



OFFICE OF INTERNAL OVERSIGHT SERVICES  
INTERNAL AUDIT DIVISION - I

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<sup>29</sup>  
14 September 2004

To: Mr. Legwaila Joseph Legwaila  
Special Representative of the Secretary General, UNMEE

From: Patricia Azarias,  
Director, IAD-I  
Office of Internal Oversight Services

A handwritten signature in cursive script that reads "P. Azarias".

Subject: **OIOS Audit No. AP2004/624/03: Demining Operations in UNMEE**

1. I am pleased to present herewith our final report on the subject audit, which was conducted by the Office of the Chief Resident Auditor in the United Nations Mission in Ethiopia and Eritrea (UNMEE). The audit was conducted in accordance with the general and specific standards for the professional practice of internal auditing in United Nations organizations and included such tests as the auditors considered necessary.

2. Based on the comments received on a draft of this report, we have closed recommendations 2, 3 and 4, and recommendation 1 has been withdrawn.

3. I would like to take this opportunity to thank you and your staff for the assistance and cooperation extended to the audit team.

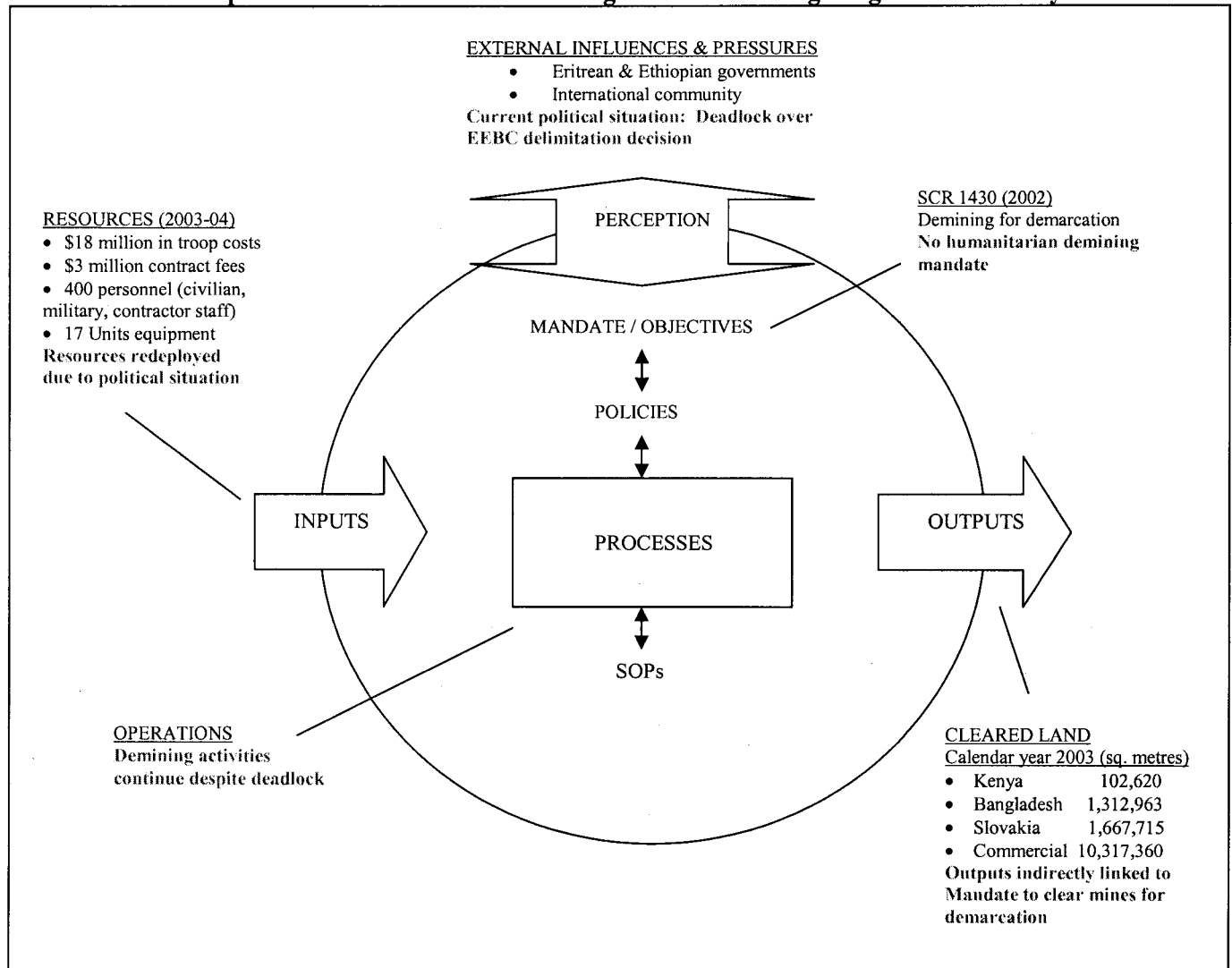
## I. INTRODUCTION

4. With the September 2003 public rejection by Ethiopia of certain parts of the Eritrea-Ethiopia Boundary Commission (EEBC) delimitation decision, demining for demarcation was indefinitely stalled and no demining directly related to demarcation has been done since. While demining for the pillar sites along the boundary in Sector East was completed before September 2003, it will have to be surveyed again for newly planted mines if and when actual demarcation commences.

5. In the interim, demining activities continue in Sector West but these operations are not directly related to demarcation. The demining resources, which have been on the ground since the Mission inception, have been diverted to achieve other objectives to put these resources to productive use. This includes enhancing the Force's mobility and training for deminers in the Temporary Security Zone (TSZ) where mines exist in terrain that is said to be similar to that in the border. Concurrently, the extraction of mines from these areas may facilitate the return of villagers to their homes.

6. A schematic diagram showing the various elements affecting the Mission's demining programme delivery is shown below.

**Schematic Representation of Elements Affecting MACC Demining Programme Delivery**



## II. AUDIT OBJECTIVE

7. The overall objective of the audit was to assess the efficiency and effectiveness of demining operations in the Mission.

## III. AUDIT SCOPE AND METHODOLOGY

8. The audit was limited to reviewing the demining operations of UNMEE; it did not cover Mine Action Capacity Building activities of the United Nations Development Programme (UNDP), since it is outside UNMEE's mandate.

9. The audit included interviews with concerned personnel and review of relevant documentation. A draft of the audit report was discussed with the Mine Action Co-ordination Centre (MACC) Programme Manager on 20 May 2004.

#### **IV. OVERALL ASSESSMENT**

10. The Mission is not making any progress on the achievement of the mandate specific to demining for demarcation, pending resolution of the current deadlock over the boundary decision. Demining activities are continuing for perceived socio-economic benefits that may accrue to Eritrea's population in future, and for enhancing mine action methodology and standards. However, the cost of resources currently in place and the resulting measurable outputs from these demining efforts are not directly linked to the UNMEE mandate.

#### **V. AUDIT FINDINGS AND RECOMMENDATIONS**

##### Evolution of demining mandates

11. The mandates enumerated below show an evolution of the MACC programme from coordination of demining activities to actual demining and for a specific purpose, i.e., to support demarcation:

- a. Security Council Resolution 1320 (2000) – Coordinate and provide technical assistance for humanitarian mine action activities in the Temporary Security Zone (TSZ) and area adjacent to it.
- b. Security Council Resolution 1344 (2001) – To facilitate mine action in coordination with the United Nations Mine Action Service (UNMAS), in particular, through exchanging and providing existing maps and any other relevant information.
- c. Security Council Resolution 1430 (2002) – Demining in key areas to support demarcation.

##### Resources and troop and equipment deployment

12. The Security Council, in the original mandate creating UNMEE, authorized the deployment of 4,200 troops to monitor the 1,000-km long and 25-km wide TSZ along the border, which is infected with mines and unexploded ordnance (UXOs). The TSZ is divided into three sectors: Sector East in Assab, Sector Center in Adigrat, and Sector West in Barentu.

13. Under the direction and control of the Force Commander (FC), the authorized troop strength of 4,200 military personnel, 3 troop contributing countries (TCCs) are deployed with embedded demining teams, as well as equipment, as shown in Table 1. A commercial contractor, MECHEM, with route clearance equipment, 6 dogs, and 24 international staff, is also deployed at a cost of \$1,176,278 for 9 months (or \$1,568,371 annually).

**Table 1**

<b>TCC</b>	<b>Number of demining personnel (All ranks)</b>	<b>Number of equipment</b>
Kenya	110	1
Bangladesh	168	1
Slovakia	52	15

14. In 2003, these groups of deminers produced the following outputs measured in square meters of cleared land area:

**Table 2**

<b>TCC</b>	<b>Mechanical assets</b>	<b>Manual deminers</b>
Kenya	0	102,620
Bangladesh	2,400	1,310,563
Slovakia*	1,282,033	385,682
MECHEM**	10,307,360	N/A

\*The Slovak contingent will be repatriated by end of June 2004.

\*\*MECHEM started its mechanical demining operations only in September 2003; this figure also includes outputs produced by another commercial contractor it replaced.

15. UNMEE estimates the following cost components and annual costs of TCC deminers:

**Table 3**

<b>Category of expenditure</b>	<b>Slovakia</b>	<b>Bangladesh</b>	<b>Kenya</b>	<b>Totals</b>
Equipment and personnel	\$9,062,990	\$3,773,105	\$2,500,972	\$15,337,067
Supply	483,790	417,655	282,534	1,183,979
Petrol, Oil, Lubricants	284,456	65,833	37,854	388,143
Transport	28,791	3,389	5,575	37,755
Engineering	23,218	41,397	21,009	85,624
MovCon (repatriation)	No breakdown per contingent	No breakdown per contingent	No breakdown per contingent	1,559,755
<b>GRAND TOTAL</b>				<b>\$18,592,323</b>

Need to expand demining mandate

16. The Shilalo area in Sector West, where all demining operations are currently focused, is not a densely populated community. OIOS is concerned that outside the mandate for demining for demarcation, there is an absence of specific authority for and effective prioritization of

resources for humanitarian demining with a mandate from the Security Council. A humanitarian/socio-economic case could be presented in support of the current programme, which presumes that once the mined area is cleared, repatriation of locals to their previous villages from post war internally displaced persons' camps could result.

### **Recommendation 1**

UNMEE, together with UNMAS, should review the scope of demining activities to determine feasibility of including a proposal in the next UNMEE mandate review for expanding MACC activities to include humanitarian demining and, concurrently, rationalizing the short- and long-term options of the MACC programme in view of the political stalemate (AP2004/624/03/1).

17. *UNMEE did not accept this recommendation. The Mission commented that the demining conducted beyond Force protection and mobility is first and foremost an operational exercise that increases TCC demining capacity and the proper integration of various UN demining actors and capabilities. The site selection is consistent with terrain of potential pillar sites for demarcation. As a by-product, the exercise contributes positively to the safety of local inhabitants and the prospects for returnees. The area of operation in Shilalo is also consistent with the priorities of the Eritrean Demining Authority, which has tasked clearance teams under its jurisdiction to work in the same general vicinity. Therefore UNMEE does not believe that any mandate change is required. Based on the Mission's response, OIOS has withdrawn this recommendation.*

### Command and control structure

18. Initially, the military and MACC's demining activities were coordinated in an ad hoc, disparate fashion. The MACC and the Force recognized the need for a better coordination of activities and, accordingly, the Force issued in December 2002 a directive on the Reorganization of Demining Assets defining the MACC Integration Chart. In recognition of its integration efforts, UNMEE MACC received the 2003 UN21 Award for team productivity. The citation reads, "The UNMEE MACC is the first UN Mine Action Center to successfully integrate civilian and military demining operations and personnel into a holistic operation... MACC will serve as a model template for the establishment of all mine action activities within future UN peacekeeping operations." But the integration and coordination, and more importantly, accountability, can still be improved in the following areas:

- The roles and responsibilities of each entity/individual involved in demining, e.g., MACC, the FC and the specific demining contingents, the Deputy SRSG, are not clearly defined in a formal document.
- The MACC does not have the mandate or authority to impose output requirements and standard operating procedures (SOPs) on the TCCs deployed to conduct demining operations. The provisions in the Memorandum of Understanding (MOU) with each TCC and the supplemental Guidelines to TCCs for Military Units in UNMEE are limited

to tasks related to the detection, clearance and demolition of mines and other ammunitions. With this limited provision, the MACC cannot and does not impose output requirements and SOPs on every aspect of demining such as clearing and safety procedures in the same manner that it imposes strictly on commercial contractors, based on International Mine Action Standards (IMAS). For example, MACC noted “some contingents work for as little as 2 demining hours per day, which compares poorly with a (commercial) humanitarian troop who works a minimum of 4.5 hours per day.”

- If the mandate issue is resolved, the communication of Tasking Orders, which specify demining tasks and areas to be cleared by the military demining contingents, can also be streamlined. Currently, the Tasking Order, prepared and approved by the MACC Chief of Operations, has to go through the military Chief of Operations down to the respective Contingent Commander before it reaches the troops on the ground. Moreover, a Contingent Commander can and has previously rejected a Tasking Order. In this case, the MACC’s Chief of Operations cannot impose the implementation of the Tasking Order without the intervention of the Force Commander.

## **Recommendation 2**

The UNMEE Force Commander, in coordination with MACC, should prepare a comprehensive directive on the roles, responsibilities and accountability of all entities and key individuals involved in demining. UNMEE should request DPKO to consider including this provision in the memorandum of understanding with every TCC with a demining component (AP2004/624/03/2).

19. *UNMEE accepted this recommendation and stated that UNMAS is currently engaged in a DPKO Working Group that is examining the utilization of resources within missions. A focus of the Working Group is to examine tasking and chain of command issues to address the point made in the audit report. The creation of the Force Mine Action Center (FMAC) and its co-location with MACC has greatly improved tasking and the MACC will continue to work with the new Force Commander to improve the tasking system per the audit recommendation. In view of the action taken, OIOS has closed this recommendation.*

### Deployment of demining assets

20. Under-utilization of mechanical demining assets deployed by the Slovakian contingent was evident in the output (refer to Table 2 for 2003 output statistics) since their deployment in the Mission in January 2001. MACC’s evaluation on Restructuring of the Demining Assets Within UNMEE notes, “Most mechanical demining machines working in the Mission are producing less than 2,000 square meters per month. This is less than half a day’s work for (commercial) humanitarian mechanical demining team.”

21. Furthermore, the MACC’s technical recommendations for the restructuring of demining assets within UNMEE in view of the scheduled withdrawal in June 2004 of the Slovak contingent show that the current fleet of demining equipment is excessive and, for some, are not

suitable for the terrain in the area. The MACC also noted that of the 17 demining machines in the country, only 3 are deployed at any one time, and it can be seen that there is a significant underutilization of assets that needs to be corrected.

22. With the recommended replacement configuration after the departure of the Slovak contingent, MACC estimates that UNMEE will save \$5.7 million annually. UNMEE spends a total of \$9.8 million annually for reimbursements to the Slovak contingent, and provision of supply, petrol, oil, and lubricants. MACC also recommends the withdrawal of the Bangladeshi demining flail, which has not been used since its deployment to the Mission in February 2001 and costs UNMEE \$107,854 annually. OIOS noted that the repatriation of this equipment has been approved and that it will be repatriated immediately.

23. OIOS agrees, in principle, with MACC's recommendations to restructure UNMEE's demining assets. However, the timing of the deployment of the recommended configuration can be deferred until the commencement of actual demining for demarcation.

24. Under the current political landscape where demining work is limited to demining for the Force's mobility and training on the ground in preparation for the actual demining in support of the demarcation, it would be cost-effective to delay the deployment of new demining resources. In the meantime, current efforts to analyze and select better alternatives should continue. Ability to rapidly deploy resources on the ground should then be one of the major criteria in awarding the contract.

25. Although the only commercial contractor currently employed by MACC has been producing satisfactory results as measured against its statement of works and the military contingents' outputs, there is a need to re-assess the contractor's continued presence in the Mission in light of the political situation. Deferment of deployment of commercial contractors will result in an estimated annual savings of \$1.6 million.

### **Recommendation 3**

The UNMEE MACC and the Force Commander should consider deferring the deployment of new demining assets on the ground until the political situation improves. In the meantime, efforts to analyze and select the best alternative to replace the departing Slovakian demining troops should continue, as well as a re-assessment of the need to maintain the services of the commercial contractor (AP2004/624/03/3).

26. *UNMEE did not accept this recommendation. The Mission stated that it is both UNMAS' understanding and professional assessment that the Force requires a mechanical demining capacity to complement the manual and mine detection dog assets as well as retaining the current route clearance contractor in the Mission. This is warranted given the incidents of new mine usage that have occurred in Sectors West and Center throughout the duration of the Mission. These incidents constitute a serious, tangible threat to the safety and security of peacekeeping personnel. Delaying the deployment of the mechanical contractor could mean a subsequent delay for demarcation. UNMAS along with the former Force Commander already*

*completed the evaluation of an alternative to the Slovak contingent with a commercial contractor identified as the most cost effective solution. The realignment of the UNMEE budget has already been approved to contract for mechanical demining services at an estimated savings to the Mission of almost \$7 million with an expected increase in productivity. Taking into account the actions taken and explanations provided, OIOS has closed this recommendation.*

#### Pre-deployment and continuous training

27. Although the IMAS have been promulgated by the United Nations Mine Action Service (UNMAS), military demining troops are not required to adhere to these standards. As such, disparate and non-compliant (with IMAS) procedures are applied on the ground by various demining troops, with the exception of the Kenyan troops and the civilian commercial contractor. MACC noted that “military contingents insist on demining in purely military methods, leaving behind questions of cleared land as a result of poor marking, recording and demining processes.”

28. Since demining operations have been essentially forming part of most peacekeeping missions, it would be practical for the Organization to develop and provide comprehensive and continuous IMAS-standard training on demining to both its civilian and military deminers, which should include pre-deployment courses and certification. As MACC appropriately noted, “focused courses would enable demining contingents to familiarize themselves with IMAS and any of the systems and processes that would enable them to demine to acceptable safety and clearance levels.”

#### **Recommendation 4**

The UNMEE MACC should pursue its current efforts to convince UNMAS to develop and provide comprehensive and IMAS-compliant training courses on demining operations to all demining troops prior to deployment in missions (AP2004/624/03/4).

29. *UNMEE accepted the recommendation and stated that UNMAS is firmly committed to increasing TCC demining capacity. In comments on a recent DPKO discussion paper on pre-deployment visits, UNMAS included the need to examine TCC demining capacity and IMAS compliance and determine additional training requirements when needed. UNMAS continues to explore the best possible means for providing such training prior to deployments. Based on the action taken by UNMEE, OIOS has closed this recommendation.*

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