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INTEROFFICE MEMORANDUM

MEMORANDUM INTERIEUR

OFFICE OF INTERNAL OVERSIGHT SERVICES · BUREAU DES SERVICES DE CONTRÔLE INTERNE
INTERNAL AUDIT DIVISION · DIVISION DE L'AUDIT INTERNE

TO: Mr. Mariano Fernandez
A: Special Representative of the Secretary-General
United Nations Stabilization Mission in Haiti

DATE: 20 October 2011

REFERENCE: IAD: 11- 00632

FROM: Fatoumata Ndiaye, Director
DE: Internal Audit Division, OIOS

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SUBJECT: **Assignment No. AP2011/683/03 – Audit of management of engineering projects in MINUSTAH**

OBJET:

Overall results relating to the effective management of MINUSTAH's planning, execution and close-out phases of engineering projects were partially satisfactory

1. Attached please find the final report on the above-mentioned audit.
2. Annex-I shows the status of recommendations. Please note that OIOS will report on the progress made to implement its recommendations in its annual report to the General Assembly and to the Secretary-General, quarterly for critical recommendations and annually for important recommendations (nos. 1 to 4).
3. The audit also identified a number of opportunities for improvement (see Annex-II). While OIOS will not report on the implementation of these opportunities, we encourage you to implement them to improve the efficiency and effectiveness of your operations. OIOS will review their implementation as part of future audits.
4. Please note that under General Assembly resolution 59/272, a Member State may request that the final report be made available. Also note that pursuant to General Assembly resolution 64/263, OIOS has included the complete management response as an appendix to the present report.
5. We wish to express our appreciation to the Management and staff of MINUSTAH for the assistance and cooperation extended to the auditors during the assignment.

cc: Mr. Kevin Kennedy, Principal Deputy Special Representative, MINUSTAH
Mr. Sunny Makoge, Officer-in-Charge of Mission Support, MINUSTAH
Mr. Francisco Rouillon, Chief of Integrated Support Services, MINUSTAH
Mr. Swatantra Goolsarran, Executive Secretary, UN Board of Auditors
Ms. Susanne Frueh, Executive Secretary, Joint Inspection Unit
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Mr. Moses Bamuwamye, Executive Secretary, IAAC
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Ms. Amy Wong, Programme Officer, Internal Audit Division, OIOS

AUDIT REPORT

Audit of management of engineering projects in MINUSTAH

BACKGROUND

The Engineering Section provides technical support to the United Nations Stabilization Mission in Haiti (MINUSTAH) including the military and police contingents in the following areas: water and sanitation, electrical and mechanical, air conditioning, planning and design, construction, building management and mapping.

The Engineering Section is headed by a civilian Chief Engineer, at the P-5 level, assisted by a Force Engineer. The Engineering Section has 179 authorized posts. To adequately support the expanded requirements of the Mission, additional temporary positions were proposed in the 2010/11 budget to enable the Section to provide technical support to areas of the Mission including Port-au-Prince, the 10 regional offices and the Liaison and Support Centre in Santo Domingo.

A total of 58 engineering projects estimated at \$28 million have been budgeted in the fiscal year 2010/11 and an additional \$6.8 million has been budgeted for renovations and alteration of buildings in the Mission area.

Table: Engineering related financial data

	2008/09 Expenditure \$'000	2009/10 Apportionment \$'000	2010/11 Cost Estimates \$'000
Construction services	8,724.1	8,800.5	28,049.6
Alteration & renovation services	1,033.4	2,082.0	6,821.6
Maintenance supplies	5,916.4	6,648.9	9,810.0
Total	15,673.9	17,531.4	44,681.2

Source: MINUSTAH's budget 2010/11

This audit was included in the 2011 OIOS' risk-based work plan due the critically of the effective implementation of engineering projects after the 12 January earthquake.

OBJECTIVE AND SCOPE

The audit was conducted to assess the adequacy and effectiveness of MINUSTAH's risk management, control and governance processes in providing reasonable assurance regarding the effective management of its planning, execution and close-out phases of engineering projects. The key control tested for the audit was project management. The audit covered MINUSTAH's engineering projects for the period 1 January 2010 to 31 March 2011. OIOS selected for detailed testing all seven major priority engineering projects, valued at \$6.8 million.

AUDIT RESULTS

In OIOS' opinion, MINUSTAH's risk management, control and governance processes examined were **partially satisfactory** to provide reasonable assurance regarding the effective management of its

planning, execution and close-out phases of engineering projects. The annual acquisition plan needed to be sufficiently detailed to be a more effective planning tool for procurement actions for construction materials. Specific guidelines and procedures needed to be developed to assist project staff in planning, executing and closing engineering projects, as well as monitoring and reporting on the status of projects and in managing outsourced projects. Additionally, internal controls over the opening and closing of projects in Galileo needed to be strengthened to improve the reliability and accuracy of project data.

Work planning

MINUSTAH had developed a Mission Support work plan with the aim to plan, prioritize and execute major office and residential accommodation projects to provide accommodation for troops and staff and reestablish the Mission's headquarters and regional offices. MINUSTAH had established a Prioritization Review Committee (PRC) that was responsible for reviewing requests to prioritize projects and to provide recommendations to the Special Representative of the Secretary-General (SRSG). The PRC had convened 11 meetings since its inception and reviewed 26 priority proposals. This was a good mechanism for approval and monitoring of high priority projects by Senior Management.

Acquisition planning and procurement of construction materials

The Engineering Section prepared an acquisition plan as part of the annual budget process, but the plan was not sufficiently detailed to be useful for timely procurement actions. Considering the high demand for construction materials in Haiti after the earthquake, the Engineering Section should have established a detailed acquisition plan in a timely manner.

The lack of adequate planning for construction materials resulted in a protracted procurement process. It took about four months for the Procurement Section to select a vendor to deliver cement throughout the Mission, and there were delays up to 150 days from the submission of the requisition by the Engineering Section to the issuance of a purchase order by the Procurement Section.

Delays in the procurement process resulted in shortage of construction materials such as sand, gravel, cement and bricks, which impeded the timely completion of projects including the Leogane Regional headquarters and the Jeremie Regional headquarters.

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| <p>1. MINUSTAH should ensure that the Engineering Section prepares a detailed acquisition plan that facilitates effective and timely solicitation of bids or proposals, award of contracts and delivery of the goods and services required.</p> |
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<p><i>MINUSTAH accepted recommendation 1 and provided OIOS with a copy of the approved acquisition plan based on the fiscal year 2011/12. Based on the action taken, recommendation 1 has been closed.</i></p>
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Environmental assessments

The environmental policy for United Nations Field Missions requires that the construction or clearing of sites used by the Mission be conducted in a manner that minimizes negative impacts on the environment. An Environmental Compliance Unit was established by MINUSTAH to monitor environmental compliance with standards and recommended procedures at all MINUSTAH sites. However, the Environmental Compliance Unit had only been involved in one of the seven major high priority engineering projects. For the project in which the Environmental Compliance Unit was involved, the environmental survey was conducted after the acquisition of the land and the beginning of

construction activities. There were no mechanisms for monitoring environment compliance at construction sites.

- 2. MINUSTAH should comply with the United Nations environmental policy and conduct environmental assessments of project sites and take into consideration environmental concerns in planning future engineering projects.**

MINUSTAH accepted recommendation 2 and stated that the Engineering Section will ensure that the Environmental Compliance Unit conducts an Environment Impact Assessment for all engineering projects, which will form part of a joint reconnaissance report. Recommendation 2 remains open pending receipt of copies of Environment Impact Assessments of engineering projects.

Policies, procedures and guidelines on project management

The Engineering Section had prepared standard operating procedures covering areas such as the Section's scope of work, engineering support concepts and organization. However, there were no specific guidelines and procedures to assist project staff in the planning, executing and closing-out of engineering projects. In addition, the lack of a database to maintain adequate and reliable records and information on engineering projects had diminished the quality of the monitoring and reporting on engineering projects.

- 3. MINUSTAH should develop standard operating procedures for the management of engineering projects and establish a central database for monitoring and reporting on the status of projects.**

MINUSTAH accepted recommendation 3 and stated that the Engineering Section will prepare standard operating procedures in line with the recommendation. Recommendation 3 remains open pending receipt of the standard operating procedures for the management of engineering projects and the establishment of a central database for monitoring and reporting on the status of projects.

Project data in Galileo

The custodians of assets and materials in the engineering warehouse are responsible for opening and closing projects in Galileo, representing a lack of segregation of incompatible duties. There were also no guidelines for the opening and closing of projects in Galileo, and these tasks were performed by warehouse assistants who were not adequately trained. Due to the lack of reliable project cost data, project managers did not have the ability to accurately assess and monitor project costs and take timely actions to prevent cost overruns. There was no mechanism in place for assigning materials to projects or activities. As a result, materials valued at \$3.7 million were issued to 140 projects described as minor work. This amount represented 53 per cent of the total materials allocated to new projects since 1 January 2010.

- 4. MINUSTAH should develop procedures and guidelines and train staff over the opening and closing of projects in Galileo to ensure accurate and reliable project cost data in Galileo is maintained.**

MINUSTAH accepted recommendation 4 and stated that the Engineering Section has requested the support of the Property Management Unit to provide Galileo Project Module training for key project management staff. Recommendation 4 remains open pending the receipt of documentation evidencing the establishment of adequate internal controls to ensure the reliability of the project cost data

maintained in Galileo.

ACKNOWLEDGEMENT

OIOS wishes to express its appreciation to the Management and staff of MINUSTAH for the assistance and cooperation extended to the auditors during this assignment.

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I. INTRODUCTION

1. The Office of Internal Oversight Services (OIOS) conducted an audit of management of engineering projects in the United Nations Stabilization Mission in Haiti (MINUSTAH).
2. MINUSTAH's comments are incorporated in the audit results in *italics*.

II. AUDIT OBJECTIVE

3. The audit was conducted to assess the adequacy and effectiveness of MINUSTAH's risk management, control and governance processes in providing reasonable assurance regarding the effective achievement of its planning, execution and close-out phases of engineering projects. The key control tested for this purpose was project management. For the purpose of this audit, OIOS defined project management control as those controls designed to provide reasonable assurance that there is sufficient capacity including, for example, financial resources, competent human resources, and project management tools.

III. AUDIT SCOPE AND METHODOLOGY

4. OIOS conducted this audit from March to May 2011. The Institute of Internal Auditors. The audit covered the period from 1 January 2010 to 31 March 2011.
5. To gain a general understanding of the processes of MINUSTAH's engineering project management, OIOS interviewed the Chief Engineering Officer, the Deputy Chief Engineering Officer, the Chief of Engineering Operations Unit, the Chief of Construction Unit, project managers, the Warehouse Manager and warehouse assistants. OIOS reviewed the Engineering Support Manual and the Engineering Section's standard operating procedures (SOPs), and conducted site visits in Port-au-Prince (staff accommodation, substantive office complex and Parliament building), Jeremie and Leogane regional headquarters. An activity-level risk assessment was conducted to identify and evaluate specific risk exposures, and to determine whether controls existed to mitigate such risks.
6. Through interviews, analytical reviews and tests of controls, OIOS assessed the existence and adequacy of written policies and procedures, and also whether they were implemented consistently.

IV. OVERALL ASSESSMENT

7. In OIOS' opinion, MINUSTAH's risk management, control and governance processes examined were **partially satisfactory** to provide reasonable assurance regarding the effective achievement of its planning, execution and close-out phases of engineering projects. The annual acquisition plan could be utilized more effectively as a planning tool to ensure timely procurement actions for construction materials. Specific guidelines and procedures needed to be developed to assist project staff in planning, executing and closing engineering projects, as well as monitoring and reporting on the status of projects and in managing outsourced projects. Additionally, internal controls over the opening and closing projects in Galileo needed to be strengthened to improve the reliability and accuracy of project data.

V. AUDIT RESULTS

A. Project management

Work planning for engineering projects is adequate

8. MINUSTAH had developed a Mission Support work plan with the aim to plan, prioritize and execute major office and residential accommodation projects to provide accommodation for troops and staff and reestablish the Mission's headquarters and regional offices. MINUSTAH had established a Prioritization Review Committee (PRC) that was responsible for reviewing requests to prioritize projects and to provide recommendations to the Special Representative of the Secretary-General (SRSG). The PRC had convened 11 meetings since its inception and reviewed 26 priority proposals.

9. The Engineering Section's work plan was adequate particularly regarding the scheduling of projects and the PRC was functioning as intended and represented a good mechanism for the approval and monitoring of high priority projects by senior management. There were however delays in procuring construction materials, which impeded the timely completion of construction projects.

Need for timely procurement actions in respect of construction materials

10. The Engineering Section prepared an acquisition plan as part of the annual budget process, but the plan was not sufficiently detailed and therefore not useful for timely procurement actions. The acquisition plan contained only broad descriptions of projects and aggregate cost estimates and not detailed lists of materials required. Acquisition planning, including logistics, finance and other resources, is essential for the effective and timely solicitation of bids or proposals, award of contracts and delivery of the goods and services required. Considering the high demand for construction materials in Haiti after the earthquake, the Engineering Section needed to establish a detailed acquisition plan in a timely manner. OIOS was informed that this was not done due to the changing priorities in the Mission.

11. The lack of a detailed acquisition plan for construction materials resulted in a protracted procurement process. Requisitions were raised by the Engineering Section from time to time after a need for construction materials was established. Upon receiving the approved requisition, the Procurement Section selected vendors and issued purchase orders. It took about four months for the Procurement Section to select a vendor to deliver cement throughout the Mission. As a result, there were significant delays in the issuance of purchase orders by the Procurement Section. OIOS reviewed a sample of 20 requisitions for construction materials from a total of 114 outstanding requisitions as of 28 March 2011 noted delays up to 150 days from the submission of the requisition by the Engineering Section to the issuance of a purchase order by the Procurement Section. In OIOS' view, a detailed acquisition plan would have helped requisitioners in determining, in consultation with the Procurement Section, the best time to initiate procurement actions and ensure availability of construction materials when needed.

12. Delays in the procurement process resulted in shortage of construction materials such as sand, gravel, cement, bricks which impeded the timely completion of projects. The affected projects included the construction of MINUSTAH FM radio studio, Jeremie Regional headquarters, the Haitian Parliament, Leogane Regional headquarters and the restoration of buildings affected by the earthquake (e.g., Movement Control building numbers 39 and 32 at the Logistic Base). The expected completion date for the Leogane Regional headquarters had been extended by three months and the construction of the Jeremie Regional headquarters was only 60 per cent complete as of 20 May 2011 although it was expected to be completed by the end of February 2011. The MINUSTAH FM radio studio was to be established as part of the construction of the SRSG and substantive office complex with an expected

completion date of 15 December 2010. During OIOS' site visit conducted on 16 March 2011, the construction of the MINUSTAH FM radio studio was on hold due to the lack of building blocks.

Recommendation 1

(1) MINUSTAH should ensure that the Engineering Section prepares a detailed acquisition plan that facilitates effective and timely solicitation of bids or proposals, award of contracts and delivery of the goods and services required.

13. *MINUSTAH accepted recommendation 1 and stated that the Engineering Section is preparing an acquisition plan based on the fiscal year 2011/12 approved budget to facilitate procurement planning. Recommendation 1 remains open pending the receipt of a copy of the detailed acquisition plan.*

Delays in the processing of invoices

14. Difficulties in acquiring construction materials were exacerbated by the Mission's slow processing and settlement of vendors' invoices. The delays in the processing of payment for materials such as cement and building blocks previously delivered resulted in local vendors refusing to honor the Mission's purchase orders. A review of the time taken to process 42 invoices was 66 days instead of the purchase order agreed payment term of 30 days. The delays were mainly due to the insufficient capacity in the Finance Section to process invoices in a timely fashion.

15. Some of the delays, which were within the control of MINUSTAH, had a serious impact on the implementation of engineering projects and resulted in the Mission having to:

- Spend significant time on processing of direct purchases for the needed materials.
- Divert stagnant labor assigned for the project into another project until the necessary materials were made available, which was not always the most optimal use of their time. For example, Individual Contractors (ICs) assigned to the MINUSTAH FM radio studio were reassigned to renovate building #39 in the Log Base which was damaged during the 12 January 2010 earthquake.
- Allow contracts for ICs to expire prior to the completion of projects resulting in more delays as additional time was required to hire new ICs. For example, the contracts of 60 ICs working on the construction of the Jeremie Regional Headquarters expired on 31 March 2011 although the project was only 50 per cent complete.

16. **To avoid withholding of materials by vendors, MINUSTAH could consider establishing a process to ensure that invoices are paid timely.** *MINUSTAH stated that the Mission is in the process of implementing an invoice tracking system that will be managed by the Contracts Management Unit in respect of high value or complicated contracts. This system is expected to be in place by October 2011. OIOS is presently conducting an audit of the Santo Domingo Liaison and Support Centre, which includes a review of MINUSTAH's capacity for processing financial transactions.*

Need to conduct environmental assessments during the planning phase of engineering projects

17. The environmental policy for United Nations Field Missions requires that the construction or clearing of sites used by the Mission be conducted in a manner that minimizes negative impacts on the

environment. The Environmental Compliance Unit (ECU) was established by MINUSTAH to monitor environmental compliance with standards and recommended procedures at all MINUSTAH sites, as well as collect data and report compliance status to Management.

18. At the initial stage of an engineering project, reconnaissance site visits are normally conducted by a team of logistic planners, engineers, environmental officers and specialist consultants. The data collected is analyzed to establish the feasibility of the project. However, the ECU was involved in only one out of the seven major engineering projects reviewed by OIOS. For the project in which the ECU was involved, the environmental survey was conducted after the acquisition of the land and the beginning of construction activities. There were no mechanisms for monitoring environment compliance at construction sites.

Recommendation 2

(2) MINUSTAH should comply with the United Nations environmental policy and conduct environmental assessments of project sites and take into consideration environmental concerns in planning future engineering projects.

19. *MINUSTAH accepted recommendation 2 and stated that the Engineering Section will ensure that the ECU conducts an Environment Impact Assessment for all engineering projects, which will form part of a joint reconnaissance report.* Recommendation 2 remains open pending receipt of copies of Environment Impact Assessment of its engineering projects.

Policies, procedures and guidelines on engineering project management was required

20. The Engineering Section had prepared SOPs covering areas such as the Section's scope of work, engineering support concepts and organization. However, there were no specific guidelines and procedures to assist project staff in the planning, execution and close-out phases of engineering projects. The Mission also did not have a mechanism such as a database for tracking, monitoring and reporting on project activities and costs. The Galileo Inventory System (Galileo) contains a project estimation and tracking module to assist in tracking the status of the project, planning and requisitioning of materials and labour through automated work orders. However, project staff were not using the module due to a lack of awareness and training on its various features. Procedures for project control and recordkeeping are indispensable tools for project managers in developing plans, assigning resources to tasks, managing budgets and analyzing workloads.

Recommendation 3

(3) MINUSTAH should develop standard operating procedures for the management of projects and establish a central database for monitoring and reporting on the status of projects.

21. *MINUSTAH accepted recommendation 3 and stated that the Engineering Section will prepare standard operating procedures in line with the recommendation.* Recommendation 3 remains open pending receipt of a copy of the standard operating procedures for the management of engineering projects and the confirmation of the establishment of a central database for monitoring and reporting on the status of projects.

There were no procedures and guidelines for monitoring outsourced projects

22. The Mission outsourced engineering tasks such as the construction of perimeter wall for Mission camps that were time consuming and labour intensive. There was only one outsourced contract during the audit period (i.e. construction of perimeter wall for the new Leogane Regional Headquarters); however the Mission was in the process of outsourcing eight engineering projects.

23. The Engineering Section did not have SOPs for monitoring outsourced projects. The Engineer of the Leogane Region informed OIOS that work was monitored through routine tests of samples of concrete, soil, and bricks and reinforcing steel; however, this important monitoring function was not documented. It was further noted that the regular coordination meetings held with the contractor were also not recorded.

24. The outsourcing contract for the construction of the perimeter wall for the new Leogane Regional Headquarters states that the contractor shall submit to MINUSTAH a list of required materials, method statement, approval of status of work to be done, etc, before the commencement of works and obtain approval from the project manager or his/her designated representative. There was no documented evidence that the contractor had complied with the material requirements as per the contract prior to the commencement of works. Furthermore, there was no inspection report indicating that the service was delivered as agreed and to the required level of performance and quality. Therefore, it was unclear whether the contractor had complied with all the technical specifications and other written instructions provided in the contract.

25. **MINUSTAH could establish SOPs for the management of outsourced projects that define the roles and responsibilities of project managers and to ensure that outsourced projects are executed efficiently.** *MINUSTAH stated that the Engineering Section in consultation with the Contracts Management Unit will prepare SOPs for managing outsourced projects to ensure the effective and efficient implementation of projects and that proper documentation is retained.*

Need to strengthen internal controls over the project data in Galileo

26. The assets and materials used in engineering projects are maintained in the engineering warehouse and issued to various projects upon request. An automated work order system was implemented in October 2010 to allow project managers to submit their requests and obtain electronic approval. Once the asset or material is issued, warehouse staff records the cost information in Galileo to update the inventory records.

27. The custodians of assets and materials in the engineering warehouse also had the responsibility for opening and closing projects in Galileo. The lack of segregation of these incompatible duties exposed the Mission to the risk of fraud. In particular, warehouse personnel have the capability to conceal variances by either opening new projects in Galileo or assigning any missing assets or materials to existing projects.

28. There were also no guidelines for the opening and closing of projects in Galileo although these tasks were performed by warehouse assistants who were not adequately trained. There was no mechanism in place for assigning materials to projects or activities. As a result, materials valued at \$3.7 million were issued to 140 projects described as minor work. This amount represented 53 per cent of the total materials allocated to new projects since 1 January 2010.

29. Due to the lack of reliable project cost data, project managers did not have the ability to accurately assess and monitor project costs and take timely actions to prevent cost overruns.

Recommendation 4

(4) MINUSTAH should develop procedures and guidelines and train staff over the opening and closing of projects in Galileo to ensure accurate and reliable project cost data in Galileo is maintained.

30. *MINUSTAH accepted recommendation 4 and stated that the Engineering Section has requested the support of the Property Management Unit to provide Galileo Project Module training for key project management staff. Recommendation 4 remains open pending the receipt of documentation evidencing the establishment of adequate internal controls to ensure the reliability of the project cost data maintained in Galileo.*

Maintenance of project documents could be improved

31. The filing system used by the Engineering Section was inadequate as it contained incomplete information. For example, requests for information on projects were difficult to obtain. Some of the information was found in the Engineering Operations Unit and the Construction Unit. Project managers also kept documents relevant to their projects. Additionally, the Engineering Operations Unit located at the Mission's Headquarters required sector engineers to provide updated project information; but this information was not readily available. **There could be project files with complete copies of all project schedules, drawings, contract documents, requisitions, site surveys, monitoring reports, etc.** *MINUSTAH stated that the Engineering Section will establish a filing system for the retention of project management documents and a master list of project documents and records will be developed by August 2011.*

A training and development programme could increase project staff capacity

32. The Engineering Section has experienced engineers and project managers. However, as the audit results demonstrate, there are areas where further training and development is necessary, particularly in the use of Galileo. There was no training programme to upgrade the skills of engineering staff or a forum to share ideas based on best practices. **A training programme would provide an opportunity for project staff to share ideas and best practices.** *MINUSTAH stated that the Engineering Section will develop a training programme for staff with guidance from DFS and based on staff members' training needs and the Section's training budget. MINUSTAH further stated that the training schedule will provide for training sessions on project management and supervisory skills and 20 engineers will attend online training courses on the PRINCE 2 (project control environment) system.*

AUDIT RESULTS

ANNEX I
STATUS OF RECOMMENDATIONS
Audit of management of engineering projects in MINUSTAH

Recom. no.	Recommendation	Risk category	Risk rating	C/O ¹	Actions needed to close recommendation	Implementation date ²
1	MINUSTAH should ensure that the Engineering Section prepares a detailed acquisition plan that facilitates effective and timely solicitation of bids or proposals, award of contracts and delivery of the goods and services required.	Operational	Important	C	Action taken.	Implemented
2	MINUSTAH should comply with the United Nations environmental policy and conduct environmental assessments of project sites and take into consideration environmental concerns in planning future engineering projects.	Compliance	Important	O	Receipt of copies of Environment Impact Assessments of its engineering projects.	July 2011
3	MINUSTAH should develop procedures and guidelines and train staff over the opening and closing of projects in Galileo to ensure accurate and reliable project cost data in Galileo is maintained.	Operational	Important	O	Receipt of the standard operating procedures for the management of engineering projects and confirmation of the establishment of a central database for monitoring and reporting on the status of projects.	October 2011
4	MINUSTAH should develop procedures and guidelines and train staff over the opening and closing of projects in Galileo to ensure accurate and reliable project cost data in Galileo is maintained.	Operational	Important	O	Receipt of documentation confirming the establishment of adequate internal controls to ensure the reliability of the project cost data maintained in Galileo.	December 2011

AUDIT RESULTS

ANNEX II
OPPORTUNITIES FOR IMPROVEMENT
Audit of management of engineering projects in MINUSTAH

Para. no.	Opportunities for improvement	Client comments
16	To avoid withholding of materials by vendors, MINUSTAH could consider establishing a process to ensure that invoices are paid timely.	<i>MINUSTAH stated that the Engineering Section will develop a training programme for staff with guidance from DFS and based on staff members' training needs and the Section's training budget. MINUSTAH further stated that the training schedule will provide for training sessions on project management and supervisory skills and 20 engineers will attend online training courses on the PRINCE 2 (project control environment) system.</i>
25	MINUSTAH could establish SOPs for the management of outsourced projects that define the roles and responsibilities of project managers and to ensure that outsourced projects are executed efficiently	<i>MINUSTAH stated that the Engineering Section in consultation with the Contracts Management Unit will prepare SOPs for managing outsourced projects to ensure the effective and efficient implementation of projects and that proper documentation is retained</i>
31	There could be no project files with complete copies of all project schedules, drawings, contract documents, requisitions, site surveys, monitoring reports, etc.	<i>MINUSTAH stated that the Engineering Section will establish a filing system for the retention of project management documents and a master list of project documents and records will be developed by August 2011.</i>
32	A training programme would provide an opportunity for project staff to share ideas and best practices.	<i>MINUSTAH stated that the Engineering Section will develop a training programme for staff with guidance from DFS and based on staff members' training needs and the Section's training budget. MINUSTAH further stated that the training schedule will provide for training sessions on project management and supervisory skills and 20 engineers will attend online training courses on the PRINCE 2 (project control environment) system.</i>