator tanks

14. MONUSCO had developed and disseminated SOPs to govern and manage the fuel contracts. These were supplemented by the contractors’ operating and maintenance manuals. The current procedures were generally sufficient to guide staff in their functions, except in the maintenance of generator tanks. The lack of these procedures resulted in inconsistent practices, which could impact on the quality of fuel stored in tanks. For example, generator tanks in Bukavu, Entebbe, Kinshasa and Kamina had not been recently cleaned, and four of the 10 generator sites visited had no external filters installed to improve the quality of fuel delivered to generators.

(1) MONUSCO should develop procedures for cleaning generator tanks and install fuel filters to remove contaminants to improve the quality of fuel.

MONUSCO accepted recommendation 1 and stated that the Engineering Section had amended the SOPs to include monthly inspections and maintenance of fuel tanks. Fuel tanks were properly positioned to ensure that contaminated fuel and water was regularly drained and fuel filters were fitted as appropriate. Based on action taken by MONUSCO, recommendation 1 has been closed.

Management of the turnkey contracts was effective

15. The Contracts Management Unit, with the assistance of the Fuel Unit and the Aviation Unit, effectively managed the turnkey contracts. The required monthly and quarterly performance review meetings were held, minutes of meetings were maintained, and action was taken by contractors to address performance related issues.

Monitoring of fuel consumption was not effective

16. MONUSCO had established a Technical Compliance and Monitoring (TCM) team that was responsible for monitoring fuel consumption to prevent and detect misuse and theft. The TCM relied mainly on information recorded in the Mission Electronic Fuel Accounting System (MEFAS) for its generators and for contingent-owned equipment (vehicles and generators), and the Carlog system for UN-owned vehicles. However, the information in MEFAS was not reliable as fuel consumption was not accurately recorded. For example: (i) one contingent, without recording odometer readings, reported that 30 out of 59 vehicles had all consumed the same amount of fuel; and (ii) a contingent did not have a meter on their refueller truck to measure fuel received and dispensed. Additionally, the staff responsible for the Mission's generators did not regularly input information into MEFAS.

17. The above conditions were caused as contingents were not adequately trained on MEFAS, and there was insufficient oversight and monitoring of contingents' fuel consumption records. There was also inadequate supervision and review of the fuel records maintained by the MONUSCO Generator Unit.

18. For fuel consumed by UN-owned vehicles, the TCM regularly generated and reviewed reports from the Carlog system. A review of the data from March 2011 to September 2012 showed that adequate procedures were established, and possible excessive consumption rates were followed up with respective consumer sections for explanation, and if necessary for investigation. During the audit period, there were 23 cases of suspected fraud, which were referred through the Conduct and Discipline Team to the Security Investigation Unit for investigation.

19. A visit to 13 military sites in Bukavu, Bunia and Kamina showed that there was inadequate monitoring of bulk fuel issued to contingents in Bunia. For example: (a) contrary to the SOPs, fuel issued to contingents was approved by a Joint Logistics Officer, and not a member of the Fuel Unit; (b) the Fuel Unit did not participate in the refueling of generator tanks; and (c) the quantity of fuel stored by one contingent was three times the standard 2,500 litres weekly consumption rate. The Fuel Unit did not regularly conduct visits to inspect sites.

(2) MONUSCO should implement adequate procedures, including improving: (a) supervisory controls over recording of fuel issued and consumed by the MONUSCO generators; and (b) oversight and monitoring of contingents' fuel consumption by increasing the number of visits to train and assist contingents in inputting data into the Mission Electronic Fuel Accounting System.

MONUSCO accepted recommendation 2, and stated that: (i) all sector engineers were provided with an amended form to log generator consumption data on a daily basis, and data would be analyzed on a monthly basis with exceptions investigated; and (ii) training and assistance to contingents was now being given based on each contingents' requirements and rotations. Based on the action taken by MONUSCO, recommendation 2 has been closed.

Contingent-owned filling stations and refuellers were no longer required

20. MONUSCO, following the establishment of the turnkey contracts, did not review available refueller trucks and fuel equipment at fuel stations to determine whether it needed to be decommissioned or repatriated. For example, at one contingent location, there was a diesel storage tank with a pump that was no longer in use because the contingent's vehicles were refueled at contractors' filling stations.

(3) MONUSCO should make an assessment of fuel related contingent-owned equipment to identify surplus or redundant items, and initiate action in coordination with the Departments of Peacekeeping Operations and Field Support to repatriate redundant equipment.

MONUSCO accepted recommendation 3 and stated that an assessment of contingent-owned fuel trucks would be conducted during the April to June 2013 inspection programme. If redundant equipment was identified, it would be discussed at the July 2013 meeting of the Contingent-owned equipment and Memorandum of Understanding Management Review Board (CMMRB), and recommendations would be submitted to Headquarters for appropriate action. Recommendation 3 remains open pending receipt of evidence that an assessment of possible redundant equipment has been done and appropriate action taken.

Fuel issued to vehicles by contractors was accurately recorded and approved

21. Contractors prepared fuel issue vouchers, which were signed by individuals receiving fuel as evidence of the amount of fuel dispensed in MONUSCO-designated vehicles. Contractors subsequently entered the information recorded on the vouchers into the Carlog system, which was independently reviewed and approved by a fuel officer. A review of 150 fuel issue vouchers concluded that data entered into Carlog was complete and accurate, all issuances of fuel were duly approved and authorized, and there was adequate oversight and monitoring of the information entered into the Carlog system by the Fuel Unit.

There was inadequate security at some generator sites

22. Generator sites visited in Bukavu. Bunia, Entebbe Kamina and Kinshasa were generally well secured. However: (a) at one contingent site in Bunia, the fence was broken and there was no gate; (b) in Entebbe, the generator site was not fenced and fuel tanks had no locks; and (c) in Bukavu, the fuel tank at one contingent site was not secured.

(4) MONUSCO should implement measures to prohibit unauthorized access to generator sites.

MONUSCO accepted recommendation 4 and stated that a memorandum was sent to all contingents to properly safeguard generator sites. Also, the Engineering Section had constructed fencing around the generator and fuel tank areas in most sectors and would continue with the construction for the remaining UN-owned equipment sites. Recommendation 4 remains open pending receipt of evidence that construction of fences at generator sites have been completed.

Fuel in generator tanks was not measured and effectively monitored in Entebbe

23. Staff members of the Generator Unit in Entebbe were required to measure the amount of fuel stored in tanks on a daily basis and to record consumption in MEFAS. However, they did not have dip sticks to accurately measure the stock of fuel in the three tanks with a total capacity of 35,000 litres.

(5) MONUSCO should provide Generator staff in Entebbe with calibrated fuel dip sticks to accurately measure and report on fuel in tanks at the generator site.

MONUSCO accepted recommendation 5 and stated that calibrated dip sticks were provided to staff in Entebbe on 8 March 2013. Based on action taken by MONUSCO, recommendation 5 has been closed.

Local and strategic fuel reserves were effectively managed

24. The turnkey contractors were required to maintain defined levels of strategic fuel reserves and local reserves at seven locations across the country, equivalent to one month of consumption. The strategic reserves totaled 2.2 million litres and 3.1 million litres of diesel and aviation fuel, respectively. The contractors, as part of operational stock, also maintained local reserves of 2.4 million litres of diesel and 2 million litres of aviation fuel. OIOS physically verified the fuel stocks in Bukavu, Bunia and Kinshasa and reviewed weekly inspection reports, and determined that the contractors maintained the required local and strategic fuel reserves, and had procedures to rotate stocks to maintain quality.

Invoice processing for the turnkey contracts was effective

25. A review of 88 of approximately 1,400 invoices totaling \$7.1 million from the two contractors concluded that invoices were properly supported and processed in compliance with the United Nations Financial Regulations and Rules. Invoices were processed in a timely manner, with MONUSCO taking advantage of the early payment discount, which totaled \$570,000 between 1 July 2010 and 31 July 2012.

IV. ACKNOWLEDGEMENT

26. OIOS wishes to express its appreciation to the Management and staff of MONUSCO 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 fuel management in MONUSCO

Recom. no.	Recommendation	Critical ¹ / important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
1	MONUSCO should develop procedures for cleaning generator tanks and install fuel filters to remove contaminants to improve the quality of fuel.	Important	C	Action taken.	Implemented
2	MONUSCO should implement adequate procedures, including improving: (a) supervisory controls over recording of fuel issued and consumed by the MONUSCO generators; and (b) oversight and monitoring of contingents' fuel consumption by increasing the number of visits to train and assist contingents in inputting data into the Mission Electronic Fuel Accounting System.	Important	C	Action taken.	Implemented
3	MONUSCO should make an assessment of fuel related contingent-owned equipment to identify surplus or redundant items, and initiate action in coordination with the Departments of Peacekeeping Operations and Field Support to repatriate redundant equipment.	Important	O	Receipt of evidence that an assessment of possible redundant equipment has been done and appropriate action taken.	31 July 2013
4	MONUSCO should implement measures to prohibit unauthorized access to generator sites.	Important	O	Receipt of evidence that construction of fences at all generator sites had been completed.	31 May 2013

1 Critical recommendations address significant and/or pervasive deficiency or weakness 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 MONUSCO in response to recommendations.

Recom. no.	Recommendation	Critical¹/ important²	C/ O³	Actions needed to close recommendation	Implementation date⁴
5	MONUSCO should provide Generator staff in Entebbe with calibrated fuel dip sticks to accurately measure and report on fuel in tanks at the generator site.	Important	C	Action taken.	Implemented



INTEROFFICE MEMORANDUM

To: Ms. Eleanor T. Burns
Chief, Peacekeeping Audit Service
Internal Audit Division, OIOS

Ref: ODMS/2013/064

8 April 2013

From: Paul Buades
Director of Mission Support
MONUSCO

Subject: Assignment No. AP2012/620/08 - Audit of fuel management in MONUSCO

1. Your interoffice memorandum IAD:13-7-5-7(04) dated 2 April 2013 refers.
2. Attached please find the Mission response in respect of the recommendations in the Draft Audit Report on the above-mentioned audit.
3. Copies of the supporting documents will be provided to the resident audit office only.

Kind regards.

Cc Mr. Mike Dora, Chief Integrated Support Services, MONUSCO
Mr. Richard L. Johnson, Chief Supply Section, MONUSCO
Mr. Peter Leskovsy, Chief Engineering Services Section, MONUSCO
Ms. Jacoba Genis, Audit Focal Point, MONUSCO
Ms. Anna Halasan, Professional Practices Section, Internal Audit Division, OIOS
Mr. Laud Botchwey, Chief Resident Auditor, MONUSCO, OIOS

Attachments:
Appendix I – Mission response

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APPENDIX I

AUDIT RECOMMENDATIONS

Audit of fuel management in MONUSCO

Rec. no.	Recommendation	Critical/ ¹ Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	MONUSCO should develop procedures for maintaining generator tanks, and ensure that tanks are fitted with fuel filters to remove contaminants and preserve the quality of fuel.	Important	Yes	Chief, Engineering Services Section	March 2013	MONUSCO Engineering Section (ES) has amended its SOP on management of UN owned generators to include procedures for maintenance of fuel tanks (Attachment 1). ES has also positioned/tilted all fuel tanks to ensure that contaminated fuel and water can be drained on a regular basis. During the monthly inspections and maintenance, fuel tanks identified with contaminants will be scheduled for cleaning and removal of the contaminants. Fuel tanks will continue to be fitted with filters in locations where fuel tanks are installed as in the attached photo. (Attachment 2).
2	MONUSCO should implement adequate procedures, including: (a) improved supervisory controls over recording of fuel by the staff responsible for the MONUSCO generators; and (b) increased oversight and monitoring of contingents' fuel consumption by increasing the number of visits to train and assist contingents in inputting data into the Mission Electronic Fuel Accounting System.	Important	Yes	Chief, Engineering Services Section	March 2013	Effective 1 March 2013, all Sector Engineers were provided with a new form to implement the system of logging in generator data on a daily basis. The data on the forms will be analyzed by Engineering Section on a monthly basis to verify consumption patterns. Any unexplained deviations will be promptly reported for investigation and corrective action. Training and assistance to contingents will be an ongoing activity driven by requirements of each contingent and based on contingent staff rotations.
3	MONUSCO should: (i) conduct an	Important	Yes	Chief, COE	31 July 2013	The assessment of COE fuel trucks will be conducted

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
	assessment of contingent-owned refueller trucks and filling stations to identify surplus or redundant equipment following the establishment of the turnkey fuel contracts; and (ii) initiate action in coordination with the Departments of Peacekeeping Operations and Field Support to repatriate any redundant equipment.					during the Phase II 2013 inspection season of April to June 2013, to identify redundant or surplus equipment. Subsequently, if any redundant or surplus refueller trucks are identified during the inspections, the issue of their repatriation or decommissioning will be discussed at the CMMRB that will be held in July 2013. The CMMRB recommendations for either decommissioning or repatriation (if any) will be submitted to Field Budget and Finance Department at UNHQ for appropriate action.
4	MONUSCO should implement measures to prohibit unauthorized access to generator sites.	Important	Yes	Chief, Engineering Services Section	May 2013	Engineering Section has already constructed fencing around the generator and fuel tanks area in almost all sectors and will continue with this construction for the remaining sites. Fencing and securing will only be done around UNOE generator sites and not for COE generators, which is a responsibility of Contingents. Target date for completion is May 2013.
5	MONUSCO should provide staff in Entebbe, responsible for fuel management, with calibrated dip sticks to accurately measure and report fuel in diesel tanks at the generator site.	Important	Yes	Chief, Engineering Services Section	8 March 2013	Staff in Entebbe has been provided with calibrated dip sticks as of 8 March 2013. See attached confirmation email from Electrical and Mechanical Unit Supervisor in Entebbe Support Base. (Attachment 3).