

INTERNAL AUDIT DIVISION

REPORT 2016/171

Audit of the management of engineering projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali

There was a need to implement a proper governance structure for managing construction projects, and enhance engineering project management capacity to ensure projects are effectively planned and monitored

19 December 2016 Assignment No. AP2015/641/06

Audit of the management of engineering projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali

EXECUTIVE SUMMARY

The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over management of engineering projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA). The audit covered the period from 1 July 2013 to 31 August 2016 and it included the review of: project governance and oversight; project management; and invoice processing and payment.

MINUSMA needed to: establish an effective project governance mechanism for construction activities; develop and issue procedures and guidelines for planning, implementing, monitoring and closing projects; assess the adequacy of the capacity of the Engineering Section; and fully comply with required procedures for payment of contractors invoices.

OIOS made two critical and six important recommendations. To address issues identified in the audit, MINUSMA needed to:

- Establish a Project Management Group and develop and implement Mission-specific guidelines and standard operating procedures for the management of engineering projects (critical);
- Assess staffing requirements and allocate adequate resources to the Engineering Section to ensure proper planning and monitoring of engineering projects (critical);
- Review and evaluate the use of international individual contractors for the management of engineering projects, and if this practice continues, ensure effective supervisory controls are implemented so that these contractors adequately perform their mandated tasks;
- In collaboration with the Department of Peacekeeping Operations ensure that military engineering contingents have the required construction equipment and are adequately tasked;
- Establish and implement a system to track and monitor in-house project costs;
- Ensure procedures are in place for project closure;
- Ensure that the Engineering Section maintains complete project files; and
- Ensure full compliance with the provisions of the relevant contracts and applicable United Nations Financial Regulations and Rules regarding the payment of contractors.

MINUSMA accepted the recommendations and has initiated actions to implement them.

CONTENTS

			Page		
I.	BACKG	GROUND	1		
II.	AUDIT	OBJECTIVE, SCOPE AND METHODOLOGY	1		
III.	OVERA	LL CONCLUSION	1-2		
IV.	AUDIT RESULTS				
	A. Proje	ect governance and oversight	2		
	B. Project management				
	C. Invoi	ce processing and payment	6-7		
V.	ACKNO	OWLEDGEMENT	7		
ANNEX I Status of audit recommendations		Status of audit recommendations			
APPENDIX I		Management response			

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I. BACKGROUND

- 1. The Office of Internal Oversight Services (OIOS) conducted an audit of the management of engineering projects in the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA).
- 2. The MINUSMA Engineering Section is responsible for planning, designing, constructing and maintaining or refurbishing buildings and physical infrastructure including roads, airports and utility plants. As at 31 July 2016, MINUSMA had 73 construction projects valued at \$310 million, including 18 camps for contingents and office accommodations valued at \$260 million; 28 airfield and airport infrastructure projects valued at \$47 million; 27 borehole drilling projects and sundry repairs and rehabilitation of existing structures valued at \$3 million. Thirty-one of the 73 projects had been completed. The implementation of engineering projects was adversely impacted by various factors, including: the deteriorating security situation in Northern Mali; poor road conditions; difficulties to source qualified expertise in the local construction industry; frequent changes in the Mission's priorities; and funding constraints at the start-up of the Mission.
- 3. The Engineering Section was headed by a Chief at the P-5 level who reports to the Chief Services Delivery. The Section had 89 approved posts comprising 35 international and 54 national positions. The Section also had 19 international individual contractors and 1,570 national individual contractors.
- 4. Comments provided by MUNISMA are incorporated in italics.

II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

- 5. The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over the management of engineering projects in MINUSMA.
- 6. This audit was included in the 2016 risk-based work plan of OIOS because of the operational and financial risks associated with engineering projects in MINUSMA.
- 7. OIOS conducted this audit from April to September 2016. The audit covered the period from 1 July 2013 to 31 August 2016. Based on an activity-level risk assessment, the audit covered higher and medium risks in the management of engineering projects in MINUSMA, which included review of: project governance and oversight; project management; and invoice processing and payment.
- 8. The audit methodology included: (a) interviews of key personnel, (b) review of relevant documentation, (c) analytical reviews of data, (d) sample testing of selected ongoing and completed projects, and (e) physical observation during site visits to Bamako, Timbuktu and Gao.

III. OVERALL CONCLUSION

9. MINUSMA needed to: (a) establish effective project governance and oversight mechanisms for construction activities; (b) assess staffing requirements and allocate adequate resources to the Engineering Section; (c) evaluate the use of international individual contractors for the management of projects and, if they continue, increase the supervision of their work; (d) in collaboration with the Department of

Peacekeeping Operations (DPKO), ensure that military engineering contingents have the required construction equipment and are adequately tasked; (e) establish and implement a system to track and monitor in-house project costs; (f) ensure procedures are in place for project closure; (g) ensure that the Engineering Section maintains complete project files; and (h) ensure full compliance with the provisions of the relevant contracts and applicable United Nations Financial Regulations and Rules.

IV. AUDIT RESULTS

A. Project governance and oversight

There was a need for adequate project governance and oversight mechanism

- 10. DPKO/Department of Field Support (DFS) Guidelines on Governance of Major Construction Projects in Field Missions (the Guidelines) require MINUSMA to establish a Project Management Group (PMG) for major engineering activities to oversee the planning and execution of major projects, which are defined as projects with an estimated cost of \$1 million or more. The DPKO/DFS start-up field guidelines and a memorandum from the Director of the Logistics Support Division of DFS require the Mission to develop and implement specific guidelines including standard operating procedures (SOPs) to guide staff on the implementation of engineering projects.
- 11. The Mission did not establish a PMG and develop and implement guidelines, or SOPs to guide staff on the implementation of engineering projects. This was because the Mission had not yet established appropriate governance mechanisms for the implementation of engineering projects. As a result, the Mission had not adequately identified or effectively addressed its infrastructure needs, and military were accommodated in substandard facilities. The Mission had also incurred approximately \$10 million to rent office premises and penalties amounting to \$11.3 million between April 2014 and March 2016 due to its inability to provide accommodation to uniformed personnel as agreed in the relevant memorandum of understanding.
 - (1) MINUSMA should establish a Project Management Group and develop and implement Mission-specific guidelines and standard operating procedures for the management of engineering projects.

MINUSMA accepted recommendation 1 and stated that it was in the process of establishing the PMG. MINUSMA advised however that although it had not formally established the PMG, the Engineering Section assessed the Mission's priority projects in conjunction with military engineers in all sectors and the assessment results were presented to the Senior Management Group to prioritize projects. The Mission was not able to provide evidence of senior management's review of engineering projects. Recommendation 1 remains open pending receipt of evidence of the establishment of a PMG and the approval and implementation of SOPs for the management of engineering projects.

B. Project management

Need for improved planning and monitoring of outsourced construction projects

12. The DPKO/DFS Engineering Support Manual requires MINUSMA to: prepare a detailed plan for each project with the estimated start and completion date, sequence of activities, timing and milestone dates; monitor the implementation of the project against the detailed plan and prepare related progress reports.

- 13. A review of: the resources and structure of the Engineering Section, troop accommodation reports, budget performance reports of June 2016, the documents for 46 projects valued at \$255 million (10 camp construction projects valued at \$213 million, 36 airfield and airport infrastructure projects valued at \$36 million, and 27 borehole drilling projects valued at \$3 million); and interview with the MINUSMA Director of Mission Support, the Chief Engineer and project managers indicated that the Engineering Section was not adequately:
 - Planning projects, as project managers (international individual contractors) were not preparing the scope of work and bills of quantity for camp construction sub-projects valued at \$54 million; establishing timelines and preparing technical specifications for 27 borehole drilling projects, two airfield projects valued at \$17 million, and three camp construction projects valued at \$43 million; completing environmental and social impact assessment reports for 9 camp construction projects valued at \$137 million and all the 27 borehole drilling projects and the nine airfield projects sampled.
 - Monitoring and reporting on the status of projects as project managers (international individual contractors) prepared only 4 of the required 43 quarterly progress reports and 168 of 609 required weekly reports and did not monitor the attendance and hence the performance of national individual contractors. For example, OIOS visits to seven construction sites in Bamako and Gao indicated that the relevant project managers did not sign attendance sheets of individual contractors to confirm that they worked on those days.
- 14. The above occurred due to inadequate project management capacity because the Mission:
 - Had not established and implemented Mission-specific guidelines and SOPs for the management of engineering projects including planning and monitoring;
 - In line with its initial concept of support, relied heavily on international individual contractors whose contracts were limited to nine months each with a mandatory break period of three months. Also, the contractors were not adequately supervised by the Engineering Section to ensure that they effectively implemented their assigned tasks and the Mission had not formally reviewed and evaluated the use of these contractors to confirm their need; and
 - Due to resource restraints in staffing: (i) did not assign managers to some projects; and (ii) routinely assigned several projects to one international individual contractor. For instance: (a) three projects for the construction of integrated camps valued at \$24 million and 27 borehole drilling projects valued at \$3 million had no project managers; and (b) one manager was assigned to 10 projects including the construction of two camps valued at \$53 million, and eight airfield infrastructure projects valued at \$32 million. MINUSMA had military enablers; however, it could not adequately deploy these resources because some of the contingents were deployed without the required equipment. For example, the Mission did not assign major tasks related to one of three military engineering contingents because this contingent did not have the required equipment.
- 15. The lack of adequate planning and monitoring of construction projects in addition to the security situation and difficulties to source qualified expertise locally contributed to delays in completing some projects. For example, as of 31 July 2016, 18 camp construction projects were delayed by an average of two years. At the time of the audit, only one of the 18 camp construction projects had been completed. There was also an unmitigated risk of unwarranted/unjustified cost overruns. For example: a review of

eight contract amendments for \$78 million showed that the justifications for the changes were not documented in four instances; the Mission had incurred approximately \$10 million to rent office premises and penalties amounting to \$11.3 million between April 2014 and March 2016 due to its inability to provide appropriate accommodation to uniformed personnel as agreed in the relevant memorandum of understanding.

(2) MINUSMA should assess staffing requirements and allocate adequate resources to the Engineering Section to ensure proper planning and monitoring of engineering projects.

MINUSMA accepted recommendation 2 and advised that: its requests for additional staff in the 2014/15 and 2015/16 budgets had been rejected; and the recent civilian staffing review had endorsed the Mission's request for additional staff, which would be included in the supplementary budget request of 2016/17 and proposed budget for 2017/18. Recommendation 2 remains open pending the receipt of evidence that the Engineering Section is adequately staffed.

(3) MINUSMA should review and evaluate the use of international individual contractors for the management of engineering projects, and if this practice continues, ensure effective supervisory controls are implemented so that they adequately perform their assigned tasks.

MINUSMA accepted recommendation 3 and stated that if the request for additional posts in the 2016/17 supplementary budget to be submitted is approved, it would minimize reliance on consultants and international individual contractors. MINUSMA also advised that it is revising the guidelines governing the hiring, filing, drafting of terms of reference and payments for contractors and consultants. Recommendation 3 remains open pending receipt of evidence that the Mission has reviewed and evaluated use of international individual contractors and improved its supervision of tasks assigned.

(4) MINUSMA should, in collaboration with DPKO, implement measures to ensure that military engineering contingents have the required construction equipment and are adequately tasked.

MINUSMA accepted recommendation 4 and stated that it had commenced discussions with DPKO to appropriately adjust future engineering contingents' structure. MINUSMA was also addressing this issue with the African Union Triangular Partnership Project for Africa's rapid deployment of engineering capabilities to Mali. Recommendation 4 remains open pending the receipt of evidence that military engineering contingents have the required capacity to effectively implement their assigned tasks.

Need to track and maintain records of the costs of in-house projects

- 16. The DPKO/DFS Guidelines and the International Public Sector Accounting Standards require the Engineer Section to track and maintain accurate records of engineering activities including project budgets, bills of materials, estimated and actual costs of materials and labor, monitor and prepare progress reports on the utilization of project budgets.
- 17. A review of the records of all nine in-house projects valued at \$105 million that were being implemented by the Engineering Section and interview of five project managers indicated that the Engineering Section did not track and maintain records of engineering activities such as project budgets, bills of materials, estimated and actual costs of materials and labor and monitor and prepare progress reports on the utilization of project budgets. This occurred because the Mission had not established and

implemented effective Mission-specific guidelines on tracking of in-house project costs. As a result, there was a risk of budget overruns.

(5) MINUSMA should establish and implement a system to track and monitor in-house projects' costs.

MINUSMA accepted recommendation 5 and stated that the Engineering Section would devise a mechanism to assist project managers in accurately estimating and tracking project costs. Recommendation 5 remains open pending receipt of evidence that an adequate cost tracking and monitoring system is in place.

Project closure procedures were not complied with

- 18. The DPKO/DFS Guidelines on Major Construction Projects require project managers to conduct final review of completed projects, as well as prepare and submit project completion reports to the Chief Engineer for approval. The project completion reports should include lessons learned and best practices, an assessment of the project results against the initial plans, and scope-related changes to the project, with reasons for the required changes, and certification of completion and hand-over notes.
- 19. A review of the documents for 31 projects amounting to \$86.8 million that were completed as of 31 July 2016 indicated that project managers did not prepare any project completion report. This was because of insufficient resource capacity in the Engineering Section, including the heavily reliance on international individual contractors that could only work 9 out of 12 months and lack of adequate guidance and SOPs, as mentioned above, and also because the Engineering Section management did not adequately supervise projects to ensure all required documentation was prepared, including project closure reports. As a result, there was an unmitigated risk that projects were not completed in accordance with contractual specifications, which may result in financial losses and reduced capacity of the Mission to implement its mandate.

(6) MINUSMA should implement adequate supervisory controls to ensure project closure procedures are completed.

MINUSMA accepted recommendation 6 and stated that due to the above mentioned staffing constraints, a gap had existed in supervisory oversight to enforce the procedures for project closure. Recommendation 6 remains open pending receipt of evidence that the Engineering Section is completing project closure procedures for all projects.

Project files not adequately maintained

- 20. The DPKO/DFS Guidelines for Major Construction Projects require project managers to maintain project files for individual projects containing project planning, scope of works, environmental impact assessments, lessons learnt, bills of quantities, project completion reports, status reports, invoices, performance evaluations, and relevant correspondences.
- 21. Interview with staff of the Engineering Section and review of the records of engineering projects indicated that the Engineering Section had not maintained complete project files. A further review of the documents for 46 projects valued at \$255 million (10 camp construction projects valued at \$213 million, 36 airfield and airport infrastructure projects valued at \$36 million, and 27 borehole drilling projects valued at \$3 million) indicated that the files did not contain one or more of the following documents: project status reports; completion reports; invoices; final approved individual scopes of works, bills of quantities, technical specifications, environmental and social impact assessment reports. This was

because the Chief Engineer had not implemented adequate supervisory controls to ensure the maintenance of complete project files. As a result there was an unmitigated risk of a lack of accountability for actions taken for the implementation of the projects.

(7) MINUSMA should implement effective supervisory control procedures to ensure that the Engineering Section maintains complete project files.

MINUSMA accepted recommendation 7 and stated that the Engineering Section would restructure its recordkeeping and configuration management classification system to capture each project in a case file, with all information captured in a synchronized folder system running from the pre-tender period until the closure of the project. Recommendation 7 remains open pending the receipt of evidence that project files are being properly maintained.

C. Invoice processing and payment

There were inadequate controls over processing and payment of contractors' invoices

- 22. The agreements between MINUSMA and its contractors require the Mission to: pay each contractor only after they satisfactorily complete a specific task within 30 days of receiving relevant invoices; and to retain 10 per cent of each invoice pending the issuance of a final certificate of completion by the Chief Engineer to ensure that the contractors have complied with all provisions of their respective contracts. From the start-up of the Mission to 1 July 2016, the United Nations Operation in Cote d'Ivoire was providing administrative support to MINUSMA that included the delegation of authority for making payments to third parties on behalf of MINUSMA
- 23. A review of 98 engineering related invoices amounting to \$80 million out of a total of 1,809 engineering related invoices amounting to \$200 million processed by the Mission during the audit period indicated that the Mission:
 - Paid for 51 invoices totaling \$47 million without evidence that the contractors satisfactorily completed their respective tasks including progress reports, detail descriptions of the work completed and materials used, the certificates of completion. Instead, project managers provided general remarks on the invoices stating that the contractor had completed works without indicating the tasks that was performed;
 - Refunded contractors for 13 retention amounts totaling \$6 million without the required certificate of completion; and
 - Paid for 65 of sampled invoices within 30 days and delayed paying 35 others amounting to \$27 million on average 167 days due primarily to the deployment of Umoja within the Mission in 2015.
- 24. The above occurred because MINUSMA Engineering and Finance Sections did not implement procedures to ensure invoices were properly supported by sufficient evidence of satisfactory completion of the relevant tasks prior to requesting United Nations Operation in Cote d'Ivoire to settle the invoice. As a result, there was a risk of invoices being settled prior to completion of satisfactory work, full retention amounts not being held to cover cost of substandard work, and cost overruns as actual costs against budgets were not being monitored. For instance, MINUSMA made a claim for unsatisfactory compaction work valued at \$800,000 after paying the related invoices valued at \$8.16 million and the release of the retention amount of \$816,000.

(8) MINUSMA should improve controls over the processing of invoices for engineering projects to ensure full compliance with the provisions of the relevant contracts and applicable United Nations Financial Regulations and Rules.

MINUSMA accepted recommendation 8 and stated that the Engineering Section had appropriate mechanisms for processing invoices. However, there were a few instances where full payments were made before the completion of work was formally certified. MINUSMA advised that subsequent to the audit observations, payments are based on partial completion certificates to support invoices. Recommendation 8 remains open pending the receipt of evidence that all invoices are promptly paid and such payments are supported by the required certificates of completion.

V. ACKNOWLEDGEMENT

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

STATUS OF AUDIT RECOMMENDATIONS

Rec.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
1	MINUSMA should establish a Project Management Group and develop and implement Mission-specific guidelines and standard operating procedures for the management of engineering projects.	Critical	О	Receipt of evidence of the establishment of a Project Management Group and the approval and implementation of SOPs for the management of engineering projects.	15 January 2017
2	MINUSMA should assess staffing requirements and allocate adequate resources to the Engineering Section to ensure proper planning and monitoring of engineering projects.	Critical	О	Receipt of evidence that the Engineering Section is adequately staffed	1 July 2017
3	MINUSMA should review and evaluate the use of international individual contractors for the management of engineering projects, and if this practice continues, ensure effective supervisory controls are implemented so that they adequately perform their assigned tasks.	Important	0	Receipt of evidence that the Mission has reviewed and evaluated use of international individual contractors and improved its supervision of tasks assigned.	1 July 2017
4	MINUSMA should, in collaboration with DPKO, implement measures to ensure that military engineering contingents have the required construction equipment and are adequately tasked.	Important	О	Receipt of evidence that military engineering contingents have the required capacity to effectively implement their assigned tasks	28 February 2017
5	MINUSMA should establish and implement a system to track and monitor in-house projects' costs.	Important	О	Receipt of evidence that an adequate cost tracking and monitoring system is in place.	31 January 2017
6	MINUSMA should implement adequate supervisory controls to ensure project closure procedures are completed	Important	О	Receipt of evidence that the Engineering Section is completing project closure procedures for all projects.	28 February 2017
7	MINUSMA should implement effective supervisory control procedures to ensure that the Engineering Section maintains complete project	Important	О	Receipt of evidence that project files are being properly maintained	28 February 2017

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¹ 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.

² 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.

 $^{^{3}}$ C = closed, O = open

⁴ Date provided by MINUSMA in response to recommendations.

STATUS OF AUDIT RECOMMENDATIONS

Rec.	Recommendation	Critical ¹ / Important ²	C/ O ³	Actions needed to close recommendation	Implementation date ⁴
	files				
8	MINUSMA should improve controls over the processing of invoices for engineering projects to ensure full compliance with the provisions of the relevant contracts and applicable United Nations Financial Regulations and Rules.	Important	О	Receipt of evidence and OIOS verification that all invoices are promptly paid and such payments are supported by the required certificates of completion	1 December 2016

APPENDIX I

Management Response

Rec.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	MINUSMA should establish a Project Management Group (PMG) and develop and implement Mission-specific guidelines and standard operating procedures for the management of engineering projects.	Critical	Yes	Chief Engineer	15/Jan/2017	Although MINUSMA didn't formally establish a Project Management Group (PMG), the Engineering Section conducted an assessment of Mission Priority Projects in conjunction with the Force Engineer in all sectors. The assessment result was presented to the Senior Management Group (SMG) to prioritize the construction projects, taking into account the mandate as well as political and environmental considerations. In addition, progress toward implementation is presented to the SMG on a regular basis. Subsequent to the audit observation, nominations for the formal establishment of PMG for the governance of major construction projects in MINUSMA and the draft Standard Operating Procedure (SOP) were submitted to the Director of Mission Support (DMS) and are under review. The memo for the formal establishment of the PMG and a draft SOP is attached.

¹ 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.

² 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.

Rec.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						For this reason, we don't consider it appropriate to categorize this recommendation as "critical."
2	MINUSMA should assess the staffing requirements and, if necessary, allocate appropriate and adequate staffing resources to Engineering Section to ensure adequate planning and monitoring of engineering projects.	Critical	Yes	Chief Engineer/ Chief Human Resources Officer (CHRO)	To start immediately after budget approval [1 July 2017]	MINUSMA management acknowledges the need to increase staffing level in the Engineering Section and requested additional staffing in its budget submissions for 2014/15 and 2015/16 financial years, but it has since been rejected by Head Quarters. Providentially, the recently conducted Civilian Staffing Review (CSR) endorsed our requirement to increase staffing requirements in engineering and other critical sections and advised us to include part of the staffing requirements in the Mission's supplementary budget request in 2016/17 and the balance in 2017/18 financial years. An extract from the CSR-approved staffing level is attached. Consequently, we are of the opinion that this recommendation has been implemented and is by no means critical.
3	MINUSMA should review and evaluate the use of international individual contractors for the management of engineering projects to confirm their need and implement effective	Important	Yes	Chief Engineer/ Resources Officer (CHRO)	To start immediately after budget approval [1 July 2017]	As previously stated, the Mission recently completed a civilian staffing review to corroborate staffing requirements across MINUSMA and requested

Rec.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	supervisory controls to ensure that they effectively perform their assigned tasks.					additional posts in the supplementary budget for sections where it has hired consultants and Individual Contractors (ICs). This will form the basis for resource planning for the 2017/18 period, and management will work to minimize the Mission's reliance on consultants and international individual contractors. In addition, as an outcome of the Board of Auditors (BOA) findings, the Human Resources Section has revised guidelines governing the hiring, filing, and drafting of Terms of Reference (TORs) and payments for contractors and consultants that will be rolled out shortly.
4	MINUSMA, in collaboration with DPKO, take effective measures to ensure that military engineering contingents have the required construction equipment and are adequately tasked.	Important	Yes	MINUSMA/DPKO	28/02/2017	It should be noted that the Mission has no control over ensuring that military engineering contingents have the required construction equipment so that they are adequately tasked. Nevertheless, the Mission's management has already been in discussion with DPKO Contingent owned Equipment Unit (COE) to adjust future engineering Companies (COY) structure. In addition, the Mission's

Rec.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						management is addressing this issue with the African Union Triangular Partnership Project for Africa's rapid deployment of engineering capabilities to Mali. Thus, this recommendation should either be directed to DPKO or considered implemented from the Mission's side
5	MINUSMA should establish and implement a system to track and monitor in-house projects' costs.	Important	Yes	Chief Engineer	31/01/2017	As a result of the creation of the supply management pillar in MINUSMA, no assets management staff in the engineering structure will be trained in the Galileo module to deal with project cost estimation and tracking. In addition, Galileo will soon be decommissioned, so training staff in this module would not benefit the Mission. The Engineering Section will look into the matter and devise a mechanism to assist project managers in accurately estimating and tracking project costs.
6	MINUSMA should implement adequate supervisory oversight to ensure project closure procedures are completed.	Important	Yes	Chief Engineer	28/02/2017	The Mission acknowledges that, due to staffing constraints, a gap has existed in supervisor oversight to enforce the procedures for project closure. As previously indicated, the additional staffing endorsed by the civilian staffing review will assist the Mission in

Rec.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
						addressing this gap and effectively following up on and documenting project closures.
7	MINUSMA should implement effective supervisory control procedures to ensure that the Engineering Section maintains complete project files.	Important	Yes	Chief Engineer	28/02/2017	As previously stated, due to staffing constraints, the Mission was not able to effectively control procedures or maintain project files. The Engineering Section will restructure its recordkeeping and configuration management classification system to capture each project in a case file, with all information captured in a synchronized folder system running from the pre-tender period until the closure of the project.
8	MINUSMA should improve controls over the processing of invoices for engineering projects to ensure full compliance with the provisions of the relevant contracts and applicable United Nations Financial Regulations and Rules.	Important	Yes	Chief Engineer	01/12/2016	The Mission acknowledges that there were few instances in which full payments were made before the completion of the work was formally certified. Following audit observations, payments are now being effected based on the submission of partial completion certificates to support invoices