



## **INTERNAL AUDIT DIVISION**

### **REPORT 2018/147**

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#### **Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic**

**Controls over bulk issuance of fuel,  
consumption analysis and fraud prevention  
and detection procedures needed significant  
improvement**

**27 December 2018  
Assignment No. AP2018/637/06**

# **Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic**

## **EXECUTIVE SUMMARY**

The Office of Internal Oversight Services (OIOS) conducted an audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA). The objective of the audit was to the effectiveness of the management of fuel operations in MINUSCA. The audit covered the period from 1 January 2016 to 31 August 2018 and included a review of risk assessment and planning, fuel operations and monitoring and billing and payments.

Despite some challenges, MINUSCA had mobilized and delivered the required quantity of fuel to all of its fuel sites, implemented controls over the use of duty-free privileges for fuel importation and supervised the contractor to implement adequate safety and emergency response measures at fuel sites. However, the Mission: (a) was using special flights for fuel delivery, which was expensive; (b) was not effectively monitoring fuel usage through the electronic fuel management system (EFMS), which increased the risk of misappropriation; and (c) needed to significantly improve controls over bulk and manual fuel issuance.

OIOS made seven recommendations. To address the issues identified in the audit, MINUSCA needed to:

- Based on a risk assessment, reassess the resources of the Fuel Unit to ensure essential tasks in fuel operations are effectively conducted;
- Take measures, by enhancing coordination among relevant Mission components, to ensure the delivery of fuel products to sector locations in a timely and cost-effective manner;
- Ensure that fuel flow meters and dispensing equipment are tested, calibrated and adjusted within the calibration certification validity period to prevent inaccurate measurement and billing of fuel provided to the Mission;
- Provide accurate data on equipment to the Fuel Unit to ensure that it is uploaded in EFMS to enable effective monitoring of fuel consumption of equipment;
- Conduct a Mission-specific fuel fraud risk assessment to identify areas of high risk and develop appropriate mitigating measures taking into consideration the higher risk areas identified by the audit;
- Adequately account for bulk fuel issuances by requiring contingents that use manual records to send monthly consumption reports related to bulk fuel issuances and for the Fuel Unit to keep copies of the reports for analysis;
- Initiate and monitor requests for the recovery of cost of fuel provided to non-Mission entities in a timely manner; and work in coordination with the Regional Service Centre in Entebbe to reconcile fuel cost-recovery payments received with accounts receivable data in Umoja to determine outstanding amounts and initiate recovery.

MINUSCA accepted all recommendations and has initiated action to implement them.

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# Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic

## I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA).

2. MINUSCA operates in Bangui and remote and logistically challenging locations in the Central African Republic. In August 2016, MINUSCA signed a turnkey contract with “Company A” for the construction of fuel facilities, supply, storage and distribution of fuel, fuel drums, lubricants and other petroleum products in support of the Mission. The contract started in October 2016 for an initial period of three years with a not-to-exceed (NTE) amount of \$164 million, with an option to extend for two additional years. As at 31 March 2018, \$85.1 million of the NTE amount had been utilized.

3. In July 2017, MINUSCA replaced the Mission Electronic Fuel Accounting System (MEFAS) with the Electronic Fuel Management System (EFMS) to provide the Mission with a full set of tools for planning, monitoring of consumption and reporting of fuel usage. The Mission’s fuel consuming assets and equipment consisted of 14 aircraft, 997 United Nations-owned vehicles, 2,406 contingent-owned vehicles, 232 United Nations-owned generators and 648 contingent-owned generators. The Mission’s fuel budget and actual expenditures for fiscal years 2016/17 and 2017/18 are shown in Table 1.

**Table 1: Budgeted and actual fuel expenditures for 2016/17 and 2017/18 fiscal years (in \$ million)**

	2016/17		2017/18	
	<i>Budget</i>	<i>Expenditure</i>	<i>Budget</i>	<i>Expenditure</i>
Engineering (Generators)	24.63	24.51	18.75	24.97
Ground Transportation (Vehicles)	11.02	10.09	13.39	10.76
Air Transportation (Aircraft)	16.94	14.87	16.94	13.08
<b>Total</b>	<b>52.59</b>	<b>50.36</b>	<b>49.09</b>	<b>48.82</b>

*Source: MINUSCA Budget Unit*

4. The Fuel Unit, under the Supply Chain Management Service, is responsible for the management of the Mission’s fuel operations by overseeing the contractor’s fuel operations and reviewing its quality control programme, maintaining sufficient quantity of strategic and local fuel reserves as a contingency measure and monitoring fuel consumption and investigating anomalies. The Unit was headed by the Chief at the P-3 level who reports directly to the Chief Contracts Management Section. The Unit had nine approved posts, including five international staff consisting of the Chief, one each for the Quality Assurance, EFMS, Operations, and Fuel Fraud and Loss Prevention Cells and four national staff, supported by four military staff officers in the Operations Cell. Three national staff were assigned to operational roles in the sectors and one national staff to administrative function in Bangui.

5. Comments provided by MINUSCA are incorporated in italics.

## **II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY**

6. The objective of the audit was to assess the effectiveness of the management of fuel operations in MINUSCA.
7. This audit was included in the 2018 risk-based work plan of OIOS due to the operational and financial risks related to fuel operations in MINUSCA.
8. OIOS conducted this audit from July to October 2018. The audit covered the period from 1 January 2016 to 31 August 2018. Based on an activity-level risk assessment, the audit covered risk areas in fuel management which included: (a) risk assessment and planning; (b) fuel operations and monitoring; and (c) billing and payments.
9. The audit methodology included: (a) interviews with key personnel; (b) review of relevant documentation; (c) analytical review of fuel transaction data in EFMS and Umoja; and (d) sample testing of fuel transactions. The audit team also conducted site visits to fuel sites in Bangui, Bouar and Kaga Bandoro.
10. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

## **III. AUDIT RESULTS**

### **A. Risk assessment and planning**

#### Need to assess staffing resources of the Fuel Unit in order to conduct essential tasks

11. MINUSCA had 14 fuel sites that were operated by the fuel contractor. The Fuel Unit was responsible for carrying out quality assurance inspections at these sites, as well as reviewing fuel consumption for potential fraud indicators and following up and investigating them where necessary. To manage these responsibilities, the Mission had established a Quality Assurance Cell, an Electronic Fuel Management System Cell and a Fuel Fraud and Loss Prevention Cell.

#### (a) Quality Assurance Cell

12. The Quality Assurance Cell in the Fuel Unit was responsible for conducting inspection of the 14 fuel sites to ensure the contractor complied with the quality requirements stipulated in the contract. In nine of these sites, the Mission held Jet A-1 fuel.

13. The Quality Assurance Cell was unable to conduct a sufficient number of inspections due to staffing constraints. For instance, from January 2016 to August 2018, the Quality Assurance Cell completed 23 of 25 planned inspections, but these only covered four sites, and 6 of the 23 completed inspections were delayed by an average of 52 days. In addition, only five of the nine Jet A-1 fuel sites inspections were conducted, exposing the Mission to high safety risks due to the potential impact that poor quality Jet A-1 fuel may have on air operations. The Quality Assurance Evaluator explained that visits could only be planned for 4 of the 14 fuel sites as that was all that could reasonably be achieved by one staff member.

(b) EFMS Cell

14. The EFMS Cell was responsible for implementing EFMS and for resolving any subsequent system implementation issues. The EFMS Cell was unable to adequately review or resolve all of the issues in a timely manner, also due to staffing constraints. Outstanding issues as of 31 August 2018 included: (a) 17 cases where scanners used for capturing details of equipment being supplied with fuel were not adequately synchronized; and (b) 136 cases of repatriated or written-off contingent-owned equipment (COE) still showing active EFMS. There were also reported anomalies in EFMS that had been outstanding since its implementation in July 2017. MINUSCA was working with experts in Bangkok to address them.

15. MINUSCA advised that it was not possible to consistently travel to locations outside of Bangui, including Sector East, which had reserves of 840,000 litres of diesel and 375,000 litres of Jet A-1 fuel to address issues with scanners and barcoding or other operational anomalies in a timely manner. There were risks associated with this, as OIOS visits to Bouar and Kaga Bandoro noted that: (a) some active scanners used by contingents for fuel transactions had an inactive status in EFMS since February 2018, and therefore fuel data was not captured; and (b) some scanners were registered in one location but used in another location, which could result in additional costs as the fuel cost for each location was different.

(c) Fuel Fraud and Loss Prevention Cell

16. The Fuel Fraud and Loss Prevention Cell (FFLPC) was responsible for fuel consumption analysis. FFLPC work was limited also due to staffing constraints. For instance, it had not carried out an analysis of generator fuel consumption since the fuel contract was established in 2016, despite the risks relating to potential fraud. The work of FFLPC is dealt with later in the report.

17. The above resulted as MINUSCA did not allocate adequate staffing resources to its Fuel Unit, although previously 22 staff were approved in the 2017/18 budget to conduct essential tasks such as quality inspections and analysis of EFMS data. The Unit was reduced to nine staff in the 2018/19 budget. The average staffing of the Fuel Units of other similar sized-missions<sup>1</sup> was 29 personnel, with 9 personnel in the Quality Assurance Cell, 7 in the combined EFMS/FFLP Cells, and 8 in the Operations Cell. As a result of insufficient staffing resources, some essential tasks were not being done, such as analysis of fuel consumption per fuel-consuming equipment, investigation into unusual variances, as well as fuel site inspections, impacting on the effectiveness of the Fuel Unit. Also, the work of the Cells came to a complete halt when the staff assigned to the Quality Assurance and EFMS Cells were away from the Mission on leave.

**(1) MINUSCA should, based on a risk assessment, reassess the resources of the Fuel Unit to ensure essential tasks in fuel operations are effectively conducted.**

*MINUSCA accepted recommendation 1 and stated that the Fuel Unit is understaffed, making it difficult to operate effectively. The Mission will reassess the Unit's staffing needs to ensure that essential tasks are carried out. Recommendation 1 remains open pending receipt of evidence that the staffing needs of the Fuel Unit have been reassessed and necessary action taken to ensure that essential tasks are carried out.*

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<sup>1</sup> The United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO), the United Nations Hybrid Operation in Darfur (UNAMID) and the United Nations Mission in the Republic of South Sudan (UNMISS)

Fuel was delivered to operational sites, but the transportation cost was high

18. The Departments of Peacekeeping Operations/Field Support (DPKO/DFS) Fuel Operations Manual (the Fuel Manual) require MINUSCA to identify risks related to fuel operations and develop and implement contingency measures to mitigate identified risks. The fuel contract requires the contractor to bear the full cost of transporting fuel products to all fuel distribution points.

19. From October 2016, when MINUSCA started the fuel contract, the contractor faced challenges in delivering sufficient stocks by road to fuel sites in the sectors. These challenges were caused by insecurity in most parts of the country; poor road networks especially during the rainy seasons; and delays in securing escorts for fuel convoys. OIOS noted that it took significant efforts and time to secure escorts for the fuel convoy, as the Military did not give it priority considering their other tasks. For example, between March and May 2018, it took seven trucks 78 days to deliver fuel in Obo for a trip that normally takes 30 days. In addition, in some locations, escort convoys were restricted to once a week. To partly address this, MINUSCA amended the fuel contract in April 2017, increasing the storage capacities of strategic and local fuel reserves at six fuel sites. The Fuel Unit also developed a contingency plan for its fuel operations in July 2017, including a matrix covering risks, associated impact on operations and mitigating measures to address the challenges being faced. As a mitigating measure, the Mission started utilizing special flights to deliver the contractor's fuel to sector locations at an average cost of \$12,000 per flight at its own cost.

20. The Mission took the decision to use special flights, as operations at sector location operations would be adversely impacted if their fuel supply was interrupted. In OIOS view, however, the Mission Support Division could be more proactive in planning and coordinating with the military component to ensure needed supplies are delivered. The decision to use special flights has resulted in the Mission incurring significant costs for special flights to deliver fuel. From May 2017 to June 2018, the Mission made 52 special flight requests at a cost of \$644,798, averaging almost four requests per month. The Mission explained that the contractor was not required to reimburse MINUSCA for the cost of these special flights because the challenges faced were beyond its control.

**(2) MINUSCA should take measures, by enhancing coordination among relevant Mission components, to ensure the delivery of fuel products to sector locations in a timely and cost-effective manner.**

*MINUSCA accepted recommendation 2 and stated that the Mission Support Division and Force Headquarters had a robust and well documented coordination mechanism for requesting military escorts. MINUSCA military forces are overstretched and this often leads to delays of departure of life support convoys or life support convoys getting stranded along the way due to lack of escorts as troops will be engaged in other operations. MINUSCA Force Headquarters will review its convoy operations with a view to improving convoy movement, reliability and timeliness. Recommendation 2 remains open pending receipt of evidence of improvement of convoy movements to ensure timely and cost-effective delivery of fuel to sector locations.*

The Mission maintained the stipulated quantities of fuel reserves

21. The Mission maintained strategic and local fuel reserves in six locations, and had amended the fuel contract in April 2017 to increase fuel storage capacity in these locations considering the challenges in transporting fuel to these locations. As at 30 June 2018, the Mission held the required levels of strategic fuel reserves at Bangui, Bouar, Kaga Bandoro, Bria and Bambari, with a combined total of 1.5 million litres of diesel and 640,000 litres of Jet A-1 fuel. The Mission also maintained the required levels of local reserves of 1.6 million litres of diesel and 655,000 litres of Jet A-1 fuel in 11 strategically selected fuel sites. OIOS conducted site visits to Bangui, Bouar and Kaga Bandoro and reviewed the Fuel Unit's quarterly inspections

to verify the quantity, quality and adequacy of strategic fuel reserves, and from this concluded that MINUSCA has implemented adequate controls over its strategic and local fuel reserves.

## **B. Fuel operations and monitoring**

### The contractor had developed and implemented an approved quality control programme

22. The Fuel Manual requires the contractor to: develop a quality control programme that is approved by the Mission; conduct periodic quality control activities; and submit monthly quality control reports to the Fuel Unit. The Mission standard operating procedures on fuel quality assurance and operations require the contractor to obtain from an independent inspector, quality certification for each delivery of fuel.

23. The contractor developed a quality control programme, which was approved by MINUSCA that met all quality standards stipulated in the fuel contract. The contractor also submitted the required monthly quality control reports to the Fuel Unit, and conducted the required periodic quality control activities. An independent inspector was also hired to conduct quality inspections and laboratory tests for each fuel delivery in accordance with international standards, and the related certificates were submitted to the Mission. Moreover, during the audit period, the contractor sent samples of Jet A-1 fuel for independent laboratory tests on a bi-annual basis to verify that fuel quality conformed with international standards. OIOS concluded that the fuel contractor had implemented the required quality control programme, in accordance with the terms of the contract.

### The calibration of fuel flow meters and dispensing pumps needed to be conducted regularly

24. The Fuel Manual requires an independent calibrator, engaged by the contractor and approved by the Mission, to calibrate fuel flow meters and dispensing equipment every six months to accurately record the volume of fuel delivered, and provide calibration certifications to the Fuel Unit.

25. The contractor hired an approved independent calibrator who tested, calibrated and adjusted fuel flow meters and dispensing equipment in 14 fuel distribution locations, with 3 or 4 calibrations having been completed in each of 13 out of the 14 locations. However, the interval between meter calibrations per fuel distribution point ranged from 6 to 15 months (average 9 months per location). The Quality Assurance Evaluator explained that delays in meter calibrations was because the fuel contractor requested the independent calibrator to conduct calibrations in recently mobilized fuel sites in addition to planned calibrations in existing fuel sites. Meanwhile, the calibration certificates at all existing fuel sites had already expired one to nine months prior to the next calibration. In Birao and Paoua, even though these fuel distribution locations were completely mobilized in July 2016, it took about 12 months for the first meter calibrations to be conducted by the independent calibrator.

26. The lack of regular and timely calibrations resulted as the Mission did not enforce the requirement for the contractor to ensure that the independent calibrator tested, calibrated and adjusted fuel flow meters and dispensing equipment within six months and there were no penalties for non-compliance in the contract. The Mission had discussed the issue with the contractor during monthly performance reviews, but no corrective action had yet been taken. Infrequent calibrations of flow meters increased the risk of inaccurate measurement and reporting of fuel consumption and possible financial loss to the Mission.

**(3) MINUSCA should take action to ensure that fuel flow meters and dispensing equipment are tested, calibrated and adjusted within the calibration certification validity period to prevent inaccurate measurement and billing of fuel provided to the Mission.**



*MINUSCA accepted recommendation 3 and stated that the calibration of fuel-dispensing meters by an independent calibrator was delayed by mobilization work that had to be completed prior to calibration. Now that mobilization has been completed, a calibration schedule has been developed to facilitate calibration twice yearly, which will be supervised very closely to ensure full compliance. Recommendation 3 remains open pending receipt of evidence that the calibration schedule has been enforced.*

Need to ensure accuracy of benchmark data, analyze fuel consumption and investigate anomalies

27. The Fuel Unit work plan requires FFLPC to analyze consumption data of fuel-consuming equipment against established fuel consumption benchmarks in EFMS, review abnormal consumption, and report suspected cases of fraud to the Mission's investigative bodies.

28. As of September 2018, a number of anomalies were highlighted in the EFMS scorecard (which highlights exceptions to the established benchmarks), which should have triggered further analysis including: (a) 244 potential duplicate transactions; (b) 136 repatriated or written-off equipment that were still showing active, potentially receiving fuel; (c) over 500 equipment which were active potentially receiving fuel, but not in use due to faulty odometers and hour meters measuring the time equipment was running; and (d) on average, more than 500 items of equipment indicated abnormal fuel consumption each month. In addition, there were 127 transactions on fuel-consuming equipment that were presumed to have been provided more fuel than the recorded tank capacity of the equipment.

29. To set the fuel consumption benchmarks for United Nations-owned vehicles, generators, aircrafts and COE, the Fuel Unit had collected from the Transport Unit, Engineering and Aviation Sections and the COE Unit data on equipment related to their standard fuel consumption and tank capacity. However, the data was not adequately validated resulting in inaccurate and unreliable benchmark data for some equipment. The Fuel Unit advised that in some cases, EFMS was comparing the actual fuel consumption of equipment to the inaccurate benchmark data that had been loaded in the system, and as a result, the system was sometimes producing erroneous fuel over-consumption reports. The Fuel Unit however had not completed an analysis of the mentioned anomalies in EFMS to resolve them if necessary. The Fuel Unit had also not followed up on abnormal fuel consumption reports, or further investigated reports of equipment receiving more fuel than their tank capacity. Such red flags should have triggered a fraud-related investigation.

30. The above control weaknesses resulted, partly due to the inadequate capacity in the Unit, because the analysis by the Mission's Fuel Unit focused only on fuel consumed by vehicles, but did not conduct fraud risk assessment on fuel consumption by the generators and aircrafts which were exposed to higher risk of fuel fraud. Vehicles consumed only about 23 per cent of the Mission's fuel whereas generators and aircrafts were consuming 41 per cent and 31 per cent of the Mission's fuel respectively during the audit period. Also, the Fuel Unit did not prepare planned fuel fraud-related inspection schedules and conduct inspections of suspected over-consuming equipment. Recommendation 1 attempts to address the inadequate capacity in the Unit.

31. The above control weaknesses also resulted because the Fuel Unit had not adequately coordinated with relevant technical sections such as Transport, Engineering and COE Units to promptly identify and repair faulty odometers and hour meters to ensure the accuracy of information captured in EFMS.

32. This led to ineffective fraud prevention measures and increased the risk of fuel misappropriation going undetected. MINUSCA indicated that EFMS staff were working with system experts based in Bangkok and the COE Unit to review and resolve the issues. Once completed, any exceptions would be made available to the Special Investigations Unit for investigation. OIOS plans to conduct a follow-up audit

once the Mission improves collection of baseline data, due to the risks of fuel misappropriation and financial loss.

**(4) MINUSCA should implement mechanisms to ensure the Fuel Unit: (a) obtains data on fuel-consuming equipment from Mission components to accurately update the electronic fuel management system for effective monitoring of fuel consumption by equipment; and (b) enhances coordination with relevant technical units to promptly identify equipment with faulty odometers and hour meters and require the relevant components to repair them.**

*MINUSCA accepted recommendation 4 and stated that the Fuel Unit is coordinating with the Transport Unit, Contingent-owned equipment (COE) Unit, Aviation Unit, Engineering Section and the Office of Information and Communications Technology in Bangkok in validating the baseline data that had been used at the beginning of the EFMS project in 2016. In conjunction with Transport Unit, COE Unit, and Engineering Section, the Fuel Unit will develop an inspection schedule to identify faulty odometers and hour meters to be repaired. Recommendation 4 remains open pending receipt of evidence that the baseline data in the EFMS has been validated, and evidence that a schedule has been implemented to identify and repair faulty odometers and hour meters.*

**(5) MINUSCA should conduct a Mission-specific fuel fraud risk assessment to identify areas of high risk and develop appropriate mitigating measures taking into consideration the higher risk areas identified by this audit.**

*MINUSCA accepted recommendation 5 and stated that the Mission will develop a fuel fraud risk matrix for all fuel consuming equipment and areas with a high risk of fuel fraud. Risk assessment visits to high risk areas will be conducted by the Fuel Unit. Recommendation 5 remains open pending receipt of the fuel fraud risk matrix and measures put in place to mitigate the associated risks.*

#### Need to adequately account for issuance of bulk fuel

33. The Fuel Manual requires contingent units to submit detailed and accurate consumption reports to the Fuel Unit to account for bulk fuel issuances. Contingent units used scanners in locations with network connections to account for bulk fuel distributed to consuming equipment in the EFMS. In remote locations without network connections such as Pombolo, Bocaranga and Ippy, contingent units were required to submit monthly manual consumption reports to the Fuel Unit to account for bulk fuel issuances.

34. Controls were effective in places where networked scanners were used. The Fuel Unit maintained adequate documentation of bulk fuel requests and issuances, including contingent units' consumption reports of previous issuances. In addition, the Operations Cell analyzed the quantity of bulk fuel issued to contingent units and evaluated the reasonableness of quantities requested. From July 2017 to August 2018, the Mission approved 1,454 requests for 2.7 million litres of diesel fuel totaling \$4.2 million, of which 686,797 litres (26 per cent) had been accounted for in EFMS relating to fuel consumption for 8 of the 24 contingent units provided with bulk fuel. The remaining 16 contingents were issued fuel manually.

35. OIOS noted that the controls over manual consumption reports were weak. Six of the 16 contingent units had never submitted the monthly manual consumption reports. The remaining 10 contingent units submitted the monthly manual consumption reports; however, due to poor archiving, the Fuel Unit could not provide complete copies of the reports. Since January 2018, the Fuel Unit maintained an Excel spreadsheet to record bulk fuel requests for contingents that used manual records, and from June 2018, the Unit was working with the Geospatial Information and Telecommunications Technology Section to develop

a database to adequately monitor and account for bulk fuel issuances. Additionally, to enhance the process of accounting for fuel, the Fuel Unit obtained information from the COE Unit to validate the accuracy of information relating to the status of repatriated or inactive equipment.

36. The above happened because MINUSCA had not implemented an adequate mechanism to account for bulk fuel issuances and the Fuel Unit did not require all contingent units to submit monthly bulk fuel consumption reports. As a result, there was a risk of fuel wastage and misappropriations not being detected for the bulk fuel issued through manual procedures.

**(6) MINUSCA should implement a mechanism to adequately account for bulk fuel issuances by requiring contingents that use manual records to send monthly consumption reports of bulk fuel issuances and for the Fuel Unit to keep copies of the reports for analysis.**

*MINUSCA accepted recommendation 6 and stated that the requirement for all contingents to submit monthly fuel consumption report was enhanced from November 2018, including those based in remote locations where reliable communication was a challenge. Also, the Fuel Unit has communicated to all contingent logistics officers that any new issuance of bulk fuel requests will be done only after submission and subsequent review of the previous month's fuel consumption report. Monthly reports for bulk fuel request for each contingent have been received for October 2018. Recommendation 6 remains open pending receipt of evidence that the monthly consumption reports of bulk fuel issuances have been consistently received and analyzed to identify risks of wastage and misappropriation.*

The Mission was actively following up to receive duty-free privileges for fuel importation

37. The Status of Forces Agreement between the United Nations and the local Government exempts all goods imported for the official use of MINUSCA from direct taxes and charges of similar nature. The Mission is required to implement appropriate procedures and controls to ensure duty-free privileges are used for its exclusive purposes.

38. From April 2015 to June 2016, the Transitional Government of the Central African Republic suspended duty-free privileges for MINUSCA for the importation of fuel. To ensure continuity of fuel supply, MINUSCA requested the contractor to pay duties and taxes related to fuel importations and seek reimbursement from the Mission. As at 31 May 2016, the Mission had reimbursed the contractor \$8.7 million in respect of duties and direct taxes paid. The Mission held discussions with relevant government officials and escalated the issue to the Office of the Secretary-General seeking reimbursement for duties and direct taxes paid on fuel importation. As at the audit date, the Government has not reimbursed the Mission the amount paid in taxes.

39. In July 2016, the Government reinstated the Mission's duty-free privileges for the importation of fuel. A review of shipping documentation, tax exoneration certificates and the Fuel Unit's collection and consumption tracking reconciliations from June 2016 to August 2018, indicated that the Unit reconciled quantities of fuel shipped by contractor to the Mission's fuel receipts and consumption. As the Mission implemented adequate follow-up mechanisms to recover the cost of duties and taxes paid on fuel importation and took measures to receive the duty-free privileges for the importation of fuel, OIOS did not make a recommendation on this issue.

The contractor had fully mobilized at all sites and implemented adequate safety and emergency measures

40. The fuel contract requires the contractor to: obtain approval of the United Nations site board prior to fuel site mobilization to confirm that the site is appropriate and authorized by local authority for fuel operations; and arrange for an independent inspection to confirm readiness for mobilization. The Mission is required to make a one-time mobilization payment per fuel site following completion of mobilization. The fuel contract requires the contractor to implement adequate safety and emergency response measures at each fuel site.

41. By 31 August 2018, all 14 fuel sites were fully mobilized and the required approvals and inspection had been completed. A review of the five new fuel sites that were mobilized during the audit period noted that the Mission had diligently completed all the mobilization tasks, and in accordance with the contract had accurately paid: (a) \$1.4 million for the five new sites as required; and (b) \$628,560 monthly operating and maintenance fees for mobilizing fuel sites.

42. OIOS site visits to four fuel sites in Bangui, Bouar and Kaga Bandoro observed that the contractor had implemented adequate safety and emergency response measures, including: (a) adequately securing fuel tanks to deter unauthorized access with fencing and barbed wire around the perimeter; (b) implementing adequate safety and security measures such as “no smoking” signage, and availability of first aid kits; (c) ensuring its personnel wore personal protection equipment; and (d) providing the required quantity of functional fire extinguishers and sirens in all locations. Also, the contractor had developed an emergency response plan for each of its 14 fuel distribution points and conducted emergency response drills on a monthly basis to test the validity of the plan.

43. OIOS concluded that the contractor had implemented adequate safety and emergency response measures at its fuel sites.

The Mission had conducted the required performance monitoring of the fuel contractor

44. The fuel contract requires MINUSCA to continuously assess the contractor’s performance of the services provided, including: (a) holding monthly performance meetings with the contractor; and (b) preparing quarterly performance reports.

45. During the audit period, the Mission held monthly performance meetings and completed quarterly performance reports as required. Despite confirmation from the Contracts Management Section, Fuel Unit and contractor staff that all the meetings were held, minutes for six of the 24 performance meetings could not be located due to inadequate archiving. However, since then, the Mission took action to improve its filing system. The recent meeting minutes showed that contract performance-related issues were discussed and resolved, timelines and responsibility for implementing actions assigned and contractor’s performance were evaluated against established key performance indicators such as mobilization status, fuel testing and quality control results, flow meters and dispensing equipment testing, calibration and adjustment and disposal and cleanup of fuel waste. OIOS concluded that the Mission properly monitored the fuel contractor’s performance during the audit period.

## C. Billing and payments

### The Mission had taken adequate steps to obtain prompt payment discounts

46. The fuel contract requires the contractor to: (a) use Platts average variable prices and fixed prices per fuel site indicated in the contract; and (b) grant the Mission prompt payment discount of 1.5 per cent for invoice payments within 30 days of receipt of invoices from contractor.

47. The Fuel Unit consistently verified the quantities of fuel quoted on contractor invoices with EFMS and manual issuance reports. In addition, reviews of invoice prices for all 42 invoice payments from July 2017 to August 2018 noted that the contractor used the fixed price per liter indicated in the contract document and the average Platts variable prices. OIOS review of the payments showed that, on average, invoice payments were made 18 days from the date of receipt of the invoice, and in 40 of 42 invoice payments totaling \$40.2 million, the Mission obtained prompt payment discount of \$602,711. For the other two invoices received in January 2018 for amounts totaling \$2.7 million, the Mission lost prompt payment discount of \$41,202 due to delays in the invoice processing. Since then; however, the Fuel Unit has implemented an invoice processing system to better track receipt of invoices to ensure payments were processed in a timely manner. Based on the action taken, OIOS did not make a recommendation on this issue.

### There was a need to enhance mechanisms to recover costs related to fuel provided to non-Mission entities

48. MINUSCA signed Memoranda of Understanding (MoU) with United Nations agencies and other entities for the provision of fuel, for which the cost was reimbursable by them within 30 calendar days following the date they received the invoice. However, although the Mission had developed and implemented adequate procedures to manage this process, there were some deficiencies in the process as demonstrated in the following examples:

- As at 31 August 2018, the Mission had not recovered \$348,386 for diesel and Jet A-1 fuel supplied between June 2016 and May 2018 to four United Nations entities and two non-United Nations entities. Finance Unit staff advised that debit advices had been sent to the entities requesting payment and the Regional Service Centre in Entebbe (RSCE) had been sending monthly reminders. The Fuel Unit had also taken actions to offset amounts owed by some entities against the Mission's existing accounts payables to these entities, but the information had not been presented through the Finance Unit to the RSCE for update in Umoja in a timely manner;
- For 51 cost recovery memoranda on file for fuel costing \$178,475, it took on average 126 days for the Mission to prepare memoranda requesting the RSCE to initiate cost-recovery from the time fuel was provided. OIOS was informed that these delays were due to initial problems with Umoja regarding the implementation of the sales and distribution module; and
- Fuel supplied to one United Nations entity amounting to \$19,060 had not yet been recorded in Umoja to initiate cost recovery because the entity had not yet been assigned an Umoja business partner number.

49. The above resulted because: (a) the Mission did not take adequate steps to initiate, monitor and record all fuel cost recovery requests on a timely basis; and (b) the Finance Unit and RSCE did not reconcile fuel cost-recovery payments with receivables data in Umoja in a timely manner to determine amounts still outstanding for each entity provided with fuel. The delays in processing cost-recovery requests or non-

collection of funds from United Nations agencies and other entities has deprived the Mission of needed resources for its operations, and increased the likelihood of financial loss.

**(7) MINUSCA should take steps: (a) to initiate and monitor requests for the recovery of cost of fuel provided to non-Mission entities in a timely manner; and (b) for the Finance Unit, working in coordination with the Regional Service Centre in Entebbe, to reconcile fuel cost-recovery payments received with receivables data in Umoja in a timely manner to determine outstanding amounts and recover those amounts.**

*MINUSCA accepted recommendation 7 and stated that it has a mechanism for initiating cost recovery of the fuel by generating sales orders for fuel every month in Umoja. Although in the past there were some cases of delays in raising sales orders, these have been addressed in conjunction with the Geospatial Information and Telecommunications Technology Section. Furthermore, the delay in the cost recovery of the fuel issued to one entity was due to procedural formalities that have since been resolved. The 3,197 litres of fuel issued to that entity was recovered. The Finance and Budget Section prepares monthly status reports in monitoring collection efforts and payment status in coordination with the Regional Service Center in Entebbe. The amount of receivables for fuel cost recovery was reduced to \$251,453 on 30 November 2018, from \$348,386 on 31 August 2018. Of the outstanding amount, \$185,186 or 74 per cent was related to fuel provided to one entity during 2015 and 2016, where the recovery was a challenge. Recommendation 7 remains open pending receipt of evidence that the receivables have either been recovered or where required action has been taken to initiate write-off of irrecoverable amounts.*

#### **IV. ACKNOWLEDGEMENT**

50. OIOS wishes to express its appreciation to the management and staff of MINUSCA for the assistance and cooperation extended to the auditors during this assignment.

(Signed) Eleanor T. Burns  
Director, Internal Audit Division  
Office of Internal Oversight Services

## STATUS OF AUDIT RECOMMENDATIONS

**Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission  
in the Central African Republic**

Rec. no.	Recommendation	Critical <sup>2</sup> / Important <sup>3</sup>	C/ O <sup>4</sup>	Actions needed to close recommendation	Implementation date <sup>5</sup>
1	MINUSCA should, based on a risk assessment, reassess the resources of the Fuel Unit to ensure essential tasks in fuel operations are effectively conducted.	Important	O	Receipt of evidence that the staffing needs of the Fuel Unit have been reassessed and necessary action taken to ensure that essential tasks are carried out.	30 June 2019
2	MINUSCA should take measures, by enhancing coordination among relevant Mission components, to ensure the delivery of fuel products to sector locations in a timely and cost-effective manner.	Important	O	Receipt of evidence of improvement of convoy movements to ensure timely and cost-effective delivery of fuel to sector locations.	31 March 2019
3	MINUSCA should take action to ensure that fuel flow meters and dispensing equipment are tested, calibrated and adjusted within the calibration certification validity period to prevent inaccurate measurement and billing of fuel provided to the Mission.	Important	O	Receipt of evidence that the calibration schedule has been enforced.	28 February 2019
4	MINUSCA should implement mechanisms to ensure the Fuel Unit: (a) obtains data on fuel-consuming equipment from Mission components to accurately update the electronic fuel management system for effective monitoring of fuel consumption by equipment; and (b) enhances coordination with relevant technical units to promptly identify equipment with faulty odometers and hour meters and require the relevant components to repair them.	Important	O	Receipt of evidence that the baseline data in the Electronic Fuel Management System has been validated and, evidence that a schedule to identify and repair faulty odometers and hour meters has been implemented.	31 March 2019
5	MINUSCA should conduct a Mission-specific fuel fraud risk assessment to identify areas of high risk and develop appropriate mitigating measures taking	Important	O	Receipt of the fuel fraud risk matrix and measures put in place to mitigate the associated risks.	31 May 2019

<sup>2</sup> Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

<sup>3</sup> Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

<sup>4</sup> C = closed, O = open

<sup>5</sup> Date provided by MINUSCA in response to recommendations.

## STATUS OF AUDIT RECOMMENDATIONS

**Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission  
in the Central African Republic**

	into consideration the higher risk areas identified by this audit.				
6	MINUSCA should implement a mechanism to adequately account for bulk fuel issuances by requiring contingents that use manual records to send monthly consumption reports of bulk fuel issuances and for the Fuel Unit to keep copies of the reports for analysis.	Important	O	Receipt of evidence that the monthly consumption reports of bulk fuel issuances have been consistently received and analyzed to identify risk of wastage and misappropriation.	30 June 2019
7	MINUSCA should take steps: (a) to initiate and monitor requests for the recovery of cost of fuel provided to non-Mission entities in a timely manner; and (b) for the Finance Unit, working in coordination with the Regional Service Centre in Entebbe, to reconcile fuel cost-recovery payments received with receivables data in Umoja in a timely manner to determine outstanding amounts and recover those amounts.	Important	O	Receipt of evidence that the receivables have either been recovered or where required action has been taken to initiate write-off of irrecoverable amounts.	30 June 2019



# **APPENDIX I**

## **Management Response**

**United Nations**

United Nations Multidimensional Integrated  
Stabilization Mission in the Central African Republic



**MINUSCA**

**Nations Unies**

Mission Multidimensionnelle Intégrée des Nations Unies  
pour la Stabilisation en République centrafricaine

**INTEROFFICE MEMORANDUM**

**MEMORANDUM INTERIEUR**

TO: Mr. Daeyoung Park  
A: Chief, Peacekeeping Audit Service  
Internal Audit Division, OIOS

DATE: 24 December 2018

FROM: X Milan Trojanovic  
DE: Director of Mission Support

A handwritten signature in blue ink, appearing to read 'Milan Trojanovic', is written over the printed name and title.

REFERENCE: DMS-3677

SUBJECT: **Comments to draft report on the audit of fuel management in MINUSCA**  
OBJET: **(Assignment No. AP2018/637/06)**

1. Reference is made to your memorandum (OIOS:2018-637-06-04) dated 12 December 2018 on the above-captioned subject. Please find attached herewith MINUSCA's response (Appendix 1) to the recommendations for your consideration.

Regards,

Attachments: (1) Appendix 1 Management response

cc: Mr. Laud Botchwey, Chief Resident Auditor for MINUSCA  
Mr. Arnold C. Valdez, Chief, Resident Audit Coordination Section, IAD-OIOS  
Ms. Cynthia Avena-Castillo, Internal Audit Division, OIOS

## Management Response

## Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic

Rec. no.	Recommendation	Critical <sup>1</sup> / Important <sup>2</sup>	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	MINUSCA should, based on a risk assessment, reassess the resources of the Fuel Unit to ensure essential tasks in fuel operations are effectively conducted.	Important	Yes	Director of Mission Support	30 June 2019	The Fuel Unit is understaffed, making it difficult to operate effectively. MINUSCA will reassess the Unit's staffing needs to ensure that essential tasks are carried out.
2	MINUSCA should take measures, by enhancing coordination among relevant Mission components, to ensure the delivery of fuel products to sector locations in a timely and cost-effective manner.	Important	Yes	MINUSCA Force Headquarters	31 March 2019	<p>MINUSCA accepts this recommendation only with respect to timely and cost-effective delivery of fuel because MINUSCA Mission Support Division (MSD) and Force Headquarters (FHQ) have a robust and well documented coordination mechanism for requesting military escorts. All requests for escorts are submitted to FHQ in writing with full details of the vehicles to be escorted, their cargo, destination, date of departure, date of return, etc.</p> <p>Notwithstanding this robust coordination, MINUSCA military forces are over-stretched and this often leads to delays of departure of life support convoys or life support convoys getting stranded along the way due to lack of escorts as troops will be engaged in other operations.</p>

<sup>1</sup> Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

<sup>2</sup> Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or 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 fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic

Rec. no.	Recommendation	Critical <sup>1</sup> / Important <sup>2</sup>	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						<p>This is a matter of concern that MINUSCA MSD has brought to the attention of FHQ numerous times.</p> <p>MINUSCA FHQ will review its convoy operations with a view to improving convoy movement, reliability and timeliness.</p>
3	MINUSCA should take action to ensure that fuel flow meters and dispensing equipment are tested, calibrated and adjusted within the calibration certification validity period to prevent inaccurate measurement and billing of fuel provided to the Mission.	Important	Yes	Fuel Unit	28 February 2019	<p>The calibration of fuel-dispensing meters by an independent calibrator was delayed by mobilization work that had to be completed prior to calibration. It was deemed that calibrating all fuel dispensing meters together by one team would ensure consistency.</p> <p>Now that mobilization has been completed, a calibration schedule has been developed to facilitate calibration twice yearly. In 2019 it will be from 08 January to 27 February 2019 and 08 July to 28 August 2019 and will be supervised very closely to ensure full compliance.</p>
4	MINUSCA should implement mechanisms to ensure the Fuel Unit: (a) obtains data on fuel-consuming equipment from Mission components to accurately update the electronic fuel management system for effective	Important	Yes	Fuel Unit	Ongoing 31 March 2019	The Fuel Unit is coordinating with the Transport Unit, Contingent-owned equipment (COE) Unit, Aviation Unit, and Engineering Section in validating the baseline data that was used at the beginning of the

## Management Response

**Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic**

Rec. no.	Recommendation	Critical <sup>1</sup> / Important <sup>2</sup>	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	monitoring of fuel consumption by equipment; and (b) enhances coordination with relevant technical units to promptly identify equipment with faulty odometers and hour meters and require the relevant components to repair them.			Fuel Unit	31 March 2019	Electronic Fuel Management System 2 (EFMS-2) project in 2016. Furthermore, the Fuel Unit is coordinating with the Office of Information and Communication Technology (OICT), Bangkok, who are reviewing MINUSCA equipment data in comparison to other missions that have implemented EFMS-2 with similar equipment.  In conjunction with Transport Unit, COE Unit, and Engineering Section, the Fuel Unit will develop and inspection schedule to identify faulty odometers and hour meters to be repaired.
5	MINUSCA should conduct a Mission-specific fuel fraud risk assessment to identify areas of high risk and develop appropriate mitigating measures taking into consideration the higher risk areas identified by this audit.	Important	Yes	Fuel Unit	31 May 2019	MINUSCA will develop a fuel fraud risk matrix for all fuel consuming equipment and areas with a high risk of fuel fraud. Risk assessment visits to high risk areas will be conducted by the Fuel Unit.
6	MINUSCA should implement a mechanism to adequately account for bulk fuel issuances by requiring contingents that use manual records to send monthly consumption reports of bulk fuel issuances and for the Fuel Unit to keep copies of the reports for analysis.	Important	Yes	Fuel Unit	Implemented in September 2018 and ongoing due to its continuing nature`	The requirement for all contingents to submit monthly fuel consumption report was enhanced from 01 November 2018, including those based in remote locations where reliable communication is a challenge. The Fuel Unit has communicated to all contingent logistics officers that any new

## Management Response

## Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic

Rec. no.	Recommendation	Critical <sup>1</sup> / Important <sup>2</sup>	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						<p>issuance of bulk fuel requests will be done only after submission and subsequent review of the previous month's fuel consumption report.</p> <p>Monthly Fuel Reports for Bulk Fuel Requests for each contingent for October 2018 have been received. These documents are too bulky to be attached but will be submitted to the OIOS Office for review.</p> <p>MINUSCA recommends closure of this Recommendation.</p>
7	MINUSCA should take steps: (a) to initiate and monitor requests for the recovery of cost of fuel provided to non-Mission entities in a timely manner; and	Important	Yes	Fuel Unit	Implemented	<p>MINUSCA has a mechanism for initiating cost recovery of the fuel issued to non MINUSCA entities. In this regard, Sales Orders for fuel are generated every month in Umoja. Although in the past there were some cases of delays in raising Sales Orders, these have since been addressed in conjunction with Geospatial Information and Telecommunications Technology Section.</p> <p>Furthermore, the delay in the cost recovery of the fuel issued to one entity was due to procedural formalities that have since been</p>

Management Response

Audit of fuel management in the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic

Rec. no.	Recommendation	Critical <sup>1</sup> / Important <sup>2</sup>	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	<p>(b) for the Finance Unit, working in coordination with the Regional Service Centre in Entebbe, to reconcile fuel cost-recovery payments received with receivables data in Umoja in a timely manner to determine outstanding amounts and recover those amounts.</p>			<p>Finance Unit</p>	<p>Implemented</p>	<p>resolved. The 3,197 litres of fuel issued to that entity was recovered.</p> <p>(b) The Finance Unit of the Finance and Budget Section takes the lead in following up with service receivers for cost recovery of fuel payment and coordinates with the Regional Service Center in Entebbe in recording of payments. The Finance Unit prepares monthly status reports in monitoring collection efforts and payment status. As at 30 November 2018, the amount of receivables for fuel cost recovery stood at \$251,453, as compared to \$348,386 as at 31 August 2018. Of the outstanding amount, \$185,186 or 74% is related to fuel provided to one entity during 2015 and 2016, the recovery of which presents a major challenge to the mission.</p> <p>MINUSCA recommends closure of this Recommendation.</p>