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Evaluation of the UNMEE Mine Action Coordination Centre

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Final, August 2005

Geneva International Centre for Humanitarian Demining

**Evaluation
of the UNMEE
Mine Action
Coordination Centre**

Final

Geneva, August 2005

Preface

This evaluation was commissioned by the United Nations Mine Action Service (UNMAS) via the United Nations Office for Project Services (UNOPS), which issued a request for proposals to eight organizations on September 2, 2004. On the basis of these proposals, the Geneva International Centre for Humanitarian Demining (GICHD) was selected to conduct the evaluation. GICHD fielded a four member evaluation team, led by an independent consultant, to complete the assignment.

The members of the evaluation team wish to express their appreciation for the cooperation of all individuals who have contributed their insights that lie at the root of our findings. We have discussed the unfolding of the UNMEE MACC story, its successes and its challenges, with people too numerous to be mentioned here. Nevertheless, Justin Brady of UNMAS deserves special recognition for generously helping us develop a basic understanding of the issues before travelling to Eritrea. Phil Lewis, UNMEE MACC Programme Manager in Asmara, spent much valuable time with us and always kept his door open to answer more questions. Gerhard Bechtold took pains to explain all the intricacies of information technology, Vankata Raman was helpful in many essential ways, and Andrea Poelling expertly arranged interviews and was able to track important data. Thank you all.

Frans Anema	Team leader
Johannes Dirscherl	Mechanical specialist
Ted Paterson	Evaluation manager and economist
Phil Bean	IMAS specialist

This report incorporates – as Annex 5 – the letter of response from the management of UNMAS.

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Acronyms

AC	Assessed Contribution
ACH	Agreement on the Cessation of Hostilities
AFL	Administration, Finance and Logistics
AOR	Area of Responsibility
AP	Anti Personnel
AT	Anti Tank
AV	Anti Vehicle
BMATT	British Mine Action Training Team
CAFL	Chief Administration, Finance and Logistics
CAO	Chief Administrative Officer
CBR	Community-Based Rehabilitation
CEA	Cost-Effectiveness Analysis
CCPM	Eritrean Commission for Coordination with the Peacekeeping Mission
CIMIC	Civilian Military Coordination Cell
COY	Company
CROMAC	Croatian Mine Action Centre
CTA	Chief Technical Advisor
DCA	Danish Church Aid
DCC	Demining Coordination Centre
DDG	Danish Demining Group
DPKO	Department of Peacekeeping Operations
DSRSG	Deputy Special Representative of the Secretary General
EDA	Eritrean Demining Authority
EDA-1	Eritrean Demining Agency
EDO	Eritrean Demining Operation
EDP	Electronic Data Processing
EEBC	Ethiopian-Eritrean Boundary Commission
EHDA	Eritrean Humanitarian Demining Agency
EMAO	Ethiopian Mine Action Office
EMAP	Eritrean Mine Action Programme
EOD	Explosive Ordnance Disposal
ERRC	Eritrean Resettlement and Rehabilitation Commission
ERREC	Eritrean Relief and Refugee Commission
FASS	Field Administration Support System
FMAC	Force Mine Action Centre
FMALO	Field Mine Action Liaison Officer
FMSS	Finance Management Support Service
FN	False Negative
GICHD	Geneva International Centre for Humanitarian Demining
GIS	Geographical Information System
GPS	Global Positioning System
HALO	Hazardous Area Life Support Organisation
HMA	Humanitarian Mine Action
HOM	Head of Mission
HR	Human Resources
HRO	Human Rights Office
ICRC	International Committee of the Red Cross

ICT	Information and Communication Technology
IDC	Integrated Demining Contract
IMAS	International Mine Action Standards
IMSMA	Information Management System for Mine Action
JAM	Joint Assessment Mission
LIS	Landmine Impact Survey
MAAT	Mine Action Advisory Team
MACA	Mine Action Centre for Afghanistan
MACBP	Mine Action Capacity Building Programme (UNDP)
MACC	Mine Action Co-ordination Centre
MACE	Mine Awareness Cell
MALO	Mine Action Liaison Officer
MAP	Mine Action Plan
MASG	Mine Action Support Group
MAT	Mine Awareness Trust
MBZ	Ministry of Foreign Affairs (Dutch)
MC	Medical Coordinator
MCC	Military Coordination Commission
MCT	Mine Clearance Team
MDD	Mine Detection Dog
MDDT	Mine Detection Dog Team
MDG	Millennium Development Goal
MLHW	Ministry of Labour and Human Welfare
MOA	Memorandum of Agreement
MOE	Ministry of Education
MOI	Ministry of Information
MOU	Memorandum of Understanding
MPS	Military Planning Service
MRE	Mine Risk Education
NAD	Norwegian Association of the Disabled
NGO	Non-Governmental Organization
NTC	National Training Centre
OAU	Organization of African Unity
OCHA	Office of the Coordination of Humanitarian Assistance
ODP	Original Data Pool
OHCHR	Office of the High Commissioner for Human Rights
OIOS	Office of Internal Oversight Services
OLA	Office of Legal Affairs
PAO	Political Affairs Office
PCA	Project Cooperation Agreement
PIO	Public Information Officer
PKF	Peacekeeping Force
PKM	Peacekeeping Mission
PKO	Peacekeeping Operation
PODD	Project Officer Demining for Demarcation
POW	Prisoner of War
PRSP	Poverty Reduction Strategy Paper
PTO	Programme and Training Officer
PWD	People with Disabilities
QA	Quality Assurance

QIP	Quick Impact Project
QMS	Quality Management System
QC	Quality Control
RLO	Regional Liaison Officer
RR	Rules and Regulations
SAC	Survey Action Centre
SC	Security Council
SMEOD	Swiss Military Explosive Ordnance Disposal
SOP	Standing Operating Procedures
SQN	Squadron
SRSA	Swedish Rescue Services Agency
SRSG	Special Representative of the Secretary General
STA	Senior Technical Advisor
SWP	Standing Working Procedures
TAOR	Technical Area of Responsibility
TCC	Troop Contributing Country
TP	True Positive
TS	Technical Survey
TSG	Technical Safety Guidelines
TSS	Technical Safety Standards
TSZ	Temporary Security Zone
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNHCR	United Nations High Commission for Refugees
UNHQ	United Nations Headquarters
UNICEF	United Nations Children Fund
UNMAS	United Nations Mine Action Service
UNMEE	United Nations Mission in Ethiopia and Eritrea
UNMO	United Nations Military Observer
UNOPS	United Nations Office for Project Services
UXO	Unexploded Ordnance
VA	Victim Assistance
VTF	Voluntary Trust Fund (for assistance in mine action)

Executive Summary

The 30-year war between Ethiopia and Eritrea (1961-1991 war of independence from Ethiopia), as well as the border conflict between the two countries (1998-2000), left a legacy of serious mine and UXO contamination. As soon as a comprehensive peace agreement was signed in 2000, contributions poured in from donor countries including, among other things, much support to demining operations as a precursor to humanitarian assistance activities and development work.

With the establishment of the UN Mission to Ethiopia and Eritrea (UNMEE) shortly after the cessation of hostilities, mine action commenced. Three countries (Slovak Republic, Kenya and Bangladesh) contributed demining assets and worked in collaboration with a civilian-run UN Mine Action Co-ordination Centre (MACC). The UNMEE MACC received its mandate from the Security Council in the form of three resolutions, certainly the first of which left much to individual interpretation. The interpretation by the MACC was a liberal one, leading to an extremely hectic pace of work during the first two years, involving mine action and institutional development activities. The first Security Council resolution called, among other things, for coordination of humanitarian mine action activities, a rather obscure concept that was not backed up by a formal agreement with the Government of Eritrea. Nor was it subjected to a strategic plan or a set of precisely defined terms of reference. It is clear from experience that considerable effort should be made to define the responsibilities of a MACC attached to a peacekeeping force with utmost clarity and precision, requiring active participation by UNMAS in the planning for peacekeeping missions.

In spite of some very noteworthy achievements, including the virtual re-establishment of the National Training Centre and the training and equipping of three national demining teams under the former Eritrean Demining Agency (EDA-1)¹, the MACC experienced a number of setbacks. Partly because of the vagueness of mandate, other competing demands, as well as a serious under-estimation of the challenges of issuing tasking orders, the MACC's coordination function was not effective, an assessment corroborated by opinions of various respondents. Nor were the mine action capacity development activities undertaken by the MACC ultimately successful (in spite of effective mine clearance training activities), partly because a temporary mine action centre associated with the peacekeeping force is not always a natural conduit for this type of activity, and partly because there was a lack of clear national commitment and a precise, formally written and signed agreement at the highest level. In mid 2002, the President of Eritrea issued a proclamation in which he announced the establishment of a national Eritrean Demining Authority (EDA). About a month later he announced the expulsion of international mine action NGOs, accusing them of being "all over the place". In spite of some noteworthy progress in local mine action capacity building by the MACC during the first two years of the Mission, the establishment of EDA amounted to a virtual denial of achievements in this area. The President left the door open for the UNDP to start a mine action capacity building programme anew, now under different circumstances, and separate from the MACC. The proclamation thoroughly affected the operations and the mandate of the UNMEE MACC, limiting the latter to a focus on Force-support only. Many

¹ Not to be confused with the Government's Eritrean Demining Authority (EDA) which was established as a consequence of Proclamation 123 in mid-2002, disbanding the existing Eritrean Mine Action Programme (EMAP).

donors withdrew funding support from the country, with the noticeable exception of the Dutch (some smaller contributions continued by the Canadians and the Norwegians).

The UNMEE MACC lost no time in re-defining its mission and the management structure of its activities. It did so with competence and creativity. Of importance in this respect is the decision to integrate Peacekeeping Force demining capacity within a civilian-run MACC while preserving the final authority of the Force Commander in priority setting and tasking of the Force assets. This innovative approach, which can be replicated elsewhere under similar circumstances, earned the MACC a UN 21 award.

While much useful work has been accomplished during the last two years, it is clear that the scope of activities of UNMEE MACC has diminished greatly compared to the period before the President's Proclamation in July 2002. Especially with respect to mine action capacity building, MACC's responsibilities have been confined to ad hoc support of the EDA upon request, except in the area of information technology and medical support where the MACC still plays an ongoing supportive role. In most other areas, the EDA now benefits from effective (but currently under-funded) UNDP assistance. It is important to mention that the relative success of the UNDP in this regard is partly due to the transfer of deminers and HQ staff trained by the MACC and NGOs to this new organization and its operating arm (EDO).

Experience would suggest that national capacity development should start immediately after cessation of hostilities, but that capacity development support by an entity closely associated with peacekeeping forces is not automatically acceptable to local authorities and should be undertaken with great trepidation. Experience would also suggest that absolute clarity in roles of a MACC, especially roles lying outside traditional Force support functions, be established through an agreement at the highest level.

With a scope of activities that is currently more confined than before, with access to both the assessed budgetary resources and the Voluntary Trust Fund, and with sufficient staff resources, the MACC could justifiably consider tasks that would logically complement current MACC responsibilities. Of interest in this respect is the objective of the Force Commander, in line with the broader objectives of the mission overall, to try to "win the hearts and minds of the local population".² Well-planned and well-defined demining activities in support of Force requirements and Force mobility, with significant secondary benefits for the local population, might play an important role in this respect. Such an approach seems especially viable when a Mission has moved from a state of emergency to a state of stability. In this respect, Force requirements should be reviewed on an agreed basis and time scale.

Great success has been achieved in establishing an effective and efficient unit dealing with information technology. The Information Management System for Mine Action (IMSMA) has proven to be a most powerful tool in Eritrean mine action, in spite of the fact that a number of serious challenges remain in establishing a fully viable system. Statistics and maps currently benefit all mine action activities in the nation. A number of IMSMA insufficiencies have been resolved with so-called "add-ons", i.e. measures to provide required data the system cannot yet generate on its own. (Subsequent to our mission, most of these add-ons were removed after the installation of an updated version of IMSMA.) Certain operational improvements can be envisaged, including the need for significant simplification of the system.

² The distinction between the mandate of the Peacekeeping Force and that of the broader mission also should be recognised, and is discussed at greater length in the body of the report.

Some serious problems have been encountered in terms of efficiency and effectiveness of troop-contributing demining assets. Mechanical equipment turned out to be hugely inappropriate and excessive, not to speak of the formidable expenses involved. Productivity of the Slovak contingent was minimal, and the Slovak deminers plus their equipment were eventually replaced by commercial assets. A serious and dangerous absence of international mine action standards (IMAS) was observed in the operations of the Bangladeshi demining contingent, and only the Kenyan contingent appeared to have been properly trained to perform in an IMAS-compliant fashion. The Joint Assessment Mission will need to play a much more vital role in determining the right mix and type of demining assets right at the initial planning stage for a peacekeeping mission. It also seems clear that DPKO will need to institutionalise the authority and competence to negotiate with troop contributing countries to ensure the best contribution suited to circumstances. Military assets will need to be assessed prior to deployment, and arrangements should be made to review the use of the assets after one year (and periodically thereafter) in order to introduce possible adjustments. With respect to the application of international standards, training may need to be provided prior to deployment, and UNMAS may wish to quality assure existing regional training programmes for this purpose (in Kenya, Ukraine, and Benin). There is also scope for donors to contribute to training and equipment if necessary.

In comparison to contingent assets, the introduction of commercial demining assets has turned out to be very cost-effective indeed. While a peacekeeping mission would likely wish to maintain contingent demining prowess (assuming some of the steps mentioned earlier are introduced to enhance performance), the use of complementary commercial assets³ right at the start of a mission should be seriously considered.

A number of recommendations and lessons learned have been defined and appear in the Conclusions (Chapter 10).

³ We use the term “commercial assets” to refer to demining assets contracted on commercial terms (usually via a competitive process) and not to distinguish between for-profit and not-for-profit organisations. We are making no assessment of the relative performance or capabilities of for-profit versus not-for-profit organisations in the demining field.

Chapter 1 – Introduction

On December 12, 2000, Ethiopia and Eritrea signed a Comprehensive Peace Agreement in Algiers. It ended more than two years of serious border conflict that resulted in countless casualties and displaced people. A Temporary Security Zone (TSZ), 25 km wide and 1000 km long, now separates the two countries. The zone, located mostly on Eritrean soil, has a serious contamination of landmines and UXO. A UN Peacekeeping Force in excess of 4,000 troops was dispatched shortly after the agreement was signed. Unfortunately, there is no resolution yet with respect to the precise demarcation of the border, in spite of a short-lived agreement by both parties to abide by the recommendations of an independent border commission.

With the arrival of the UN Peacekeeping Force, a mine action programme began. The programme received its mandate from the Security Council, Resolution 1320, and two subsequent resolutions. Perhaps the most important event during the last four years was the unexpected decision by the President of Eritrea to expel international non-governmental organizations (NGOs) engaged in mine action, and to establish a new national mine action authority called the Eritrean Demining Authority (EDA). The decision abruptly stopped much demining activities in the TSZ, and drastically changed the scope of work for the MACC attached to the UN peacekeeping mission.

After some four years of operations, it was felt useful to evaluate the mine action programme in order to learn from experiences gained. The Geneva International Centre for Humanitarian Demining (GICHD) was selected by UNOPS/UNMAS to conduct the evaluation, and a team of evaluation and mine action specialists commenced work in October 2004. The team consisted of two technical experts with knowledge of mine action standards and mechanical demining techniques, one specialist in management and evaluation methodology (team leader), and one evaluation manager stationed in Geneva, who also conducted the economic analysis based principally on data obtained from UNMEE MACC.

The goals of the evaluation were to (i) define the coordinating role of the programme through mid-2002; (ii) the optimal integration of peacekeeping force demining assets under a civilian-run coordination centre; and (iii) provide a cost-benefit analysis of peacekeeping demining versus commercial demining. Further elaboration concerning these goals was provided through nine evaluation objectives and 21 evaluation issues. Given the breadth of the assignment and the budget constraints that emerged,⁴ GICHD recommended that the evaluation team focus on those issues most central to UNMAS and its current policy agenda. During the discussions in New York, UNMAS advised that the evaluation team, while not abandoning the first goal, should indeed focus on the second and third goals plus the specific objectives and evaluation issues associated with these goals.

The first three members of the team spent a week in New York for discussions with staff of UNMAS, UNOPS, DPKO and others able to provide special insights. The team leader and the mechanical expert then travelled to Eritrea and spent close to three weeks meeting with staff of the mine action centre, members of UN specialised agencies, officials and representatives of donor countries. A major problem encountered was that the relevant representatives of the

⁴ The budget for the exercise was reduced following the preparation of the Terms of Reference. As a result, GICHD was asked to reduce its cost proposal by about 25 per cent, which then necessitated a tighter focus for the evaluation.

Eritrean government did not make themselves available for meetings with the evaluation team, leaving a serious but unavoidable gap in the evidence-base from which to draw conclusions and recommendations. The mission team also observed demining operations in the field, and analysed numerous documents. The team did not travel to Ethiopia but concentrated its research on mine action in the TSZ and adjacent areas. In Europe, team members visited the Netherlands and Sweden for follow-up meetings with donor country representatives, and Bratislava to review the mandate and performance of the Slovak demining contingent.⁵

In October 2004, shortly after its mission to Eritrea, the evaluation team also distributed questionnaires to the international NGOs active in Eritrea at the time of the expulsion order in August 2002. cursory responses were received for the most part; the reason being that the officers most familiar with the events surrounding the expulsion had moved on in the intervening years. HALO Trust provided a lengthy response, but this arrived in early February 2005, some weeks after the presentation and discussion of the findings, conclusions, and recommendations contained in the draft report⁶ with UNMAS and UNOPS in New York, and shortly after the draft final version of the report had been completed.

The submission from HALO Trust raised some fundamental questions relating to the coordination role played by UNMEE MACC. In light of this, and despite the fact that this submission arrived so late in the process, UNMAS, UNOPS, and GICHD agreed that the draft final should be further revised to elaborate somewhat on the issues raised in the HALO submission. The Evaluation Team were able to contact some others who were closely involved in the mine action efforts in Eritrea during the period leading-up to the expulsion order, or who were active in the Mine Action Support Group (MASG)⁷ at the time.⁸ A by-product of this decision was, of course, further delay in presenting the final report. Events in Eritrea have had significant effect on the country's mine action programme, and this report no longer reflects the current status on the ground. Nonetheless, a number of the conclusions and recommendations are important in general and, in particular, for mine action operations during the course of peacekeeping operations. The subsequent events in no way impinge on their validity or relevance of these conclusions and recommendations.

⁵ Unfortunately, the officials met in Bratislava had not been directly involved during the period the Slovak demining units and equipment were part of UNMEE, and provided only limited information.

⁶ The draft report was submitted in early December, and the meeting in New York was 17 January 2005. HALO Trust's comments had been delayed in part because their programme manager for Eritrea for the relevant period had since moved to another organisation. On his own initiative, this individual had, in mid-January, submitted a response to the questionnaire, which his former colleagues had forwarded to him – of course, he emphasised that he was responding in his personal capacity and his views should not be construed as the official position of HALO Trust.

⁷ The MASG comprises (mainly) New York-based representatives of countries which actively support mine action. Initially quite informal, it has enlarged its role gradually over the years, and by 2002 was an important forum for information-sharing between UN agencies and donor countries. Unfortunately, the regular practice of preparing thorough minutes and distributing these widely appears only to have started in November 2002, just after the expulsion order (a MASG meeting had occurred on 5 September 2002, and a number of presentations were made concerning the Eritrean expulsion order. We have obtained at least some of these statements, but were unable to obtain the minutes themselves.

⁸ As many of the points at issue were left unresolved in the immediate aftermath of the expulsion and, indeed, remain so today, these individuals contributed in a personal capacity on the assurance of confidentiality, and the additional information provided is speculative to some degree. Their names are not listed in Annex 4.

All four members of the evaluation team contributed to the drafting of the final report; conclusions and recommendations resulted from close team interaction. The report is an attempt to trace the development of the overall demining effort in the Temporary Security Zone, learn from the findings and define recommendations for the future. Chapter 2 provides an historical and political perspective placing mine action in the TSZ into context. The next chapter deals with the question of mandate, the relative vagueness of which has given rise to various interpretations of responsibilities. This chapter also deals briefly with the innovative model of integrated management that has earned the MACC a UN 21 award for excellence. Chapters 4, 5 and 6 deal with aspects of operations of the MACC, the changing nature and the challenges of its work, its relation to national authorities and other mine action actors, its financing, and its staffing. Chapter 7 provides a commentary on information technology and the excellent work the MACC has done in this area in spite of tools that are still undergoing growing pains. Chapters 8 and 9 deal with the technical aspects of demining assets deployed, the problems encountered, and the cost-effectiveness of using commercial as opposed to military assets, as well as some observations on the performance of UNOPS. The last chapter provides conclusions, defines the lessons learned, and lists all recommendations made in the report.

One last point requires mention. GICHD is responsible for supporting and further development of the Information Management System for Mine Action (IMSMA). The Terms of Reference included the requirement to “Evaluate the effectiveness of the IMSMA system and determine how it has contributed to the overall management of the mine action programme in Eritrea.” Clearly there is a potential conflict of interest, which GICHD managed in the following fashion:

- It clearly declared the potential conflict of interest in its proposal, together with the steps it would take to mitigate this, (as below):
- It engaged an independent consultant of established repute from outside the Mine Action field to serve as Team Leader for the Evaluation;
- It specifically tasked the independent consultant/team leader with the responsibility for the assessment of the information management function of UNMEE MACC, including the IMSMA;
- No members of the evaluation team discussed the IMSMA in Eritrea with the IMSMA unit in GICHD until the draft report was completed, at which point a copy of the draft report was distributed to the IMSMA unit at GICHD for comment along with other stakeholders.

Chapter 2 – Historical and Political Context

2.1 Eritrea's Struggle for Independence

An understanding of the challenges that UNMEE MACC has had to face in the past, and is still facing today, requires a brief exposé of the country's recent history.

Eritrea has been under colonial rule for long periods of time. Italian colonization started in 1881 and lasted for 60 years, until 1941. Establishing an outpost in Assab in 1881, the Italians moved northward to Massawa and in 1890 the Italian king proclaimed the colony of Eritrea, with the port of Massawa as its capital. The capital was moved to Asmara in the mid 1890's and a period of infrastructure development (roads and communications networks) commenced. However, strict colour-based restrictions were placed on the local population, excluding locals from schools, jobs and social services.

In the face of an assault by British forces in 1941, Italy lost control over Eritrea. The British stayed until 1952 and introduced a number of reforms that allowed new forms of organisation, including an institutional framework for political action. The disposition of Italy's former colonies fell to the newly established United Nations. The latter approved a controversial proposal by the United States to establish a federation between Ethiopia and Eritrea, the latter being granted the right of self-administration with authority over the police, local taxes and other domestic affairs, but with Ethiopia controlling Eritrea's defence, foreign affairs, finance and international trade.

Over the next decade Ethiopia was accused of asserting itself on Eritrea's domestic affairs. Ethiopia decreed a preventive detention law, arrested newspaper editors, drove prominent nationalists into exile, and banned trade unions and political parties. On November 14, 1962, the Eritrean Parliament was dissolved and Eritrea was annexed as Ethiopia's fourteenth province.

On July 1960 the Eritrean Liberation Front (ELF) was established by exiled Eritreans in Cairo and a little more than a year later a small band of ELF guerrillas, armed with antiquated Italian rifles, fired the first shots on police in western Eritrea. The country's 30-year liberation struggle had started. Internal rivalries weakened the ELF but near the end of the decade the struggle was resumed with renewed vigour under a re-organised command and a new name: the Eritrean People's Liberation Front (EPLF). The struggle was hard on the whole population and in the mid-1980s war and famine combined to create a human crisis of horrific proportions. By 1985, some 360,000 Eritrean refugees had fled to Sudan. Several hundred thousand more were internally displaced.

Eventually Eritrea gained its independence in 1991, and a period of reconstruction started. Rumblings of war started anew, however. Throughout 1996 and 1997, tensions arose between Eritrea and Ethiopia over economic and political issues. There followed a series of armed incidents causing the death of several officials near Badme, a small, dry and dusty village in the western region of Eritrea. Three rounds of combat in 1998-2000 produced hundreds of

thousands of casualties and resulted in countless Internally Displaced People (IDPs).⁹ Eventually Ethiopia and Eritrea agreed to a cease-fire, and on December 12, 2000, the two countries signed a Comprehensive Peace Agreement in Algiers. Under its terms, a 25 km wide Temporary Security Zone was established, largely within Eritrea, to be patrolled by UN peacekeeping forces.

The forces were mandated to operate in the TSZ and “adjacent areas”, a term roughly defined by the UN as 15 km either side of the TSZ boundary and inserted into the mandate to allow for some flexibility in the interpretation and, especially, the execution of tasks. The TSZ is primarily located on Eritrean soil which tends to influence the relationship between the Eritrean Government and the PKF. This sensitive fact may have contributed to the attitude displayed by the Government in drastically revising mine action authority in the zone (see below).

Landmine and UXO contamination is spread throughout Eritrea, and it is serious. After the Landmine Impact Study (LIS), some 310 sq. km. were suspected of being contaminated (IMSMA data).

Decisions and attitudes of the current Eritrean Government should be seen in the light of this historical background and the seriousness of the contamination. The Eritreans are a proud and independent people who, indeed, fought and sacrificed for a very long period of time to gain their freedom. They gained it with little outside help, and they are not prepared now to welcome such help in an uncritical way, having been disappointed in the past. This spirit of independence also tends to explain the drastic decision in mid 2002 to expel foreign demining NGOs, thus bringing a virtual halt to all national and NGO demining activities in the country.

2.2 Proclamation 123 (2002)

In mid 2002, the President of Eritrea, H.E Isayas Afworki, surprised the donor community by announcing the establishment of a new demining agency (the Eritrean Demining Authority or EDA), and disbanding the existing one (the Eritrean Mine Action Programme or EMAP). Shortly thereafter he ordered all demining NGOs to leave the country. Three NGOs left promptly - Danish Church Aid (DCA), Danish Demining Group (DDG), and Mine Awareness Trust (MAT). A fourth NGO (HALO Trust) managed to stay on for roughly another year – and even planned an expansion of its project – but then also departed.¹⁰ What motivated the President to take such a drastic step?

During a meeting with UN representatives on August 23, 2002, the President made the following essential comments. His main concern is the return of IDPs. To this end he wants to expedite landmine clearance. There have been undue delays in clearance. The effectiveness of

⁹ Accurate statistics on IDPs and Refugees are hard to come by. UNHCR estimates that, since the beginning of their work in Eritrea in 2000, some 200,000 refugees have returned home (Eritrea at large, few to the TSZ), mostly from Sudan. Of these, some 80,000 returned spontaneously, and 120,000 returned with the assistance of UNHCR. The latter estimates that some 50-60,000 refugees still reside in Sudan as registered refugees, and double this figure as non-registered refugees. UNHCR notices a current outflow of Eritreans to Sudan and Ethiopia. UNHCR is not dealing with IDPs, and statistics on them are not available (UNMEE MACC has tried for years to obtain an accurate picture of IDPs in the TSZ, thus far to no avail).

¹⁰ The commercial demining company Ronco, funded by the US State Department, managed to continue operations after intervention by the US.

NGOs is questionable: they seem to be “all over the place”. Even worse, UNMEE's demining work is slow, very expensive,¹¹ and very ineffective.¹² It cannot deliver, and should not become involved in demining for demarcation, which should be left to a professional demining company. Eritrea will establish its own demining authority. We will do it on our own. We want to start with a clean slate. But, even though UNMEE is “a new kind of monster”, other UN agencies could play a useful role in the country (e.g. health and education). We will plan and design our own mine action structure, and submit it to the relevant UN specialised agencies to decide if they want to participate.

His comments contained a strong flavour of wanting to go it alone, no matter what the costs. His words showed a profound distrust of UNMEE mine action capabilities. He appeared to have a genuine concern for IDPs. He also expressed great scepticism with respect to the coordination of NGO activities, and of their ultimate usefulness. Indeed, this scepticism apparently had been growing for some time, and various NGO informants mentioned that they had been very concerned about it during the days leading up to the proclamation.¹³ There was no indication that UNMAS was either aware of the developing situation, or took precautionary steps to avoid an outburst.

The decision to start with a clean slate angered many in the UN and NGO community. Indeed, it would have been much preferable to attain local mine action self-sufficiency by phasing out NGOs over time and incorporating their competence into local institutional arrangements. Instead, the embryonic Eritrean Mine Action Programme, whose offices were located on the premises of the MACC, was disbanded and a new organisation was created, at least in name – the Eritrean Demining Authority (EDA). Mine action had come to a virtual halt and would not come back to life until at least a year later through some sporadic core staff appointments and UNDP assistance. The wish to do it on their own is very laudable, but it requires a readiness to allocate sufficient resources, and a willingness to accept technical advice until self-sufficiency is reached. The reality is that it took considerable time for EDA to work on its own and it still depends heavily on UNDP assistance in capacity building. The appointment of the General Manager took time; the work of the UNDP capacity support team has been hampered by a lack of sufficient counterparts, EDA's operating arm (Eritrean Demining Operation - EDO) lacks support in terms of logistics, equipment, and supplies.

On the more positive side, however, EDO now has a number of demining teams at work (manual cum mine detection dogs), and has plans to expand in the near future. These teams are doing work in accordance with IMAS, in very difficult terrain. The draconian decision to expel NGOs in order to force mine action self-sufficiency seemed ill advised but, given time and UNDP's continued support, EDA capacity may slowly develop further. This is especially so since there are signs of a re-awakened donor interest with, for example, substantial contributions by Norway to UNDP's capacity building project.

¹¹ In addition to the high costs of the many expatriates in the MACC and various Mine Action organisations, a specific concern of the powerful Ministry of Defence was the comparatively high salaries paid to deminers by the international demining organisations, which led to dissatisfaction within their own engineering units.

¹² Of course the President has a military background. HALO Trust's reply to our questionnaire and their earlier correspondence with members of the Mine Action Support Group (MASG) make particular reference to clearance operations at Shilalo (conducted by UNMACC and Minetech), and said the President was aware of, and extremely dissatisfied with, the details of that task, in which two EDA-a deminers died.

¹³ See, for example, the presentations submitted or made to the MASG in August-September 2002.

Of great benefit, in the interim, has been the work of Ronco, a US-based demining firm (working on behalf of the US State Department), which reports to EDA. The company is engaged in land clearance using two teams of 60 individuals per team, divided into four units each, with manual detectors and a total of 15 dogs. It manages to clear, to the highest standards, some 200,000 square meters a month; substantially more than any other area clearance operation in the country (see discussion on cost effectiveness in chapter 9).¹⁴

2.3 The Current Stalemate

One would hope the Agreement on the Cessation of Hostilities signed in Algiers on December 12, 2000, would have been the end of the trials and tribulations of the two nations. But it may not be so. The Ethiopian-Eritrean Boundary Commission (EEBC), an independent body of international experts, who were approved in advance by both parties, was established to examine and recommend the precise boundary between the two countries. The deliberations of this Commission were based on, among many other things, a close examination of old Italian maps. The Commission concluded its deliberations in 2003, recommending in detail the location of the boundary. Its recommendations were fully accepted by both parties. Not long afterwards, however, Ethiopia had a change of mind and announced that it could not accept the inclusion of Badme, the dusty hamlet, into Eritrean territory. Since then there has been a stalemate, with tensions rising. In his progress report on Ethiopia and Eritrea dated July 2004, the Secretary General mentions a deterioration in the relations between UNMEE and the Eritrean Government. The deterioration manifested itself in a number of areas, including restrictions on the Mission's freedom of movement, closure of an important supply route to UNMEE traffic, continuing detentions by the authorities of locally recruited UN staff, and a recent spate of public statements by some Eritrean officials attacking the peacekeeping operation and its staff.¹⁵ Although the Secretary General reported slight improvements in his next progress report of September 2, 2004,¹⁶ the relationship remains tense.

The UN envoy, Dr. Lloyd Axworthy of Canada, appointed to try to mediate between the two countries, has thus far failed to gain access to Eritrea's President who maintains that there is nothing to discuss since both parties already have agreed.

Also important are indications of strong top-down management of the country. Recently all internet cafés in Asmara were closed. Young men were picked from the streets of Asmara to do their military service (a practice that is not new to the country). Insiders fear that the possibility of armed conflict cannot be excluded in the future, even the near future. The Boundary Commission remains unable to proceed with the demarcation of the border. Its (by now very limited) presence in the area may have to be terminated by the end of 2004 in order to preserve remaining funds earmarked for demarcation activities.

Given this historical background, the current political climate and the stalemate with respect to demarcation, how relevant is the current mandate of UNMEE MACC? In the next chapter

¹⁴ Mechem, another highly effective demining firm working for UNMEE MACC is currently engaged for road clearance, and no valid comparison with Ronco's area clearance can be made.

¹⁵ Security Council, Progress report of the Secretary-General on Ethiopia and Eritrea, July 7, 2004, S/2004/543.

¹⁶ Security Council, Progress report of the Secretary-General on Ethiopia and Eritrea, September 2, 2004, S/2004/708.

we will examine this question in some detail, starting with a review of the Security Council Resolutions that have thus far defined the framework of the MACC's activities.

Chapter 3 – The Mandate of UNMEE MAC

3.1 Security Council Resolutions

The UNMEE MACC received its mandate from two Security Council resolutions:

Security Council Resolution 1320 (2000):

Coordinate and provide technical assistance for humanitarian mine action activities in the TSZ and area adjacent to it.

Security Council Resolution 1430 (2002)

Demining in key areas to support demarcation.

There are other security council references to mine action relating to UNMEE:

- Security Council Resolution 1344 (2001) incorporated the following statement: *“Facilitate mine action in coordination with the United Nations Mine Action Service, in particular through exchanging and providing existing maps and any other relevant information to the United Nations.”* This was intended as an instruction to the governments of Ethiopia and Eritrea to provide minefield maps, and did not impact the MACC mandate
- Resolution 1466 (2003), in which the Security Council *“notes the work done by the UNMEE Mine Action Coordination Centre in demining and education on risk related to mines, and urges the parties to pursue efforts on mine clearance.”* Again, this did not affect the MACC mandate.
- In more general terms, the President of the Security Council, in a statement dated November 19, 2003, strongly supported mine action as an activity that *“can play an important role in peace-building and confidence-building in post-conflict situations.”*¹⁷ There seems, therefore, sufficient recognition in the Security Council of the importance of mine action in relation to PKM activities.

3.1.1 Resolution 1320

Resolution 1320 seems, at first sight, relevant to the circumstances prevailing at the time. It opened the door for the MACC to humanitarian mine action, particularly in terms of coordination and provision of technical assistance. Aside from numerous casualties, the 1998-2000 border conflict resulted in countless displaced Eritreans, many from the TSZ. There was a humanitarian disaster, calling for a humanitarian response.

¹⁷ Security Council, Statement by the President of the Security Council, November 19, 2003, S/prst/2003.22

International humanitarian mine action NGOs¹⁸ had started operations at about the same time as the arrival of the Peacekeeping Force, but there was a lack of oversight and a virtual absence of national strategic mine action planning. The situation was complex, and coordination of NGO activities proved problematic, partly because some NGOs may not have been easily controllable, partly because there was no strong national mine action agency capable of such coordination, and partly because the complexity of coordination was underestimated and the task was, in the view of various informants, simply not properly carried out.¹⁹

In order to try to build a bridge to the Government, staff of the Eritrean Mine Action Programme (EMAP); a fledgling government agency; were given accommodation on the premises of the MACC. This appears to have underscored the need for a clear separation between the UNMEE MACC and an independent national mine action entity. The token presence of EMAP mine action staff on MACC premises was symptomatic of a lack of clear vision and commitment, on the part of the Government, with respect to the establishment of a strong and independent mine action agency fully representing Eritrean interests.

The location of EMAP on the premises of UNMEE MACC was a poor substitute for the need to create local mine action capacity on its own. It is true that EMAP and UNOPS had signed a formal MOU for capacity development including rental of the facility. It is also true that UNDP was similarly housed in the compound. Yet, in hindsight, an over-arching agreement with the Government specifying in detail the tasks of the MACC in terms of local mine action capacity building, may have prevented subsequent problems and Government animosity. It has turned out to be critical that a mine action centre under the mandate of a UN Peacekeeping mission be guided by such a formal agreement. In a MACC paper dated September 2003 it is stated:

“By stepping outside its mandate, without an official agreement between the Government and UNMEE, the MACC increasingly lost focus of its originally mandated responsibilities...An official agreement is crucial to avoid confusion...”²⁰

The attempt to support the establishment of indigenous capacity is one of the most important steps to be taken at the beginning of a Peacekeeping mission. The findings of the Study Report of the UN Department of Humanitarian Affairs are relevant where it says

“...the UN focal point must take quick and early action to help national and local authorities address the humanitarian implications of landmines. The realization of this objective cannot be considered of lesser value than the organization of mine action activities focused on addressing Peacekeeping operational needs. It is equally important that any activity or

¹⁸ HALO Trust, Danish Demining Group, Danish Church Aid, and Mine Awareness Trust.

¹⁹ See also, for example, comments by HALO Trust in this respect, later in this report. As well, the report on findings submitted by members of the MASG following their fieldtrip to Eritrea in May 2002 highlighted *“The vital importance of transparent and constructive cooperation with all the mine action partners, including NGO’s, has been stressed...”* The concern seems to relate specifically to coordination between the MACC and NGOs, as the next line stated that *“cooperation and coordination between the MACC and NGO’s is improving...”*

²⁰ *Lessons Learned since 2000*, September 2003, UNMEE MACC.

*capacity which is generated under the auspices of a UN mission form part of a coherent plan focused on enabling national authorities meet long-term responsibilities.*²¹

There is also the more fundamental question whether an entity such as the MACC, with responsibilities to discharge directly, is a suitable vehicle for driving a capacity-building effort. Abundant evidence exists from the field of international development that the achievements of technical advisors often are disappointing and, in particular, often fail to achieve much progress in developing the 'high-level' capacities required for managerial and organisational performance. A contributing factor in many cases is the fact that, in spite of their titles, advisors are often judged by whether the local organisation achieves observable performance improvements. Often it is easier to improve organisational performance by doing the job oneself rather than training others and hoping for the best, and many advisors fall into the trap of 'doing' rather than 'advising', which then inhibits the capacities of local managers by denying them the opportunity to do their own analysis, take decisions, and – a necessary part of learning – make mistakes. Personnel in a MACC, having their own responsibilities for tasking, QA, information management, and so on would be under even more pressure to do jobs by themselves which, for the sake of capacity development, should be left to local officials.

For this reason, it would be preferable if UNDP's mandate for capacity development was given greater emphasis from the start, rather than having its programme being subsumed, in appearance at least, within the MACC. As subsequent events have shown, capacity building²² by the UNDP (an entity without links to the Peacekeeping Force) was much more acceptable to the Government. We can extract a recommendation:

Any involvement of a peacekeeping mission, or an entity closely associated with a peacekeeping mission, to support building of indigenous mine action capacity, should generally be contemplated only with a full understanding and consideration of the consequences. Such involvement should be subject to a clear and unambiguous agreement between the UN and the Government at the highest level identifying mutual commitments and responsibilities.

One can make another important, closely related, observation here, already alluded to earlier. A mine action centre with close ties to the Peacekeeping Force was given a coordinating role for humanitarian mine action that normally would be the responsibility of a national body. It is clear from the experience in Eritrea that involvement of peacekeepers, or those closely associated with the Peacekeeping Force, to achieve such an objective is not necessarily, nor automatically, a good idea. Nor does it appear to have been warmly received by the Eritrean Government authorities (as comments made earlier have intimated). While there are no absolutes in this matter, and other Governments might have welcomed a coordinating role by an entity with ties to a Peacekeeping Force, one should not assume that this is true for all

²¹ *Study Report, The development of indigenous mine action capacities*, UN Department of Humanitarian Affairs, New York, 1997. p.27

²² As defined by the Development Assistance Committee of the OECD, capacity building (or capacity development) is "...the process by which individuals, groups, organisations, institutions, and societies increase their abilities to: (1) perform core functions, solve problems, define and achieve objectives; and (2) understand and deal with their development needs in a broad context and in a sustainable manner....". Enhancing operational and technical capacities, while often necessary, clearly is insufficient for the challenge of capacity development of organisations and (even more ambitious) networks of organisations such as a national mine action programme.

circumstances. We, therefore, have to conclude again that an official agreement with the Government at the highest level might have prevented subsequent problems that ultimately resulted in the expulsion of mine action NGOs.²³

In this context it may be useful to refer to the conclusions of a study conducted by the OECD in 1998.²⁴ It notes that the civilian sector, by virtue of its extensive experience, has a comparative advantage in most aspects of the provision of humanitarian assistance. The study mentions:

"The political realities that surround the involvement of the military make it an unpredictable asset for humanitarian assistance operations in several ways. First, political constraints often mean that military assets cannot be deployed until after the peak of a crisis has been reached. Second, recent experience indicates that when militaries are deployed for humanitarian purposes their involvement in security matters will be restricted. Finally, the use of the military can at times politicise the delivery of humanitarian aid and threaten the neutrality, impartiality and independence of that aid".²⁵

By assigning the MACC coordinating responsibilities for humanitarian mine action, the question as to which activities should be coordinated, and carried out by whom, were left unanswered. Also unanswered was the question as to how this mandate would support Force requirements. By defining the role of a civilian-run mine action centre associated with a peacekeeping force, it would seem important to reflect on the comparative advantage such a centre would have. As subsequent discussion in this report will elaborate, a civilian MACC is fully familiar with IMAS, can ensure that demining operations are IMAS compatible, and can train demining contingents in the application of IMAS. In addition, a civilian-run mine action centre is not subject to short-term rotation, and has flexibility in subcontracting non-military demining assets (NGOs, commercial firms) in order to establish the right "mix" of assets. At the same time, lines of command are clear, and confusion with dual loyalty exhibited by contingent deminers (loyalty to home country and loyalty to the Force Commander) are avoided. Most importantly, a civilian-run mine action centre can propose mine action that could address both Force requirements as well as community aspirations (see also discussion below).

Resolution 1320 provided a perhaps tantalizing, but very incomplete, glimpse of the thinking that went on during the Joint Assessment Mission (JAM). While we may look into the deliberations of this mission for guidance, clearly defined terms of reference for the MACC, especially with respect to coordination and capacity development, should have been prepared for discussion with the Government, leading to a comprehensive agreement. We may formulate another recommendation:

Activities of a Mine Action Centre resulting from a Security Council Resolution should be defined in clear terms of reference, that can then be made the subject of an overarching agreement with the Government concerned.

²³ The Sri Lankan Government similarly objected to a role for the relevant mine action centre that would encroach on non-military areas of responsibilities, whereas other governments have welcomed such roles.

²⁴ Conflict, Peace and Development Cooperation, Report No.1, *Civilian and military means of providing and supporting humanitarian assistance during conflict - Comparative Advantages and Costs*, OECD, Paris, 1998.

²⁵ *Ibid*, page 32.

With the developments of mid-2002, and the subsequent establishment of the Eritrean Demining Authority which now decides demining priorities, the MACC's mandate resulting from Resolution 1320 is no longer of much relevance. In fact, the MACC currently consults very closely with EDA before embarking on demining tasks. It now only coordinates those demining assets which fall under its own direct authority.

3.1.2 Resolution 1430

The second resolution deals only with support to demarcation, leaving many other mine action responsibilities in a virtual grey zone. It takes a creative mind to carve out a meaningful mandate when the resolution confines the MACC to clearing small staging areas and access routes for the placement of demarcation pillars. The problem is further confounded by the current demarcation stalemate. Strictly going by a literal interpretation of the official mandate, then, the scope of work of the MACC is, at the moment, limited indeed.

The events of mid-2002 where the Eritrean authorities forcefully asserted themselves on the local demining scene resulted in a re-evaluation of the MACC's role (see Chapter 4 for details). The question arises whether, given the profoundly different circumstances prevailing after Proclamation 123, the dimensions of the MACC's responsibilities should have been revisited by the Security Council; especially since the MACC's original coordinating mandate had become largely irrelevant. There is no indication that this was done. The current boundary stalemate does not help things.

It is recommended that, in defining the mandate of a civilian mine action coordination centre attached to a peacekeeping mission, considerable effort be made to outline, for Security Council deliberations, the general scope of the MACC's responsibilities within the evolving context of political, humanitarian and peacekeeping realities, and in line with the MACC's comparative advantage.

3.2 Peacekeeping Objectives

Realizing that the Security Council Resolutions only partially indicate UNMEE MACC responsibilities, we are left with the task of finding out more about what these responsibilities entail. In doing so, our starting point will have to be the fact that the MACC's essential task is, first and foremost, to support the force component of the Peacekeeping Mission (see textbox on Mission versus Force objectives). If we can identify the objectives of the Peacekeeping Forces, we can then deduce the scope of work relevant to the MACC.

Textbox 1 – Mission versus Force Objectives

The presence of international military forces with a peacekeeping mandate is the defining feature of a peacekeeping mission, but there are other components to such missions such as political, public relations, and administrative. Normally, the peacekeeping mission will have a broader mandate than the peacekeeping forces.

In the Secretary General's Report to the Security Council (S/2000/785), leading to Security Council's Resolution 1320, the statement is made on page 3 that *"the mandate of the expanded United Nations Mission in Ethiopia and Eritrea would be to:"* – it then gives nine points including *"(h) Coordinate and provide technical assistance for humanitarian mine action activities in the temporary security zone and*

areas adjacent to it;” Later on the same page it notes...“UNMEE would be composed of political, military, public information, mine action and administrative components.” Thus, the Secretary General’s report lists nine aspects of the UNMEE (i.e. “mission”) mandate and has mine action as a distinct UNMEE component, not subsumed within the military component. Thus, it appears the intent was to have an UNMEE ‘Mission MACC’, not an UNMEE ‘Force MACC’. This point was emphasised repeatedly by some officers in UNMAS headquarters (although not the personnel based in Eritrea).

However, the Security Council Resolution itself states:

“Authorizes the deployment within UNMEE of up to 4,200 troops, including up to 220 military observers, until March 2001, with a mandate to:” [...the same 9 points including (h) relating to humanitarian mine action.]

In the eyes of the evaluators, the Security Council Resolution established the Peacekeeping Force component of UNMEE and places the humanitarian mine action component under that force’s mandate, even though this is not fully consistent with the Secretary General’s report. Of course, the Force is a component of the mission and, in that sense, a MACC reporting to the Force Commander supports the mission’s mandates.* However – and for good reasons – the scope of action of international military forces is typically defined in precise terms and (as illustrated most dramatically by Bosnia and Rwanda) Force commanders are expected to adhere to these limits even if mayhem is unfolding before their eyes.

Regardless of the intent implied in the Secretary General’s Report, given the reporting structures actually created by the Security Council Resolution the fundamental question to be asked is “how can the MACC best serve Force and Mission objectives?”

Mission objectives include, to: (i) promote the successful conclusion of the peace process (ii) monitor the TSZ; (iii) ensure coordination of UN efforts in delivering humanitarian assistance, monitoring human rights, promoting mine awareness education and demining activities in the zone; (iv) chair the MCC; and (v) provide administrative and logistical support to the EEBC. Force objectives are a sub-set of mission objectives. The latter, therefore, include the four goals for this Force as outlined by the Force Commander, to: (i) stay informed; (ii) win confidence of the two governments; (iii) ensure mobility for the troops; and (iv) win the hearts and minds of the people. In the case of Eritrea at least, the Commander’s “hearts and minds” goal appears to be ample room for the MACC to target mine action activities to support the Mission objective of coordinating UN efforts in delivering humanitarian assistance.

* UNMAS has pointed-out that the MACC Programme Manager reports to the DSRSG on policy matters, and to the Force Commander concerning operations. This arrangement is not necessarily inconsistent with the Resolution given that some mechanism above the PKF is needed at least to identify requirements for “...humanitarian mine action activities in the temporary security zone and areas adjacent to it” and to discuss how to address these requirements. However, the view that the MACC was established as a part of the Mission distinct from the Peacekeeping Force component seems inconsistent with the Security Council Resolution. At the very least, this contributed to the confusion over the authorised mandate of the MACC.

(Sources: Secretary General’s report to the Security Council (S/2000/785); Security Council Resolution (S/RES/1320 of 2000); Substantive guidance to the Mission by the USG in April 2004)

What are the objectives of the Force? In a discussion with the Force Commander, Major General Rajender Singh, the Evaluation Team learned that the objectives can be formulated briefly as follows:

- 1) Stay fully informed of all events in the peacekeeping zone, i.e. keep eyes and ears open;
- 2) Win the confidence of the two governments involved, and be respectful of the cultures of the two nations;
- 3) Ensure mobility for the troops; and
- 4) Win the hearts and minds of the people.

The pursuit of objectives 3 and 4 are especially important for the MACC. Road clearance is now being provided by a commercial demining company, Mechem, which has a worldwide reputation. The services of Mechem now ensure safe troop mobility in a cost-effective manner, and directly support objective 3 (see also Chapter 9 in this respect).

It is objective 4 that offers interesting scope for MACC support. In order to try to achieve the objective of winning hearts and minds of the local population, the Force is engaged in Quick Impact Projects (QIPs) for villagers. Such projects may include the building of small water reservoirs, wells, etc. It was outside the Evaluation Team's mandate to examine these small projects, and to determine to what extent such projects are integrated into demining activities, if at all. The Evaluation Team feels, however, that strategic demining activities on the part of the MACC, combined with QIPs, could certainly go a long way in helping the Peacekeeping Force to achieve this objective. One could envisage an enhanced scope of activities for UNMEE MACC that would include the inclusion of specific and strategic QIPs in a demining programme that would not only support the Peacekeeping Forces directly, but also bring important secondary benefits to communities.

It is recommended that the mandate of a civilian Mine Action Coordination Centre within a peacekeeping mission be enhanced by tying it very closely to the objectives of the Peacekeeping Force itself (and perhaps those of the broader mission²⁶), necessitating a careful analysis of ways in which the MACC can satisfy basic aspirations of the people in the region in line with the Force's goals.

Of interest in this respect is the fact that this enhanced role for the MACC would not only address Force requirements, but also Mission requirements in terms of "ensuring the coordination of UN efforts in the delivery of humanitarian assistance"²⁷

3.3 Command and Control Structure

In attempting to define a basic model for a MACC supporting a peacekeeping mission, there is not only the question of enhanced mandate as suggested above, but also the issue of management. Of particular importance here is the relationship between a civilian-run MACC and demining contingents belonging to the Force.

The confusion that may arise from trying to coordinate two parallel demining activities has been admirably resolved by integrating the Force Mine Action Centre (FMAC) with the UNMEE MACC, without disrupting the authority of the Force Commander. Of importance is that the two parties share common premises for ease of communication. FMAC has placed its staff under the same roof as UNMEE MACC, sharing office space in the MACC compound. The decision-making process is as simple as it is ingenious. The programme manager of MACC proposes priorities to the Force commander, who then approves/adjusts the proposal

²⁶ It may well be that situating mine action as a distinct component of a peacekeeping mission, rather than an element of the peacekeeping force component, would simplify matters. However, it might also complicate working relationships to the demining units supplied by TCCs or lead to divisions within the mission concerning the relative priorities accorded to demining to support, say, force mobility and humanitarian efforts. Regardless, if UNMEE and UNMAS wished Mine Action to be a distinct component, they should have had this reflected in subsequent Security Council Resolutions to give themselves the clear authority to operate in such a fashion.

²⁷ Guidance to the Mission by the USG in April 2004 to prepare for the next budget cycle '05-'06

and directs his troops accordingly. The structure also benefits from the already existing access to two sources of funds: the Voluntary Trust Fund of UNMAS and the UNMEE Assessed Contribution budget. This double funding access has ensured that the MACC has been, and continues to be, adequately resourced. The integration of the two demining capabilities has earned the MACC a UN 21 award.

UNMEE MACC is the first MACC to be integrated into a Peacekeeping Mission and could serve as a template for future Peacekeeping Missions requiring mine action. The lesson learned is that

The integration of civil and military mine action assets under a joint mine action structure, fully respecting Force authority, is an efficient and effective way to plan and execute a mine action response within a Peacekeeping Mission.

We now have the basic ingredients of a potentially very effective mine action centre attached to a Peacekeeping Mission. The model is an integrated one, fully respects the Force Commander's authority, and functions strictly in support of the Mission's objectives. In order to be effective, it requires a clearly defined mandate that addresses two of the fundamental concerns of the Force: mobility and satisfaction of the local population. Winning the hearts and minds of the population offers a much wider scope for mine action than currently existing Security Council resolutions would tend to indicate.

A complicating factor of an integrated operation is the limited authority the MACC enjoys as a coordinating body. The MOUs with individual TCCs do not give the MACC the necessary mandate to establish performance requirements, or to require military demining units to follow IMAS-compatible technical and safety standards. These MOUs are merely financial documents stating that reimbursement will be given for personnel/equipment provided. They do not include specifications as how to operate. In the view of the evaluation team, this is a serious shortcoming. It means that the MACC, as a coordinating body, cannot guarantee a uniform clearance standard in its area of responsibility. Even the Force Commander does not have the mandate to force a contingent to apply standards issued by the MACC, and to change equipment if it is considered to be inappropriate to achieve required clearance standards.²⁸

The military demining units do not submit IMSMA completion reports to the MACC in which the particular senior representative formally declares that the area cleared is free of landmines and UXO. Commercial companies such as Ronco and Mechem operating in the same area have to report on the standardized IMSMA form and have therefore to take responsibility for the results (full clearance of land) of their work.²⁹

Tasking orders selected and agreed upon with the local demining authority (EDA) have to go through the military chief of operations down to the respective contingent commander. They can reject these tasking orders if they are considered inappropriate or inconsistent with the particular national regulations. This makes long-term planning for the MACC difficult.

Integration of management does not necessarily resolve the question as to how tasks can, and should, be assigned. A recommendation by the authors of an internal UNMEE audit to include

²⁸ LtCol Fernand Dias Martins, e-mail to Johannes Dirscherl dated November 19, 2004

²⁹ See also Chapter 8.3.2 in this respect.

humanitarian demining into MACC's activities was rejected by UNMEE.³⁰ It was felt that "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".³¹ Of importance here are (i) the comparative advantage of a commercial /civilian-run entity in most aspects of the provision of demining assistance; and (ii) the inherent lack of capacity of Force demining assets to work efficiently, and cost-effectively. To quote again from the earlier mentioned OECD study:³²

"Civilian assets are, in general, more cost-effective. Military means, which are designed to be fail-safe rather than efficient, will cost more task-by-task than civilian means. Moreover, the cost of the military providing security for large humanitarian assistance operations will be significantly greater than the cost of providing assistance itself. "

At the same time, commanding officers prefer to have military demining assets available in their area of operations, in spite of the fact that they may be grossly under-utilized and expensive. An added consideration is that contingent deminers contribute to a sense of security for the local population. Their mandate is peace building, their presence generates confidence. The very least that should be done, then, is to ensure that contingent deminers work towards internationally accepted standards and employ the right mechanical and manual equipment.

The recognition of separate comparative advantages of military versus commercial and other civil demining assets, managed under a joint structure, would have to acknowledge the mutually reinforcing nature of the respective capacities. Thus, road clearance for the protection of the Peacekeeping Force and the enhancement of military mobility would also result in safety for the civilian population. The mutually reinforcing nature of the partnership also extends to the assurance of quality and the preservation of the right operating standards. Without a clear mandate for the MACC, the introduction and maintenance of International Mine Action Standards for TCC demining contingents present a formidable challenge, an area requiring special attention. In this respect it is important to recall a statement by the President of the Security Council:³³

"The Security Council recognizes the contribution that peacekeeping personnel can make in the areas of mine risk education and demining and calls upon troop-contributing countries, where appropriate, to train selected personnel to demine in accordance with the International Mine Action Standards."

The following recommendations are offered:

UNMAS should be actively involved in the planning for peacekeeping missions, including the definition of mission requirements, and work with the Force-generating unit in areas of equipment planning and establishment of standards.

³⁰ OIOS Audit No. AP2004/624/03: *Demining Operations in UNMEE*, UN Office of Internal Oversight Services Internal Audit Division, September 29, 2004

³¹ *Ibid.* page 5.

³² Conflict, Peace and Development Co-operation, Report No.1, *Civilian and Military Means of Providing and Supporting Humanitarian Assistance During Conflict*, OECD, Paris, 1998, page 32.

³³ Security Council, Statement by the President of the Security Council, November 19, 2003, S/prst/2003.22

Mission requirements should be reviewed on an agreed basis and schedule to assess whether comparative advantages of military versus commercial and other civilian mine action entities have shifted.

A MOU with a TCC covering the operation of a demining contingent should include specifications on how to operate, and on the authority of a MACC to ensure IMAS compatibility.

Chapter 4 – Mine Action Programme Development

Mine action activities in Eritrea may be roughly divided into two separate components: the programme elements managed by the UNMEE MACC focusing on the TSZ and adjacent areas, and the programme elements under the authority of the national EDA. The latter's mandate is nation-wide but its five EDO teams as well as the commercial deminer Ronco which reports to EDA similarly operate primarily in the TSZ. EDA is strongly supported by the UNDP through its Mine Action Capacity Building Programme (MACBP), and works closely with UNICEF in Mine Risk Education. A brief summary of both programmes is provided below.³⁴

4.1 Summary of the UNMEE MACC Programme

The MACC was established in August 2000 by UNMAS, utilizing UNOPS as the executing agency and with funds from the UNMAS Voluntary Trust Fund. Consistent with a liberal interpretation of its original mandate from the Security Council, the UNMEE MACC programme addressed the emergency landmine problem in the TSZ, attempted to coordinate the various humanitarian mine action players active in the country at that time, and supported the Eritrean Government in establishing and strengthening an indigenous mine action capability (EMAP).

A "Strategy for UN Assistance in Mine Action in Eritrea" was approved in November 2001 outlining a number of broad goals including:

- strengthening of indigenous mine action capacity,
- establishment of a comprehensive information base for mine action upon which to base a sound national strategy,
- establishment of national standards and a quality assurance capacity,
- reduction of the impact of the landmine/UXO threat on the population, and
- mobilisation of adequate resources for mine action.

This was an ambitious agenda requiring a great deal of energy and commitment, both of which are much in evidence as the output seems to indicate.

4.1.1 The period before mid-2002

Progress reports indicate that much was achieved during the first two years. By June 30, 2002, the UNMEE MACC was fully staffed with eleven international positions filled. All positions were financed under the UNMEE Assessed Budget for July 1, 2001 through June 30, 2002 under the MOA concluded between the UN and UNOPS. Any periods of service prior to July 1, 2001 were funded from other sources of income. By the middle of 2002, the program also employed 22 national staff working in different sections of the UNMEE MACC financed by the Voluntary Trust Fund.

³⁴ The TORs of the Evaluation Team did not call for an evaluation of UNDP's Mine Action Capacity Building Programme, but given the Team had to "analyze the relationship" between the MACC and this programme, the subject is treated here to provide a more inclusive picture of mine action in Eritrea, and to illustrate the shift in responsibilities that occurred in mid-2002.

The focus of mine action during the first year of operation (2001) was on mine risk education (MRE) and mine clearance in the TSZ, thus supporting the return of refugees and IDPs, as well as supporting UN peacekeeping activities. During 2001, the UNMEE MACC established the in-country Technical Safety Standards (TSS) for Eritrea, and worked with EMAP to establish accreditation and licensing procedures for all operators working in mine action. IMSMA was installed, an important achievement in spite of subsequent growing pains. The database was able to produce landmine/UXO area maps which were provided to all organisations and agencies working in the TSZ. Formally authorized in writing by EMAP, UNMEE MACC implemented a quality control and quality assurance system that allowed monitoring the work of clearance operations in the TSZ. Other achievements included substantial work on Standing Operating Procedures (SOPs), establishment of two sector offices, production of various documents proposing UNMEE MACC support for the Boundary Commission, and more.

Much effort was devoted in trying to build EMAP into a national mine action organization. For this purpose, UNOPS concluded a MOA with EMAP from January through August 2002 to provide continued support for staffing, rent, operations, equipment and logistics. Training was provided to EMAP with respect to accreditation, quality assurance, standard operating procedures, technical safety standards based on IMAS, etc.

In addition UNOPS extended an existing contract with the former Eritrean Demining Agency (EDA-1) for three manual clearance teams (consisting of 60 deminers per team) to work in the TSZ. MACC and Danish Church Aid (DCA) provided assistance to EDA-1 for both headquarters and field team activities and international supervisors were appointed to monitor and oversee the work of the three teams.³⁵ During the first half of 2002, the three EDA-1 teams cleared close to 700,000 square meters of contaminated land, destroyed 186 mines and 1,430 UXO.

Much effort was spent renovating and upgrading the National Training Centre (NTC), with a US\$250,000 contribution by GTZ. UNOPS assisted the MACC in conducting a tender and issuing a contract for this purpose, and the works were completed under budget. The MACC provided instructor support to the NTC, including the training and professional development of thirteen national instructors. The MACC also conducted numerous mine action related courses at the NTC for representatives of all mine action agencies in Eritrea, but primarily for EDA-1 staff.

On April 29, 2002, UNOPS awarded a contract to UXB Africa (Pty) for route clearance, (using Assessed Budget funds) for an initial period of six months. This contract was extended by another six months. The quality Assurance section fully deployed to the field during the first half of 2002; the development of technical safety standards and SOPs for quality assurance was completed; mechanical and mine detection dogs test areas were established at the NTC and used for accreditation of clearance operators' assets. The Information Section continued the development and maintenance of IMSMA in support of data requirements of different parties.

³⁵ UNMAS, through the MACC, provided substantial funding support to DCA to commence their operations in Eritrea due to funding problems DCA experienced during their deployment phase.

MRE activities were flourishing. A UNICEF MRE trainer completed the training of teachers and community facilitators in MRE and the preparation of in-country MRE training manuals. Landmine posters, handouts, educational children games, and other educational materials were distributed. MRE was introduced to schools through the Ministry of Education, and some 268 teachers were trained by MRE instructors from the NTC. In collaboration with UNICEF and the Department of Radio and the Ministry of Information, a national MRE radio program was launched. A number of international NGOs and commercial companies were participating in the implementation of MRE programs, in addition to the implementation of their respective mine clearance operations.³⁶ UNICEF had seconded an MRE officer to the MACC since the early stages of the programme who worked with EMAP and other ministries on MRE capacity building.

In other words, there was a flurry of intense and important activity on the part of the MACC, in collaboration with other parties, before the events of mid-2002 put an abrupt end to it. It is most likely that the uncoordinated demining efforts of the various players at that time, alluded to in the previous chapter, contributed to the President's decision to start with a clean slate.

HALO Trust was particularly scathing of the MACC's performance in terms of coordination, but criticism was voiced by others as well. For example, in discussions between a member of the evaluation team and Dutch Government officials in The Hague, considerable dismay was expressed by the officials concerning the failure of the MACC to convene regular coordinating meeting among the various players.³⁷ The members of the MASG fieldtrip to Eritrea in May 2002 felt the need to emphasise "The vital importance of transparent and constructive cooperation with all the mine action partners, including NGOs." During a MASG meeting on 5 September 2002 in New York, the representative of DCA noted that "In Eritrea, coordination between UN, NGO's and the donors has been missing".³⁸ Similarly, DCA noted that "The UN MACC in Eritrea has failed in planning, tasking and coordination"³⁹ The HALO Trust Programme Manager during that time stated: "I really doubt if a claim can be made that the UNMEE MACC really coordinated mine action in the TSZ in anything other than a basic sense".⁴⁰

In defence of MACC's Programme Manager,⁴¹ however, it must be said that UNMAS was remiss by not: (i) concluding a relevant overarching agreement with the Government giving clear legitimacy and limits to the coordinating role; (ii) providing a clear overall strategy for

³⁶ They included HALO Trust, Danish Church Aid (DCA), Danish Demining Group (DDG), Mine Awareness Trust (MAT), Landmine Survivors Network (LSN), Ronco and Minetech.

³⁷ The Dutch Government was a major contributor to HALO in Eritrea.

³⁸ Notes to the members of Mine Action Support Group (MASG). Presented to the reinforced MASG meeting on 5 September 2002 in New York. Page 1.

³⁹ IBID. Page 3.

⁴⁰ Comment on questionnaire asking "In your view, was mine action performed by the respective NGOs well coordinated?"

⁴¹ It is not the role of an evaluation team to assess individual performance ("Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle." *Norms for Evaluation in the UN System*, Para. 11.5; *Standards for Evaluation in the UN System*, para. 20, both issued by the UN Evaluation Group, April 2005). However, some highly charged and personalised statements were made in writing, both at the time of the expulsion notice and in response to our questionnaire, and we feel it necessary to point out the simple fact that individual employees function as part of larger organisations and it is important – indeed essential in such a politicised environment as Eritrea – that the various levels of that organisation discharge their respective responsibilities.

the MACC to exercise its mandate; and (iii) defining precise terms of reference for the MACC to substantiate a coordinating role. Instead, as was intimated in the previous chapter, the MACC was left to manage much on its own, and to define its own role, apparently with scant guidance from headquarters. Of relevance is the comment by a DCA representative in this respect: “UN MACC in Eritrea has been searching high and low the last year for a mandate”.⁴² In the view of the evaluation team, the ultimate cause of the MACC’s relative failure in coordination can be found in the absence of a clearly defined mandate, the preparation of which would certainly be the responsibility of UNMAS in New York.

Most serious of all was the failure to identify the mounting irritation of the President that resulted in Proclamation 123; a gathering storm that some of the NGOs claim they saw coming.⁴³ The evaluation team did not find any evidence that UNMAS anticipated the Proclamation, nor that it took appropriate action to prevent the outburst (see also box containing a summary of HALO Trust’s views, below and, in a separate box, a summary of a statement from UNMAS covering the same period).

At the same time, it must be said that certain NGOs are notoriously difficult to coordinate, and resent UN interference in their affairs. Compounding this is the threat of competing demands for donor funds, with NGOs fearing that such funds may be channelled to the UN rather than to their own NGO activities.⁴⁴

Textbox 2 – Summary of HALO Trust Comments

In responding to a questionnaire submitted by the Evaluation Team, HALO Trust expressed its deep frustration with the coordinating activities of UNMEE MACC before the issuance of Proclamation 123 in mid-2002. HALO’s representatives considered the MACC’s coordination efforts a failure. There were no UNMEE MACC or JMACC tasking plans, nor was there a viable tasking process. The UNMEE MACC did not focus on its primary mandate – coordination within the TSZ – but rather it attempted to develop capacity for a national programme without consulting others working in mine action, with overlapping intentions. HALO Trust found the relationship with the UNMEE MACC *‘highly irritating.’* It felt that the mine action process was not inclusive and, as a stakeholder in the process, it felt routinely ignored. For example, according to HALO Trust, monthly JMACC coordination meetings on purely operational issues started only in 2002, upon the initiative of HALO Trust. HALO Trust felt that *‘coordination implicitly demands the coordinator to listen, discuss, argue, and demonstrate vision...Coordination is not about secrecy, arrogance, position, or control.’*

The expulsion order by the Government of Eritrea reportedly came as no surprise. What was going to happen was *‘clearly sign posted.’* HALO Trust argued, immediately after the order, that the UNMEE MACC should return to its mandate. It argued, among other things, that EMAP (or by that stage EDA) could meet the challenge and *‘did not need the UN-imposed UNMEE MACC to tell it how to do it.’*

HALO does not believe that an Eritrean Government document exists – ‘appropriately dated’ – that empowered the MACC to build a national programme. UNMEE MACC ignored the fact that the Dutch Government assumed that it was doing some of this through a US\$4 million programme with the HALO Trust and EMAP. *‘At the very least, why did the UNMEE MACC not consult formally with the HALO Trust and the Dutch Embassy?’*

HALO Trusts makes the comment: *‘Had the UNMEE MACC concentrated on coordination then we might all have achieved something...What happened instead is that the UNMEE MACC would appear to have concentrated on*

⁴² Notes to the members of Mine Action Support Group (MASG). Presented to the reinforced meeting on 5 September 2002 in New York. Page 3.

⁴³ This may represent more the benefits of hindsight than prescience, but HALO Trust programme manager did ask the HALO Director (who knew President Afworki personally) to come to Eritrea in August 2002, apparently because he saw trouble looming. Some representatives of other NGOs which worked closely with the MACC were taken by surprise by the expulsion, and questioned whether the MACC – which had greater access to the government – was effective in defending their programmes.

⁴⁴ The boxed statement from UNMAS indicates it has learned the lesson that coordination problems should be “quickly addressed in the future, by effective communication, compromise, and an inclusive approach with all partners”.

building a UN programme to a template that was simply inappropriate to the way mine action had and was evolving in Eritrea. HALO's belief is that 'when the Eritrean Government discovered that their national authority EMAP had allowed itself to be drawn into the UNMEE MACC process, they simply moved to close the whole show down'.

HALO feels that *'there was a failure to understand or demonstrate any passing understanding of the historical relationship between EPLF (the liberation movement that was the precursor to the Eritrean Government) and the UN... The UN is arguably not held in high regard by Eritrea for its actions in the 30 years after 1945'*.

Source: Comments by HALO Trust in response to a questionnaire by the evaluation team.

Textbox 3 – Comments by UNMAS covering the same chain-of-events

UNMAS addressed in particular the HALO allegations concerning *"(1) what HALO saw as UNMAS' unilateral decision to help build a national programme, and (2) the MACC's poor effort in the area of coordination"* which they see as integral elements of all UNMAS programmes.

"While the extent of the landmine problem was not clear in 2000, it was widely recognized that it could not be resolved in a few years and that a national response would be required. This was agreed with the Eritrean authorities and included in the report that led to the establishment of UNMEE. The strategy was made operational with the assistance of the Commissioner of the Commission for Cooperation with the Peacekeeping Mission (CCPM) and the Deputy Commissioner for Mine Action, who was later appointed Director of the Eritrean Mine Action Programme (EMAP), and it formed the basis of signed agreements between the UN and the Government of Eritrea to support EMAP. This requirement for a national programme was also clearly stated by the Commissioner to the Mine Action Support Group in New York on 19 November 2001. The decision to develop a national programme, therefore, was not unilaterally taken by UNMAS. Significant capacity was developed by the MACC and NGO partners such as HALO during that period, capacity that has been an integral part of Eritrean mine action efforts under leadership of the Eritrean Demining Authority (EDA).

On the issue of coordination, the comments of the two former HALO Programme Managers depict an ineffective and at times obstructive MACC. The clearance and MRE statistics, populated IMSMA database and quality assurance reports for that period tell a different story. Coordination in mine action is aimed at enhancing the efficiency and effectiveness of activities by reducing duplication; providing a central point for information collation and analysis, requests for assistance and tasks prioritisation, based on availability and capability of assets; monitoring adherence to agreed standards; integrating activities; and interfacing with national authorities on mine-related issues. This is never easy or straightforward, given the number of competing requirements of the broad range of actors involved, including the government, UN organizations, donors, NGOs, and the local population. Therefore, it is inevitable that differences of opinion will arise from time to time. This was unfortunately the case in Eritrea between the UN and HALO Trust. The experience has taught a valuable lesson in ensuring that such problems are quickly addressed in the future, by effective communication, compromise, and an inclusive approach with all partners."

Source: Written comments submitted to the evaluation team in May, 2005.

While there is some concordance between the HALO and UNMAS positions (e.g., both point to differences of opinion concerning coordination and to the need for speedy resolution of these in future), the common ground is scant relative to the ocean of difference. On some points the statements of the other NGOs appear to corroborate the allegations of HALO Trust. But these statements also convey a sense of betrayal that HALO Trust did not join in a coordinated effort to salvage a more acceptable outcome to the crisis, choosing instead to negotiate its own reprieve (plus an expansion of its programme). An individual familiar with MASG deliberations during the period offered the opinion that at least some of the important allegations made by HALO were, at their core, correct, but the tone of the correspondence from HALO, the personalised nature of some of the allegations, and the suspicions occasioned

by HALO's announced expansion⁴⁵ meant that the MASG members were loathe to press the issue, at least once they had assurances from the Eritrean government that it would not require the departing NGOs to turn-over their equipment and that future demining operations would be IMAS-compliant.

Thus, there are seemingly few concrete repercussions within the wider mine action community to this traumatic and costly event, which in all probability has negatively affected the prospects of Eritreans living in, or seeking to return to, mine affected regions. One outcome was that the Director of UNMAS undertook to hold more regular dialogues with the international mine action NGOs, some of which coalesced into a more cohesive network that subsequently took on the name NGO Perspectives on the Debris of War. This continues to express concern over the role of UN agencies in coordination of mine action, emphasising largely the same points as were made following the expulsion order in Eritrea.⁴⁶

The evaluation team is not in a position to pronounce on how to allocate responsibility for failing to recognise and appropriately manage the risks to mine action activities in Eritrea during 2002. In part this is because the information provided⁴⁷ does not 'triangulate', but more fundamentally because of the absence of direct input from Eritrean authorities regarding their perceptions and motivations at the time, or whether they felt their actions, in hindsight, were even based on accurate information.

4.1.2 The period after mid-2002

The Government of Eritrea issued a proclamation in mid-2002 thoroughly changing the mine action picture in the country.⁴⁸ EMAP was dissolved, the Eritrean Demining Agency became EDO with only some slight staffing changes. The Eritrean Demining Authority was established, taking over from EMAP, and international NGOs were asked to leave. By the end of September that year, only HALO Trust remained (it left less than a year later) and the commercial company Ronco continued operations (and is still there).

By order of the Government, all activities of MACC in support of EMAP stopped abruptly. Responsibility for UN capacity building shifted to UNDP and UNICEF. The departure of the NGOs also meant that the MACC's coordinating responsibilities of humanitarian demining were no longer relevant, except in so far as UNMEE MACC's own demining assets were concerned. With the loss of important humanitarian demining activities in the TSZ, and the serious curtailment of its responsibilities by the Government, the MACC had to re-examine its role. It did so without wasting time.

⁴⁵ HALO Trust explained that the government-imposed reduction in salaries within the mine action sector allowed it to engage more staff with its existing project budget. The expansion was never fully implemented.

⁴⁶ For example, *"Our experience is that these MACs are confused in their role of responsibilities, have inadequate skills of personnel, are partially implementing, have insufficient oversight of field programmes and programme staff by New York, lack transparency and manage IMSMA incorrectly and unsustainably."* Presentation to the Resource Mobilisation Contact Group by Steven Olejas, DanChurchAid on behalf of the NGO Perspectives on the Debris of War, 10 February, 2004.

⁴⁷ Most was provided only after the Evaluation Report was "finalized". Once again, the evaluation team originally did not intend to focus on the issues surrounding the expulsion order, and the Terms of Reference did not even provide for visits to the headquarters of the NGOs affected.

⁴⁸ Proclamation 123/2002, of July 8, 2002.

The MACC submitted a revised work plan which was approved by DPKO, UNMAS and UNMEE at the end of October, 2002. The following changes were implemented:⁴⁹

- The Quality Assurance (QA) section was amalgamated with the Operations section allowing the reduction of two international positions;
- The Peacekeeping Force (PKF), Mine Awareness Cell (MACE) and Explosive Ordnance Disposal (EOD) officer and the UN Military Observers (UNMO) Mine Risk Education (MRE) cell were relocated to the MACC compound and combined with elements of the MACC Operations section to form the Force Mine Action Centre (FMAC);
- The FMAC would be responsible for prioritisation and issuance of all UNMEE mine action tasks including demining, EOD and MRE tasks;
- An EOD emergency response team was formed to conduct EOD training for the PKF EOD assets, and respond to major emergency EOD tasks within the TSZ;
- Two MACC Regional Liaison Offices were established in the western and central sectors. The MACC staff in these offices assumed responsibility for all sector mine action coordination, QA and monitoring of any mine action activity within their sectors;
- Two emergency MRE teams were recruited and deployed in sectors west and centre to work with PKF mine action operational elements working in those sectors;
- Only indirect capacity building support would be provided by the MACC to the national program, and only through UNDP and UNICEF.

It should be emphasized that:

The revised MACC work plan was a creative and appropriate response to the unexpected and drastic decisions of the Eritrean Government in mid-2002. It resulted, in fact, in increased efficiency of UNMEE MACC operations by integrating military demining assets into a civilian-run mine action centre.

The new work plan significantly had to limit the scope of activities of UNMEE MACC. Coordination of humanitarian demining was greatly reduced by the expulsion of NGOs and the intention of the Government to assume full control over mine action in the nation without UNMEE MACC's help. The numerous details involved in mine action capacity building were shifted to the UNDP, with only support to EDA's embryonic information technology, and medical support, left as MACC tasks. This shift left important spare capacity. With the current stalemate in boundary demarcation, not much action can be taken by the MACC beyond the continuation of access road clearance and activities related to demarcation.⁵⁰ In short, then, we can say that the MACC's wings were clipped in comparison to the first two-year period.

During the period 2003 and 2004 noteworthy events included the replacement of UXB (because of a new requirement being identified for rapid route clearance) by Mechem. The latter, by all accounts, is one of the world's top demining companies in its specific genre. UNOPS entered into a contract with Mechem for the period August 19, 2003 to April 7, 2004,

⁴⁹ *Annual Report 2002, Emergency Mine Action Assistance in Eritrea and Ethiopia*, MACC.

⁵⁰ Some of the tasks include, but are not limited to, reconnaissance, liaison with both countries military assets in the area of responsibility, vital training of PKF demining assets for the specific demarcation tasks, and clearance activities in areas calculated as possible pillar sites.

which has been extended since then. Mechem manages to clear some 15 km of road a day, less if the sensitivity of the sensors are adjusted to generate more signals. With the departure of the Slovak assets during the first half of 2004 (see Chapter 8), UNMEE agreed to utilize commercial mechanical support through UNOPS, instead of replacing the Slovak contingent with one from another TCC. UNOPS tendered a new contract and Mechem was awarded the extra work. The additional contract with Mechem was signed in September 2004 for the supply of four integrated demining teams, to be deployed in January 2005. UNOPS is to be commended for the selection process and its efficiency in concluding contractual arrangements.

The Slovak demining contingent ceased operations at the end of May 2004 and departed the Mission area a month later. As the next chapter discusses in more detail, productivity of the Slovaks left much to be desired. The shift from a demining contingent to a commercial demining company (Mechem) turned out to be very cost-effective indeed (see Chapter 9).

An important achievement was the establishment of a demining coordination centre in Shilalo in Sector West for the purpose of centralising and improving all operational, monitoring and training activities of PKF demining assets in the field.

Quality assurance work was conducted on PKF demining assets, with mixed results as far as the Bangladeshi contingent is concerned (see chapter 8).

The information section continued to develop its competence by creating add-on programmes to overcome deficiencies in IMSMA. It became a powerful support service to all mine action activities in the nation, especially the fledgling EDA, EDO, and the commercial deminers Ronco and Mechem (see Chapter 7).

The two MACC MRE field teams were regularly deployed either to sector west or sector centre, and offered valuable assistance to a large number of communities residing in the TSZ, while supporting the operational tasks of the MACC EOD field team and the PKF demining teams.

The Medical Coordination Cell of the MACC, staffed by a medical coordinator supplied by the Swedish Rescue Services Agency (SRSA) continues to ensure that the demining medical support capacity of all PKF demining contingents and MACC field operators – including the MACC EOD and MRE field teams and Mechem – is adequate. The work involves regular monitoring assessments and the conduct of various medical training courses.

In-house training courses are organised by the MACC Training Cell under management of the Programme and Training Officer. The aim is to provide all MACC staff with opportunities to various training programmes planned and executed with selected staff participation, including computer training, report writing, a train-the-trainers HIV/AIDS course, human rights and conflict resolution, etc.

Much useful work has been done during the last two years, but the scope of activities of UNMEE MAC has diminished (see Chapter 6 for staffing implications) compared to the period before the Government Proclamation 123 of July 8, 2002.

4.2 EDA and Mine Action Capacity Development

UNDP support to mine action in Eritrea started with the arrival of the Chief Technical Advisor in February 2002, temporarily accommodated on the UNMEE MACC premises. Shortly thereafter the Senior Technical Advisor for the Landmine Impact Survey (LIS) arrived. Various agreements were signed in April, 2002 (the original MACBP project document, the agreement between UNDP and UNOPS, the agreement between UNDP and EMAP) and the capacity building in EMAP was initiated.⁵¹

The issuance of Proclamation 123 in July 2002 contributed to the clarification of UNDP's role. EMAP and the old EDA (1) ceased operations, and the UNDP's task was now to support the new EDA. Progress appeared to have been fast judging from MACBP's key milestones (Annex 2), in spite of the fact the new General Manager of the EDA was appointed only in October 2002. The initial project document of MACBP was fully funded (approximately US\$3 million), EDA staff was hired, equipment was ordered and put to use, some field equipment was transferred from the MACC to the EDO, training was provided in various areas, including MRE and Quality Assurance, LIS national staff was selected and hired in the fall of 2002, and the LIS was launched (completed in June 2004), etc. Many achievements can be cited, including the launching of five effective demining teams working to IMAS in the central and western regions, effective support to victim assistance under the auspices of the Ministry of Labour and Human Welfare, the launching of operations of six MRE teams under auspices of UNICEF, support to the drafting and completion of a National Mine Action Strategic Plan (2005-2009), etc. An evaluation of the MACBP was conducted in August 2004.⁵² The evaluation was supportive of MACBP, recommended broadening of Victim Assistance, called for better integration with national planning, recommended broadening of mine clearance resources (mechanical and dogs), and suggested that annual relief costs of keeping IDPs in camps are 2-3 times higher than demining costs. Its final conclusions are:

*“The appraisal team feels that the UNDP MACBP has achieved much in very little time, with a paucity of resources, and that its role is crucial to the further growth and development of a national mine action capacity in Eritrea. A final consideration is that Eritrea, as a signatory to the Antipersonnel Mine Ban Convention, has put into place national policies and frameworks to align itself to fulfil its obligations under article 6.3 and article 7 of the Convention, but requires the resources to do so”.*⁵³

The arrival of the UNDP to help in the development of national mine action capacity was late, i.e. about two years after the cessation of hostilities. In the mean time, the MACC was engaged in providing support to EMAP, thus dividing a hectic period between supporting the Force on the one hand, and supporting an emerging national mine action capacity on the other hand. The efficiency with which the UNDP was able to launch a capacity development programme, and the early successes of this work, were in no small measure due to the capacity building efforts performed by the MACC and other mine action partners in previous years. People had been trained and were absorbed in the two newly created entities (EDA/EDO). Material and equipment were transferred from EMAP. Had it not been for the early capacity building work by international mine action organizations including the MACC

⁵¹ See Annex 2 for a list of key milestones in the unfolding of the MACBP.

⁵² *An Appraisal of the UNDP Mine Action Capacity Building Programme in Eritrea*, by Dunne, Judith; Lindbaek, Espen; Haile, Dr. Tesfay; Teodonna, Raffaele; August 13, 2004

⁵³ *Ibid*, p.4

that benefited EMAP, progress of UNDP's MACBP would most likely have been more modest.

At least two lessons can be formulated:

Capacity development support by a specialised agency should start immediately after cessation of hostility and the arrival of a peacekeeping force, not two years later.

In countries with extensive contamination problems, mine action must have national ownership to be successful and sustainable. This also infers that demining should be included in national development plans as a pre-condition to achieve development goals.

Chapter 5 – Mine Action Financing

5.1 UNMEE MACC Financial Resources

As of today, the UNMEE MACC has received a total of US\$18.4 million from the Assessed Contribution Budget, either on the basis of various UNOPS Memoranda of Understanding (MOU), or through UNMEE administered funding.

In addition, the UNMEE MACC has been very successful in attracting contributions to the Voluntary Trust Fund, totalling US\$5.1 million. The following tables provide some details.

Table 1 – UNMEE MACC Mine Action Assessed Budget (US\$000)

Activity	2000-01	2001-02	2002-03	2003-04	2004-05	Total
UNOPS MOU						
MACC Staffing	0	1,187	1,386	1,468	1,468	5,508
Route Clearance Contract	0	1,200	1,200	1,200	1,431	5,031
Mine Awareness Contract	0	0	90	100	100	290
Integrated Demining Cont.	0	0	0	0	3,256	3,256
Clearance for Demarcation	0	0	0	0	1,581	1,581
UNOPS Mgt Fee	0	0	214	221	603	1,038
Sub-total UNOPS MOU	0	2,387	2,890	2,989	8,439*	16,705
UNMEE Direct Funds						
Mine detect. equipment	130	124	124	73	30	481
Mine detect. supplies	50	152	152	81	100	535
Mine detect. services	716	0	0	0	0	716
Sub-total UNMEE	896	276	276	153	130	1,731
Grand Total	896	2,663	3,166	3,142	8,569	18,435

Source: UNMEE MACC

* Partly offset by savings of some \$5m by withdrawal of Slovaks

Table 2 – Summary of Donor Support to the Voluntary Trust Fund (US\$)

Contributing Country	Amount
Japan	1,063,385
Germany	672,806
Netherlands	550,000
Canada	441,846
Norway	325,172
Italy	241,756
UK	851,518
Sweden	188,489
Denmark	126,197
Korea	55,000
Ireland	52,496
Un-earmarked	892,500
Total	5,461,165

Source: UNMAS finance section

It is clear from the above figures that the Programme Manager has been singularly successful in attracting funds, sufficient to maintain current levels of activity. In Chapter 3, discussing the mandate of UNMEE MACC, the Evaluation Team recommended an enhanced role for the

MACC by tying its activities very closely to the basic objectives of the Force or Mission. Such enhancement would entail mine action activities in direct support of communities to gain the hearts and minds of the population, while deepening Force protection and mobility. Should this recommendation be accepted, an additional need for funds could be envisaged depending on the nature of the proposed enhancement, and on the weighing of a number of related factors. These factors include, but are not limited to:

- ✓ The serious mine contamination in the TSZ, requiring focused action of increasing scope;
- ✓ On the other hand, the fundamental change in the mandate of the UNMEE MACC after the Proclamation 123 in mid-2002, significantly reducing the scope of its work, notably by leaving mine action capacity building to the UNDP;
- ✓ The possibility of obtaining additional funds (important here is the unique situation of the integrated UNMEE MACC that allows access to both the Assessed Budget, and the Voluntary Trust Fund);
- ✓ The current stalemate with respect to final boundaries, a stalemate that has put further work on demining for demarcation to a virtual stop, work that may need to be re-activated at a moment's notice; and last but not least
- ✓ Cooperation from EDA with respect to an enhanced mandate.⁵⁴

It is recommended that UNMEE MACC prepare a costed proposal for the further enhancement of its mine action activities that would accomplish the three-fold objective of Force protection, Force mobility, and community support designed to gain the hearts and minds of the population.⁵⁵

5.2 MACBP Financial Resources

Although not a part of the evaluation's Terms of Reference, it was nevertheless felt appropriate to provide some comments on the financial resources required by the MACBP. This would place into perspective the scope of required support for local capacity development. It also tends to underscore previous comments to the effect that capacity development is a task all unto its own, not to be confused, or mixed, with mine action in support of Force requirements.

Cash flow requirements for the National Mine Action Strategic Plan 2005-2009 run at US\$10-13 million a year for the next five years (see table below).

⁵⁴ At the end of August 2004, an offer was extended to EDA by the MACC Programme Manager to assist in mine clearance operations to allow the return of approximately 19,000 IDPs to several villages in the Shilalo area. A request for assistance has subsequently been made by EDA.

⁵⁵ Subsequent to the evaluation mission, UNMAS and UNOPS contracted commercial organisations to provide mechanical and EDD assets in support of the Kenyan demining contingent, creating a combined commercial-military capacity. This is termed the Integrated Demining Contract (IDC), and is in line with our recommendation. More generally, we encourage UNMAS to update its analysis of the capacities required to meet the Force Commander's objectives on a periodic basis, and give active consideration to alternative means for providing the requisite capacities in the most cost-effective manner.

Table 3 – National Mine Action Strategic Plan Cash Flow Requirements, (US\$ m)

National Strategic Objective	2005	2006	2007	2008	2009
Return of IDPs to 21 communities	4.2	4.2			
Clearance 116 H & M impacted communities	3.5	4.9	9.7	10.5	11.2
MRE & risk reduction 344 low impacted communities	0.5	0.5	0.6	0.6	0.5
Victim assistance	2.1	3.6	2.9	2.0	1.8
Total	10.3	13.2	13.2	13.1	13.5

Source: UNDP

During the period immediately following Proclamation 123 in mid-2002, and the expulsion of mine action NGOs, the donor community was not greatly amused. Certain donors had invested substantial amounts of money in Eritrean demining activities, especially the Dutch, key sponsor of HALO Trust, and by far the largest contributor to Eritrea (see table in Annex 3 for donor contributions). Their sponsored activities came largely to a halt, and there was not much inclination to invest in the country.

Yet, donors are coming back. They are encouraged by indications of MACBP success, based on the findings of the August 2004 evaluation and discussions with the Chief Technical Advisor. During the past three years the following contributions were made (see table below).

Table 4 – Contributions to (UNDP) MACBP 2002-2004 (US\$ m)*

Donor	Contribution
European Union	1.604
Norway	3.000
Canada	0.728
Netherlands	0.500
United Kingdom	<u>0.158</u>
Total in US\$ millions	5.990
Memoranda items – other contributions	
Sweden	Technical advisors, vehicles and equipment
Switzerland	EOD explosive charges
US (State Department)	US demining company Ronco fully funded

*Not including in-kind contributions.

Note: Leahy Foundation pledged US\$500,000 bilateral MLHW for income generation; Canada support for CBR expansion under negotiation.

Source: UNDP

As the following table indicates, significant pledges have been made for the year 2005, but much more is needed to accommodate future years.

Table 5 – Programme Resources Pledged to (UNDP) MACBP (US\$ m)*

Contributors	2005	2006	2007	2008	2009
Planned funding requirements	10.30	13.20	13.20	13.10	13.50
Govt. of Eritrea (wages)	0.70	0.70	0.70	0.80	0.80
Norway	1.46	1.46	1.46	1.46	1.46
US (Ronco)	2.80				
EU (new)	0.72	0.48			
EU (first balance LIS)	0.33				
EU (second balance LIS)	0.07				
South Korea	0.05				
Italy	0.10				
US (MRE)	0.23				
Total Pledged	6.46	2.64	2.16	2.26	2.26
Remaining to be mobilized	3.84	10.56	11.04	10.84	11.24

*Not including in-kind technical advisors and equipment donations from SIDA and Switzerland

Source: UNDP

In comparing the figures from UNMEE MACC on the one hand and MACBP on the other hand, one may make a hypothesis (to be confirmed by a more detailed cost-effectiveness analysis, see Chapter 9) that the establishment of national mine action capacity leads to significant advantages in terms of efficiency and effectiveness when compared to the costs and performance of military demining contingents.

Chapter 6 – Mine Action Staffing

6.1 Summary of Changes in Staffing Levels

6.1.1 FMAC

The integration of the Mine Awareness Cell (MACE) and the UNMO MRE cell into the MACC and the formation of the Force Mine Action Centre (FMAC) enabled a joint military/civilian structure to focus in a coordinated fashion on tasking and deployment of assets. This integration resulted in the immediate reduction of seven UNMEE military staff positions by amalgamation of responsibilities. Shortly after this new structure was created in the fall of 2002, another two Force positions were “disestablished” (Chief MACE and a Mine Awareness Warrant Officer) making it nine military positions that were eliminated.

The FMAC was fully established and integrated with civilian personnel in the MACC compound in January 2003. FMAC consists of the following PKF military personnel: MRE coordinator, MRE Officer, Kenyan Liaison Officer, Bangladeshi Liaison Officer, Clerk. In addition there are three military secondments from UN Military Observers (UNMO): Mine Action Liaison Officer (MALO) based in Addis Ababa, a Project Officer Demining for Demarcation (PODD) based in Shilalo, and Field Mine Action Liaison Officer (FMALO) also in Shilalo.

6.1.2 MACC

In the fall of 2002, two existing QA Officer positions in the MACC were amalgamated into the Sector Regional Liaison Officers responsibilities, thus resulting in two MACC positions being declared redundant. This meant that the UNMEE MACC international staff came down from eleven positions before integration to nine after. Subsequently, a logistician was re-deployed, making the current international core staff level of UNMEE MACC a total of ten.

In addition there are 40 local staff engaged by the UNMEE MACC.

UNOPS has signed Memoranda of Agreement with donors for the following in-kind positions: two EOD Officers (Swiss Ministry of Defence); an IMSMA Officer (Swedish Rescue Services Agency (SRSA)) shared with UNDP, and a Medical Coordinator (SRSA) also shared with UNDP.

The ten core international positions are the following: Programme Manager, Chief of Operations, Chief of Finance and Administration, Chief of Information, Operations Officer, EOD Officer, Logistics Officer, two Regional Manager/QA Officers, and a Programme and Training Officer.

6.2 Staffing Issues

Are current UNMEE MACC staffing levels appropriate? This question should be answered in terms of:

- (i) the need for essential competencies to be available (even if not fully utilised);
- (ii) the scope of responsibilities envisaged;
- (iii) the current workload;
- (iv) the degree of risk that can be accepted.

There is also the need to determine what options exist for engaging local personnel rather than international staff, who cost many times more and whose benefit packages typically provide for significant periods away from their duty stations.

Most mine action centres discharge a range of core functions, including:

- operations planning and oversight
- quality assurance
- mine action information
- finance and administration

There may be other distinct functions, such as MRE in the case of the UNMEE MACC, that a MAC is required to perform. This range of functions, coupled with the limited number of Eritreans with extensive training and experience in performing these functions within a mine action programme intended to operate at international standards and the restrictions placed on Eritreans vis-à-vis Ethiopian territory within the TSZ, suggest a core complement of international staff of six, covering the following essential competencies – operations; QA; information management; finance and administration; and MRE; plus the overall manager. Additions to this complement of international staff need to be justified on other grounds.⁵⁶

Turning next to the scope of responsibilities, one issue in many programmes is the geographic scope of operations, particularly in areas with rudimentary transport systems. In this case, UNMEE MACC has established two regional offices (West and Centre), each headed by an international staff member. This seems reasonable provided operations actually are underway or planned for the near future (e.g. to support the border demarcation work).

Another common issue relating to the scope of mine action operations relates to the range of munitions in the theatre of operations. There is a large variety of explosive remnants of war in the TSZ and adjacent areas, so provision for specialised EOD expertise appears reasonable.

Once provision is made for the essential capacities to cover core functions, and for the scope of responsibilities, further additions to the international staffing complement must be justified by (i) workload or (ii) degree of risk aversion. As noted earlier, militaries generally have extremely low tolerances for risks to what are, or could become, mission critical functions.

⁵⁶ There is always the possibility of recruiting multi-skilled individuals to cover two or more of these essential competencies, but except for extremely small programmes this is generally not a satisfactory option for extended periods.

Therefore, military planners typically provide for significant redundancy in staffing, equipment, and so on, which is a major reason why the military provision of humanitarian assistance often costs many times more than civilian options. (OECD, 1998, *Civilian and Military Means...*, op cit., p.32) Governments in many TCCs also exhibit extreme risk aversion with respect to potential casualties among their troops serving on peacekeeping missions. The evaluation team acknowledges there will be an understandable predisposition toward low risk tolerance relating to UNMEE MACC affairs, and that this will affect staffing decisions.

Turning now to workloads, a useful approach is to use other mine action programmes as benchmarks for comparison. The table below provides some very basic indicators⁵⁷ for three mine action centres and programmes: (i) MACA in Afghanistan (a large and long established national programme); (ii) the MACC SL in South Lebanon (a closer match to UNMEE MACC, being fairly recent, connected to a peacekeeping operation, and responsible for a range of commercial assets plus a small military component – the Lebanese Armed Forces); and (iii) UNMEE MACC.

Table 6 – Staff/Deminers Ratios in Various Programmes

MA Centres (1)	International Staff (2)	National Staff (3)	Number of Deminers (4)	Ratio (4):(2)	Ratio (4):(3)
MACA	27	160	6,500	240:1	41:1
MACC SL	7	22	400	57:1	18:1
UNMEE MACC	10	40	201	20:1	5:1

The case of MACA in Afghanistan illustrates the importance of economies of scale. With one central office in Kabul, and five regional offices throughout the country, the Afghanistan Mine Action Centre (MACA) employs 27 international staff and 160 national staff.⁵⁸ Of those 27 international staff, five are full time engaged in reconstruction work. Of the 160 local staff, 15 are full time working on reconstruction. For the 12 month period 2004-05, tasks include: humanitarian mine action of 21.5 sq km, with 60% of funding covering mine action tasks and 40% support to priority projects under tight deadlines. In addition, the programme includes battle area clearance of some 74 sq km, and surveys of some 30 km². The total number of deminers under the programme is approximately 6,500. Thus, the ratio of deminers to international staff for the MACA in Afghanistan is 12 times higher than that for the MACC in Eritrea, and the ratio of deminers to local MAC staff in Afghanistan is eight times that of UNMEE MACC.

In contrast, the mine action programme managed by the Mine Action Coordination Cell in South Lebanon (MACC SL) is significantly more modest, concentrating only on a region of a much small country (and mainly on the border minefields and former occupied villages in Southern Lebanon). MACC SL was responsible for demining funded by Operation Emirates Solidarity, under which two commercial firms (BACTEC, which fielded about 280 personnel

⁵⁷ Data on personnel numbers have been compiled from a variety of sources and, given the ebbs and flows in mine action programmes, are intended to be indicative rather than definitive as per any specific date. Those for Afghanistan relate to 2004; those for South Lebanon to 2003 when operations were in full swing.

⁵⁸ Source: United Nations mine action programme for Afghanistan, *National Operational Work Plan 2004/05*, UN, 2004. Also data from a recent mission to Afghanistan by Ted Paterson, GICHD

along with dogs and a range of mechanical assets; and Mine Tech with over 100 personnel plus dogs and one machine) were engaged to conduct demining operations and an international NGO (MAG) was contracted to conduct surveys.⁵⁹ In addition, 12 troops from the Lebanon Armed Forces were assigned to work under MACC SL guidance and a series of teams from the United Arab Emirates came for training in mine clearance and EOD. All told, the ratio of deminers per MAC staff members (international, local, or combined) in Southern Lebanon is about three times that for UNMEE MACC.

These big differences do not automatically demonstrate excess staffing of the UNMEE MACC. Yet, the comparisons motivate one to seek ways to further reduce the staff complement. Improvement in economies of scale will have to be sought in: (i) a possible further re-structuring of combined FMAC and MACC positions (e.g. combining UNMO demining for demarcation positions with MACC operational positions, or possibly phasing out one MACC Regional Liaison Officer position); and (ii) enhancing the mandate of UNMEE MACC as suggested in Chapter 3. With the arrival of four integrated demining teams, such enhancement becomes a real option.

At the current level of activity, it seems clear that two other international positions fall very much into the 'nice to have' rather than 'need to have' category. First, the Programme & Training Officer position appears responsible largely for reporting.⁶⁰ This task has been discharged in a truly commendable fashion by the incumbent. However, the evaluation team is far from certain that detailed reports of all activities on a weekly basis are required to meet accountability and progress monitoring requirements. For these requirements, and recognising the time pressures on those receiving such reports, monthly reporting on an 'exceptions basis'⁶¹ normally suffices. Detailed weekly reporting appears to serve more of a public relations function. Such a public relations effort may be warranted, but then the position should be justified on that basis rather than suggesting the weekly activity reports are required for operational or oversight purposes.

Second, the UNMEE MACC organisation chart shows that the Operations Officer is responsible mainly for the coordination of the two regional TAs. Due to the current situation, with limited demining activities in the TSZ, it seems doubtful that this coordination role justifies a full-time position. The coordination could be covered by the Chief of Operations.⁶²

The evaluation team also notes that the option of training local personnel to assume roles played by international staff (i.e. individual capacity development) could be explored more aggressively by UNMAS for any programme that seems likely to endure for an extended period. This can lead to significant cost reductions of staff and to important enhancements to indigenous capacities within the overall mine action programme.

⁵⁹ Another commercial firm – Armour Group – was engaged to provide QA under the guidance of the UN QA Officer, and these international personnel are not reflected in the comparison.

⁶⁰ According to an UNMEE MAC document (Lessons learned since 2000), the deployment of a Programme Officer to the MACC in Asmara has enabled the UNMEE MACC to compile timely, comprehensive, and useful reports to UNMEE and to UN headquarters in New York, allowing the Programme Manager to focus on higher responsibilities such as policy and strategy.

⁶¹ This simply means that no detail is provided concerning activities which are going according to plan; rather the focus is on 'exceptions' to the planned progress, with analysis of the causes for each deviation and the steps underway or envisaged to address any problems.

⁶² Apparently, the Operations Officer stands in for the Chief of Operations during the latter's absence. This 'filling-up' role can be taken over by the EOD Training Officer, who should have appropriate qualifications to serve at least temporarily as an Operations Officer.

The big unknown in this whole matter is, of course, the resolution of the current border stalemate and hence the termination of the UNMEE mission. In spite of that, a close second look should be taken to further rationalise the staffing picture as much as possible (as was done in early 2004), while planning for enhancement of operations that would satisfy not only military requirements but also provide important development benefits to local communities.

It is recommended to re-examine UNMEE MACC staffing options, including further staffing amalgamation options, and define a mine action programme that would enhance current activities by ensuring: (i) the satisfaction of military requirements; and (ii) the satisfaction of community aspirations in line with Force objectives.

Chapter 7 – Information Technology

The UNMEE MACC has a Security Council mandate to facilitate mine action particularly *"through exchanging and providing existing maps and any other relevant information to the United Nations"* (Resolution 1344 [2001]). The establishment of an Information Section within the MACC as the central repository of all mine-related data in Eritrea, as well as the implementation and maintenance of a mine action database for Eritrea, fulfils this particular requirement. The Information Section is absolutely central to planning and implementing all mine action operations in Eritrea

7.1 Basic Structure and Activities of the UNMEE MACC Information Section

The Section consists of two international (one core staff and one in-kind staff) and five national staff members, and is housed in three offices in the MACC headquarters. One may identify seven distinct components of activity as follows:

- ✓ IMSMA database, functioning as the national database in Eritrea.
- ✓ GIS for mapping and to support IMSMA
- ✓ "Add-on" data bases as a complement to IMSMA (for information where IMSMA is lacking, or to enhance existing features)
- ✓ Support to the Field Administration Support System (FASS)
- ✓ Other office support databases, such as "Expendables" (warehouse supply program for IT consumables, or "correspondence").
- ✓ IT with network administration and network support, hardware and software installations, training,
- ✓ IT office support.

Of these components, IMSMA and GIS stand out. If these two systems are used and controlled properly, they can be fundamental and indispensable to all decision making related to mine action.

The Section's main activity is the maintenance of all databases with a well-defined QA/QC scheme for all data. In addition, the Section is producing some 50-200 maps per month, a vast number of statistics and tables and provides support to the Operations Section for tasking MACC and UNMEE, as well as supporting external clients with maps (e.g. development agencies, NGOs, etc.)

EDA has established an information section similar to the MACC. EDA is now capable of running IMSMA and GIS with most – if not all – data coming from the MACC systems. The main challenge here is to find, and appoint, a qualified local IT specialist to assure sustainability (see also Chapter 4). Currently work is in progress to establish an automatic procedure to synchronize the IMSMA databases and to have one updated national IMSMA database running simultaneously in both institutions. A distributed data entry (DDE) facility for this purpose is delivered with the system and has been in use with little or no problem for over two years in Lebanon, Chile, and in Afghanistan. The extensive local changes being performed are designed to allow the system to perform this function while providing EDA with access to just those data elements associated with its own territory.

GeoCell is the cartographic unit of UNMEE. It has a mapping capability similar to that of the MACC Information Section. There is an agreement between the two that standard topographic map production at the scales of 1:50,000 and 1:100,000 will be provided by GeoCell, while all mine-related maps and specific thematic maps will be printed by MACC. Both organizations have an agreement to share regularly updated mapping information to ensure standardisation.

7.2 IMSMA

The Information Management System for Mine Action (IMSMA) is a software-based data management tool for use at mine action centres. It includes a geographic information system (GIS) and can provide, if all goes well, up-to-date information to managers allowing them to plan, manage, report, and map demining related activities.

It can be said that IMSMA is in the formative stage. It has experienced difficulties in the past, and UNMEE MACC has not been spared in this respect. In fact, a redesign of the system is being planned with the intention of ironing out problems that have been experienced. The redesign has been underway since August with planning and tendering processes started in 2003.

Looking at the IMSMA system as implemented in UNMEE MACC, the following positive observations can be made:

- IMSMA has proven to be a most powerful tool in Eritrean mine action: it is fundamental to planning and tasking. UNMEE-MACC has greatly benefited from this tool, as have local authorities such as the EDA and EDO as well as other organizations.
- The position of the Information Section within the UNMEE/MACC organisational structure is most appropriate. The section functions in a staff (advisory) position, supporting a number of users both within UNMEE/MACC and outside. Data entry is controlled by the Section for quality assurance, an essential condition of independence if the system is to maintain relevance and accuracy. Losing control over data entry (which might occur if the section were placed in a line position with data entry by various functional units) could seriously affect quality of output.⁶³
- A number of technical problems related to installation that have plagued the system have been resolved satisfactorily: (i) distortion of polygons; (ii) problems of re-installing IMSMA software; (iii) restoring the IMSMA database.

⁶³ Some people would argue in favour of allowing UNMEE MACC Operations to input data directly for enhanced operational control. This argument has merit, but could give rise to mistakes when different individuals with different functions input a multitude of different mine action statistics into a system that is notoriously complicated and very much in need of simplification. While, on balance in the opinion of the evaluation team, the situation in Eritrea calls for a separation between the Information Section and Operations because important mapping services are provided to external clients, this does not exclude the need for close cooperation between the two, given that Operations is the principal client.

Many problems have been corrected by updates to the system fielded in 2003 and others in early 2004. A number of **technical challenges** remain for IMSMA. They can generally be categorised as the growing pains of the system:

- Problems not related to installation continue to exist: (i) the coordinates of the starting points of mined areas are (occasionally) recalculated by IMSMA in the wrong way; (ii) the export function works erratically (being corrected at the time of writing this report); (iii) there is, in the opinion of the Head of Information Technology, not sufficient consideration for quality control.⁶⁴
- A number of problems have been resolved through ‘add-ons’, intended to create functions desired by UNMEE. It is expected that these ‘add-ons’ will be removed as soon as the respective problems in the IMSMA system have been resolved. These ‘add-ons’ are: (i) Progress databases (to overcome a perceived insufficiency of the progress reporting facility); (ii) Tasking database; (iii) Accident statistics; (iv) MRE statistics; and (v) LIS memo database. (See Box on following page for more detail.)⁶⁵
- Of particular importance in a peacekeeping mission is the ability of the system to identify cleared roads. IMSMA does not support ‘line features’ only ‘fields’. The system suffers, therefore, from a serious handicap in maintaining a database required by peacekeeping forces whose effectiveness is based on mobility. As long as this problem remains, an ‘add-on’ will be fully justified.⁶⁶
- The display of information in IMSMA-GIS is very rudimentary (e.g. the interface that allows more detailed information of a minefield by clicking on the respective point on a map).⁶⁷

In addition to the above technical challenges, an important **operational improvement** could be envisaged for IMSMA:

- In order to facilitate access to the database by non-technical people, it would be useful to try to simplify the system significantly. Generally speaking, the simpler the system the more useful it becomes to others than only the hi-tech wizards.

Preparation for **hand-over** of the system to local authorities:

- In the long run, the IMSMA competence developed in UNMEE MACC will need to be transferred to the local EDA. At the moment the EDA and MACC exchange data once a week (as far as possible), and the latter then enters it into the system. Strategies will have to be devised by UNDP MACBP with MACC assistance and advice, to transfer the IMSMA competence to local authorities in order to be prepared for an eventual withdrawal of peacekeeping forces and the consequent de-mobilization of the UNMEE MACC.

⁶⁴ GICHD asserts that there are a number of facilities that address various aspects of quality control with respect to the content of the data base.

⁶⁵ Subsequent to writing this evaluation report, significant improvements have been introduced into the system allowing the removal of at least two ‘add-ons’, i.e. MRE and accident statistics.

⁶⁶ The system re-design includes a function specifically designed for this purpose

⁶⁷ GICHD asserts, in this respect, that local customization of the map displays is possible within the functionality provided by the ESRI GIS product ArcView 3.2.a or 3.3

While it is clear that IMSMA has provided a powerful means of data entry and retrieval, it is still a work in progress that requires improvement. The recent upgrading of the system (introduced after the present evaluation took place) has removed some important irritants. Recommendations emerging from the above description are self-evident, but will be formulated here as a concluding summary.

In spite of important recent upgrades that now allow the system to operate relatively smoothly, work still needs to be done to resolve remaining technical problems, with particular emphasis on removing remaining ‘add-ons’, and facilitating ease of access by significantly simplifying the system. The installation of the latest version of IMSMA into the MACC system in December 2004 has obviated the need for many add-ons and has greatly enhanced the functionality of IMSMA for the MACC.

Additional efforts will have to be made for handover of IMSMA expertise to the national authorities (EDA), an effort that requires full EDA participation (especially the recruitment and training of a competent IT specialist) and continued close cooperation between UNMEE MACC and UNDP MACBP.

Textbox 4 – IMSMA “Add-Ons” with their functionalities

(1) Progress Database

- Easy entry, storage and retrieval of regular (weekly/monthly) demining activities (‘progress’) in terms of area (m²), road length (km) and cleared devices, grouped by company, defined for any selected time period.
- Additionally, log monitoring system of demining activities to report, if a company did not work in a certain period.
- Main target user is the Ops Section (developed to support Ops at follow-up of tasks).

(2) Tasking Database

- Easy entry, storage and listing of tasks, with interface to IMSMA.
- Tasks can be printed in Gantt charts in different formats showing the completion rate, or listed with key data.
- Locations are displayed in the ‘add-on’. Also transferable to GIS.
- In addition, UXO, which have been reported and/or destroyed by EOD teams, are entered in a user-friendly way to generate tasking as well as completion report.
- Main target user is the Ops Section (developed to support Ops at tasking)

(3) Accident Statistics*

- Data entry and retrieval module of data about accidents and victims in high compatibility with IMSMA. Data structure is compliant to IMSMA; user interface is very similar to IMSMA. Reports are designed to meet the needs of MACC Eritrea. Interface to GIS.
- The particular data feature of mine accidents on roads has been added.

(4) MRE Statistics*

- Works as a report generator, i.e. the interface enables a user-friendly retrieval of MRE beneficiaries by selected period, with a breakdown by age, gender, and organization.

(5) LIS Memo Database

- IMSMA LIS tables do not allow storage of memo fields (long text). LIS was collecting long text data (comments, descriptions, survey problems, etc) in the field, which had to be entered to a database system.
- The system is look-alike and feels similar to IMSMA.

* Note: these two ‘add-ons’ have become redundant after a recent upgrade of the system took place some time after the evaluation occurred.

7.3 – Mapping

The establishment of the MACC's mapping facility has gone through a long and careful process. Based on old Russian maps (which proved to be off by some 1.6 km), GPS was applied correcting locations to some 5-20 meters accuracy and validating the locations of roads. With the introduction of LIS information, community locations were identified. The University of Bern created an entire new map set for Eritrea as part of the LIS project (at a cost of more than \$200,000).

The Information Section of UNMEE-MACC has succeeded in establishing a state of the art map production facility. The quality of maps being produced serve as a standard for the whole country. This is a great achievement!

The marriage of IMSMA and maps works very well indeed. The maps are being used by the Government authorities and the international community with equal enthusiasm. Maps can be produced on very short notice and are freely available upon request (on average, some 50-200 maps are produced a month).

The ability to produce maps has now been introduced to EDA. The latter is now able to produce maps itself. This has contributed significantly to local mine action capacity development.

The ability to produce state of the art maps, and the introduction of IMSMA data allowing for numerous permutations and combinations in map information, has proven fundamental in guiding mine action operations, including prioritisation and tasking.

Chapter 8 – Integration of Military Demining Assets

8.1 Peacekeeping Military versus Civilian Role in Mine Action

Wherever there is a mine and UXO problem, mine action initiatives require a high degree of cooperation between military personnel, civilian mine action staff and local authorities. Although initially intended for force protection and to ensure mobility, military demining capabilities, if properly directed and controlled, can bring important skills and organisational assets to complement activities more focused on community based mine action. Military organisations are normally trained to be mission orientated, and to complete these missions as quickly as possible. This works well for almost all military challenges, and indeed for many humanitarian problems like infrastructure repair. A study carried out by the Geneva International Centre for Humanitarian Demining concluded: “Military forces, both local and visiting, have made a significant contribution to mine action.”⁶⁸

At the same time, it is necessary to distinguish between tasks of a short-term nature and those institutional development activities requiring a long-term approach. Establishing national mine action programmes under post-conflict conditions requires long-term commitment that may continue long after the mission has completed its tasks. Right after a conflict, it is of great importance to gain an overview and a clear picture of the level of pollution in terms of landmines and UXO, and to use the data for priority setting and tasking of the demining assets. Development programmes are very much linked to demining efforts as they can only progress well in a safe environment. Therefore, a database on landmines and UXO contamination has to be set up and maintained properly from the beginning aiming to support long-term efforts. This requires technically qualified staff with long-term presence in the country. It calls for a civilian-run coordination body, as the military is not trained to deal with long-term mine action issues and related socio-economic aspects.

8.2 Joint Assessment Mission

Though small-scale humanitarian demining was carried out before UNMEE started its mission, no comprehensive information was available to assess the scope of the landmine problem in Eritrea and especially in the TSZ.

The HALO Trust conducted a so-called rapid survey right after the border conflict in 2000. It was focused for the most part on the former confrontation lines, but did not cover roads within today’s TSZ. As in most post conflict scenarios, there was a high likelihood of roads being mined by the conflict parties. The results of the HALO survey, therefore, gave only a rough idea of the pollution and certainly were not accurate enough to allow for a reliable assessment of the mine situation in the area of concern.

The Security Council authorized the deployment of 4,200 troops to monitor the 1000 km long and 25 km wide TSZ along the provisional border which is known to be contaminated with landmines and UXO. Both Force protection as well as Force mobility became key concerns.

⁶⁸ Geneva International Centre for Humanitarian Demining, *The Role of the Military in Mine Action*, June 2003, page13

Suitable assets had to be selected and deployed to ensure safety for all UN staff, both on the roads and in fields used by the mission (e.g. compounds and areas around watch towers) Demining of key areas to support demarcation was not part of the mandate at that time.

As safety of all UN staff is of utmost importance, the assets to be used and the demining procedures to be applied have to meet high quality standards.

Assessment missions are of great significance as the mission approaches. Wrong or imprecise assessments may lead to wrong decisions and may affect the mission's future operations, including efficiency and effectiveness factors.

The Joint Assessment Mission (JAM) carried out in July 2000 proposed the deployment of road clearance assets and demining machines capable of preparing the ground for manual deminers and mine detection dogs if needed. Based on an agreement between the UN and the Troop Contributing Countries (TCC) the following mine clearance assets were deployed in early 2001.⁶⁹

Table 7 – Mine clearance Assets Deployed in Early 2001

TCC	Number of staff (all ranks)	Mechanical equipment	Other key assets
Kenya	90		2 teams (45 deminers each), 40 mine detectors
Bangladesh	72	1 Aardvark medium flail	2 teams (36 deminers each), 4 MDDs per team, 36 mine detectors,
Slovakia	130	9 Bozena mini flails, 3 flail systems UOS 155 Belarty, 4 T55 roller systems	

As the technical discussion below explains in more detail, some serious flaws were made in determining requirements. The mechanical assets deployed by the Slovaks, with the exception of one of the nine Bozenas,⁷⁰ were not suitable to the country conditions even though they may have looked good on paper. A closer examination of geographic and weather conditions (poor road conditions, isolation in the rainy season complicating repairs, overheating of equipment in hot areas resulting in equipment breakdown) would have pointed to a selection of more appropriate mechanical assets. In addition to the **inappropriateness** of some of the mechanical assets, one may question the **large number** of such assets deployed (in total 13 flail systems), especially since there was no clarity in the first Security Council Resolution concerning a humanitarian mine action mandate beyond relevant coordination and provision of technical advice (see chapter 3).

Another serious problem of inefficiency resulted from the lack of integration of the TCC combined assets. A fully integrated set of assets, combining mechanical, manual, and dogs has strong potential to raise cost-effectiveness of demining. During the course of the mission, the advantages of integrated teams have been realized, and four such teams are currently being deployed.

⁶⁹ UNMEE MACC, Restructuring of the Demining Assets within UNMEE, page 4

⁷⁰ The Slovaks deployed eight Bozenas '2' and one (more effective) Bozena '4'. Under a new and supplementary contract, Mechem operates four Bozenas '4'.

Experienced inefficiencies of TCC demining assets resulted from other factors. Of importance are the observed insufficiencies in maintaining appropriate mine action standards. As will be discussed below, the Bangladeshi demining contingent worked far below IMAS, thus presenting not only a danger to themselves but also raising questions about the safety of so-called “cleared” areas. Furthermore, there is a problem of accountability: demining contingents are accountable to their own national governments; any requests by UNMEE MACC to improve performance (e.g. the Slovaks reportedly worked one and a half hour per day on average, managing to clear a mere 200 meters of road a day on average) would be of no avail.

In the course of the last few years, it has also become clear that deployment of commercial demining assets as a supplement to TC assets provides much synergy to the overall mix of the demining effort. The work of the first commercial company (UXB), contracted for road clearance, was terminated because of a new requirement being identified for rapid route clearance. Its successor (Mechem) has proven itself to be a highly efficient outfit. In addition, there are very significant cost savings by using commercial assets as opposed to TCC assets (see Chapter 9) and the commercial company is much more controllable.

A number of recommendations emerge from the above:

A Joint Assessment Mission should include a highly experienced mine action specialist thoroughly familiar with force demining requirements as well as demining in accordance with IMAS. The specialist should also have a sound knowledge of all demining technologies available and their appropriate application. DPKO may have to fall back on external expertise to cover the whole range of aspects.

The need for a judicious mix of demining assets will need to be anticipated right at the start of the mission, based on

- (i) a clear definition of tasks expected to be performed, combined with a liberal rather than a narrow interpretation of the Security Council Resolution defining the mandate;**
- (ii) the realization that there is a considerable dual benefit of demining accruing to both the military and the affected communities; and**
- (iii) the significant scope that exists to supplement and/or complement traditional contingent demining assets with commercial demining assets.**

DPKO needs to institutionalise the authority and competence to negotiate with TCC in order to ensure the best contribution suited to circumstances. UNMAS could play an important role in this respect.

The determination of the right assets during the Joint Assessment Mission also has important implications for the **source** of funding. It allows for a more considered inclusion of anticipated expenditures into the Assessed Budget, rather than having to rely on subsequent contributions to the Voluntary Trust Fund. This suggests the following recommendation:

The Assessed Budget should include a well-considered mix of expenditures that takes into account the natural unfolding of demining activities that normally change significantly when the mission moves from an emergency state to a state of stability.

8.3 Assessment of Assets Deployed to Eritrea

8.3.1 Mechanical equipment

The military road clearance equipment deployed to Eritrea by the TCCs was not suitable to meet safety and clearance requirements. Military demining equipment, especially when it is exclusively designed to breach minefields in a combat situation, is not reliable enough to clear areas to a level that is demanded by International Mine Action Standards.

(i) Roller systems

Roller systems attached to main battle tanks, such as the KMT system, are designed to breach paths into minefields in combat situations, but not to clear roads to a standard demanded by IMAS. The disc array in front of the tank covers only a small area of the road to be treated. Therefore, several runs are necessary to cover the whole road and the roadside, if considered necessary. A required overlap to ensure a full coverage of the ground in a specified area is hard to achieve, especially on curves in the road. Additionally, roller systems are proven to be unreliable on uneven ground as areas may not be treated by the disc and therefore mines do not detonate as intended. From January 2002 to October 2002 the Slovaks treated only 317 km of roads with their roller systems. Compared to that the civilian contractor MECHEM cleared 1,662 kilometres of road within 9 months in 2004⁷¹.

Road clearance is known to be technically difficult and time consuming, no matter what sort of mines are likely to be encountered. Both, the humanitarian demining community and the military still have to rely on either the use of MDD or on vehicle mounted metal detection systems. Other technologies such as ground penetrating radar are still premature to be fielded. Even most of the NATO forces, which are reputedly better equipped than many armies from developing countries have currently no sufficient answer to respond to this particular challenge.

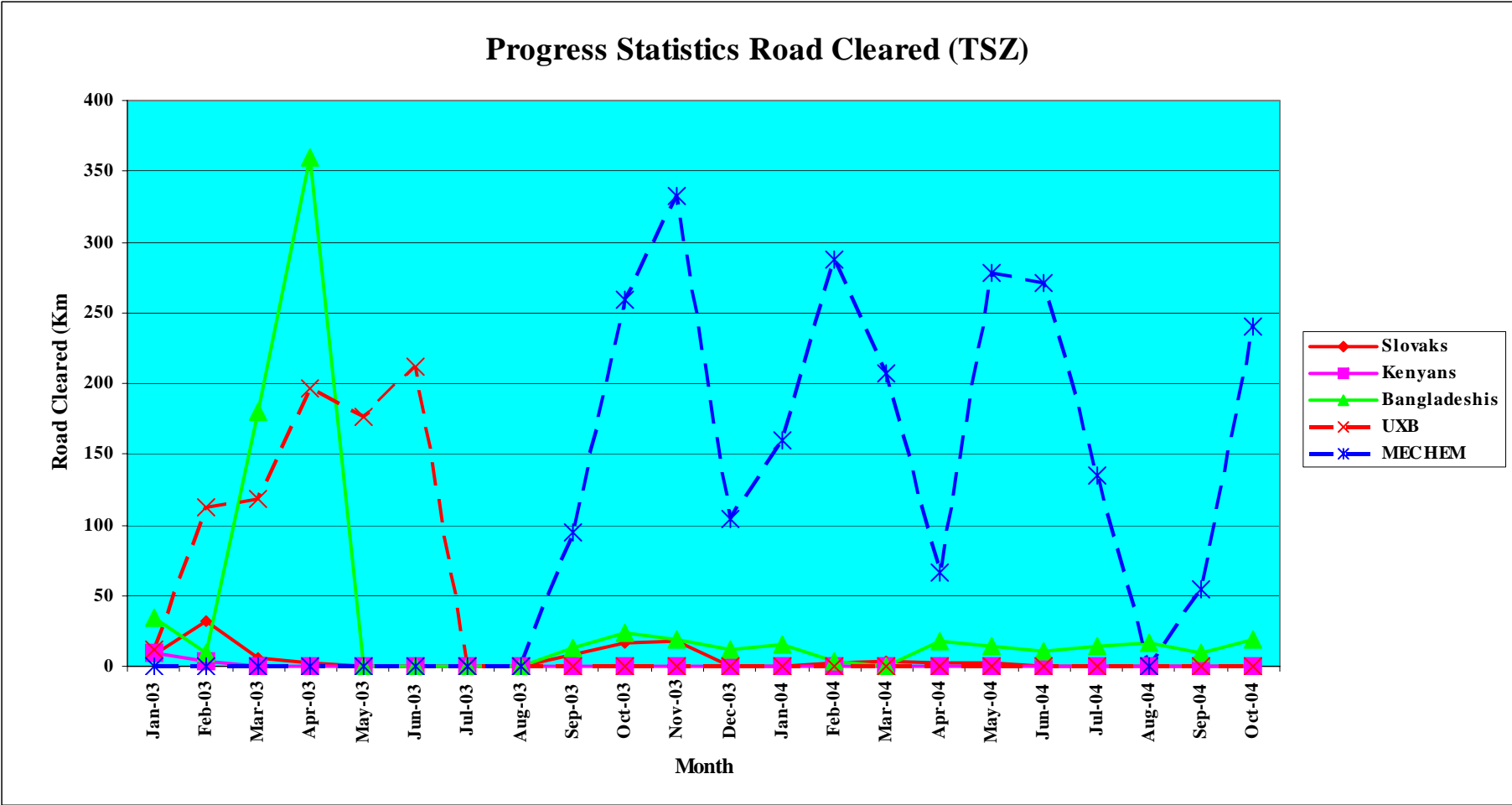
During the last decade mine action has developed quickly. A great many studies have been carried out leading to enhanced productivity, highest safety standards and consideration of socio-economic aspects. The UNMEE MACC as the coordination body has to be given the mandate to use equipment that has the technical potential to ensure the highest possible level of clearance, as otherwise safety of UN staff (and civilians for that matter) cannot be guaranteed.

⁷¹ UNMEE MACC, Demining Progress Statistics, 01 January 2004 – 31 October 2004, 01 January 2002 – 31 December 2002



Figure 1 – T 55 tank roller operating in Eritrea

The decision made by the MACC in late 2002 to contract a commercial company for road clearance was the right one as the military assets did not have the technical potential to ensure a high level of safety and clearance performance. The increase of productivity, and consequently of safety for mission staff, can be deduced from the graph shown on the following page.



Graph 1 – Clearance performance of commercial and military demining units

(iii) Heavy flail systems

Heavy flail systems, such as the Belarty (see picture below) that are based on a battle tank chassis, have never been tested impartially and independently as they are not commonly used for humanitarian mine clearance purposes. Therefore, the clearance performance of such systems has not been properly evaluated. However, experience shows that the running costs of heavy machinery such as battle tanks (fuel, oil, lubricants) are extremely high and their technical complexity often causes downtime, which makes them unsuitable for large scale demining operations. Poor road conditions in developing countries make transportability of a 30 tonne machine difficult; sometimes even impossible.

Therefore their suitability for operations in developing countries is considered to be very limited. Many kinds of flail systems are not applicable to road clearance as their working tools destroy the surface of dirt roads. Their main purpose is to prepare the ground aiming to support manual deminers or mine detection dogs (MDD). Clearance statistics provided by the MACC do not show the actual use of this particular machine type, as they exclusively display the m² cleared by the Slovakian contingent as a whole.



Figure 2 – UOS 155 Belarty

(iv) Bozena mini flail

The system has been independently and impartially tested by the Croatian Mine Action Centre (CROMAC) in January 2002 and basically is proven to be a valuable asset for ground preparation to assist operations carried out by manual deminers and mine detection dogs (MDD). The Bozena is not a stand-alone mine clearance asset, which means that the area treated by the machine has to be searched either by dogs or manual deminers.

According to the CROMAC test report, the Bozena has an average productivity of 300 to 500 m² per hour, depending on soil conditions, type of vegetation encountered, and level of mine contamination.⁷² Low running costs and ease of logistic support and transport (5,500 kg) make the system suitable in many situations.

⁷² Republic of Croatia, Croatian Mine Action Centre, Testing of Bozena 3 Mine Clearance Machine, January 2002, page 33

However, dry and hard soil conditions may cause technical problems to the machine and require modifications; especially with regard to the cooling system. The particular environment encountered in the operational area has to be assessed properly prior the deployment of equipment in order to avoid excessive downtime.

The soil conditions in the areas visited by the evaluation team (Shilalo-Sector West) allow the use of the Bozena for ground preparation. The suitability of the machine for clearing the pillar sites in other areas cannot be evaluated as there may be other soil conditions to be encountered.

The Department of Peacekeeping Operations (DPKO) agreed with the Slovakian Government on the deployment of nine Bozena mini flails to Eritrea. Their theoretical daily output (5 working hours/400m² per hour per machine) is 18,000m². Assuming the machines were operational five days a week and 50 weeks per year, roughly 4,500,000m² could have been treated. However, according to UNMEE MACC progress statistics for 2003, the Slovakian contingent treated only 687,918 m² of ground. This figure possibly includes an unknown area treated by the 3 Belarty systems. The figures show that the machines were extensively under-utilized, at high opportunity costs. The decision made in 2000 to deploy 12 flail systems does not seem reasonable considering the vast degree of under-utilisation.

The UNMEE MACC is going to start a demining project called “integrated demining” in early 2005. After the withdrawal of the Slovakian contingent, there are no ground preparation systems left in Eritrea. UNMEE MACC, therefore, decided to contract MECHEM for ground preparation using four Bozena mini flails and to combine these systems with manual deminers and, optionally, with mine detection dogs. This approach seems to be reasonable and the local population will benefit highly from the expected increase of productivity.



Figure 3 – Remotely controlled Bozena mini flail

(v) Aardvark flail system

The Aardvark is a mechanical mine clearance system mainly in service with the military. It is proven to be a valuable asset when used in the right environment and under appropriate circumstances.⁷³ However, the mass of the vehicle (roughly 15 tonnes) requires a low-bed trailer for transportation and an appropriate road infrastructure, which can be found only in a few areas of Eritrea. This has to be taken into account prior to deployment. MACC staff

⁷³ United States Army, Communications- Electronic Command Research, Development and Engineering Centre, Fort Belvoir, Virginia, Capabilities Demonstration Test Report, January 2002

pointed out that the Bangladeshi contingent had no appropriate transport vehicle to ensure the deployment of their demining machine to the demining sites as required. In 2003 the Aardvark was only operational for seven hours in total and treated not more than 2,400 m²,⁷⁴ an area that can normally be done by a comparable machine in one day.



Figure 4 – Aardvark on a low bed trailer.

The mass of this vehicle leads to difficult transport on dirt roads.

All demining organisations, whether military or civilian, acting under UN umbrella in a defined area of responsibility must follow mine action standards that are derived from IMAS. The equipment applied must have the technical potential to achieve full clearance. Unfortunately, many military forces are not equipped to carry out large-scale road clearance operations leading to results that come up to IMAS.

The following recommendations are offered:

Military demining assets offered by TCCs have to be assessed accurately prior their deployment with the prospect of their potential utilisation, clearance performance, suitability for the particular environment, and cost-effectiveness.

DPKO should arrange for a review of the use of the assets deployed to a mission after one year aiming to do adjustments, if necessary.

The use of commercial assets should be considered an option from the beginning of a mission, if the security situation allows.

8.3.2 Demining equipment and procedures of military demining units

Demining aims to identify and remove or destroy all mine and UXO hazards from a specified area to a specified depth. For buried landmines and UXO this depth should normally not be less than 13 centimetres below the original surface level.⁷⁵ The figure is based on the effective

⁷⁴ United Nations, Office of Internal Oversight Services, Internal Audit Division-1, 29 September 2004

⁷⁵ International Mine Action Standards. Series 9

detection depth of the majority of modern metal detectors. This means that the equipment used by both civilian and military demining teams has to ensure a performance, which meets this internationally, agreed standard.

The beneficiaries of demining operations, regardless whether they are mission staff or local population, must be confident that cleared land is safe for their use. Equipment and operational procedures applied by the demining units – both military and civilian – have to meet this requirement.

The evaluation team visited demining operations carried out by the Kenyan and Bangladeshi contingents in Shilalo, Sector West. Both units conducted tasks given by the MACC through the FMAC and seemed to be highly motivated. However, there was a significant gap between the two contingents with regards to working procedures, equipment and understanding of safety requirements.

The Kenyan demining units were trained by British experts in Nairobi prior to their deployment. They apply working procedures that are in line with IMAS (for instance appropriate safety distances between deminers and set up of the demining site). Their personal protective equipment is “state of the art” and meets all safety requirements for the demining staff. MACC staff stressed that deminers encounter highly mineralised soil in the Shilalo area that seriously affects metal detectors. Therefore the metal detectors used have to be of high quality. Only modern models have been proved to have the feature to compensate for soil conditions with minimal loss of target sensitivity. The Minelab model used by the Kenyans has been tested independently and impartially by various organisations and performed generally well. It can be concluded that the Kenyan deminers achieve clearance standards demanded by IMAS and their working procedures in conjunction with their protective equipment ensure a high level of safety for the staff. Their relative productivity under the prevailing conditions cannot be judged as there are no other operating units using manual methods only.

By contrast, the Bangladeshi deminers apply purely military methods that do not correspond to the latest knowledge on safe and effective demining.



Figure 5 – Bangladeshi deminers conducting “road clearance” in the Shilalo area

The clearance methods applied should guarantee a high level of safety for the deminers. The use of picks for excavation, the small safety distances between the deminers and the poor

personal protective equipment (flak jackets, skiing goggles) are only three examples showing deficiencies with respect to internationally agreed safety standards.

As displayed on the picture above, the Bangladeshi contingent does not use base sticks or markings to ensure that the whole area searched is covered entirely as demanded. The performance and the suitability of their metal detectors is at least questionable as it is an old model (METEX 4122/4125, produced by Institute Dr. Foerster – Germany) which has no “ground compensation” system to compensate for highly mineralised soil and would therefore have difficulties to perform well under the conditions encountered in the Shilalo area.

The MACC operations branch has been aware that the performance of the Bangladeshi deminers is not appropriate to meet necessary requirements. *“As we have till now not had the confidence in the clearance we have only allowed the Bangladeshi to demine low risk road tasks where the likelihood of mines is low and the verges of roads where only high metal content AT mines have been found. We do not record the roads cleared by the Bangladeshi as cleared until the route clearance contractor has also cleared them”*.⁷⁶

In this context UNMEE MACC commented in 2003 on the dangers of *“...demining in purely military methods, leaving behind questions of cleared land as a result of poor marking and demining processes”*⁷⁷. The paper was disseminated to DPKO, UNMAS and the UNMEE force in 2003 apparently without leading to any changes.

The International Mine Action Standards are issued by the United Nations to guide planning, implementation and management of mine action programmes. The work of preparing, reviewing and revising these standards has been conducted by technical committees with the support of international organizations, governmental bodies and NGOs. They have been developed to improve safety and efficiency in mine action, and to guarantee the full clearance of potentially affected land. The IMAS cover a wide range of issues from the accreditation of mine detection dogs (MDD) to medical support for demining staff, from safety and occupational health to survey, from sampling of cleared land to storage and transport of explosives. They are well accepted by the international demining community and serve as the common ground, as they are based on relevant experiences gained from all over the world and latest research results. The UN Special Committee on Peacekeeping has specifically recommended that troop-contributing countries follow national and international standards for mine action, including IMAS.⁷⁸

The Bangladeshi contingent started demining operations in 2001 and according to UNMEE MACC they have cleared manually 1,726,868 m² of land so far.⁷⁹ This does not include 1,146 kilometres of road treated by them since 2001. Due to the inadequate methods used during the last four years, the status of the area cleared is questionable and the gain for either the local population or the Force is debatable at best.

⁷⁶ David Bax, chief of operations UNMEE MACC, e-mail to Johannes Dirscherl, 19 November 2004

⁷⁷ UNMEE MACC, Restructuring of Demining Assets within UNMEE, page 5

⁷⁸ See the section on mine action in the fifty-seventh session of the C34 Comprehensive Review of Peacekeeping, paras. 145-149.

⁷⁹ Demining Progress Statistics January 2001-October 2004

If it is the Force policy to win the hearts and minds of the local population,⁸⁰ the use of military demining assets can be a valuable contribution to this end. However, an accident in an area previously cleared by UNMEE deminers would certainly be counterproductive and has to be avoided.

The issue was raised by the evaluation team during a discussion with the Force Commander. It resulted in a decision to train the Bangladeshi contingent and introduce higher standards to their operation. The evaluation team is not aware of any reason as to why such a decision was not made when these marginal standards became known shortly after the deployment of the Bangladeshi contingent. Even if the MACC and the Force Commander did not have the mandate to influence the operating procedures of demining contingents, the potentially serious impact on the Mission should have raised alarm.

All demining organisations, no matter whether they are military, commercial or civilian, acting under a UN umbrella in a defined area of responsibility must follow mine action standards that are derived from IMAS. The equipment applied must have the technical potential to achieve full clearance.

The UNMEE MACC may have to consider clearing the Bangladeshi areas again using a commercial company to ensure full safety, or at least to carry out a comprehensive threat assessment in order to decide on further action.

The following recommendations emerge:

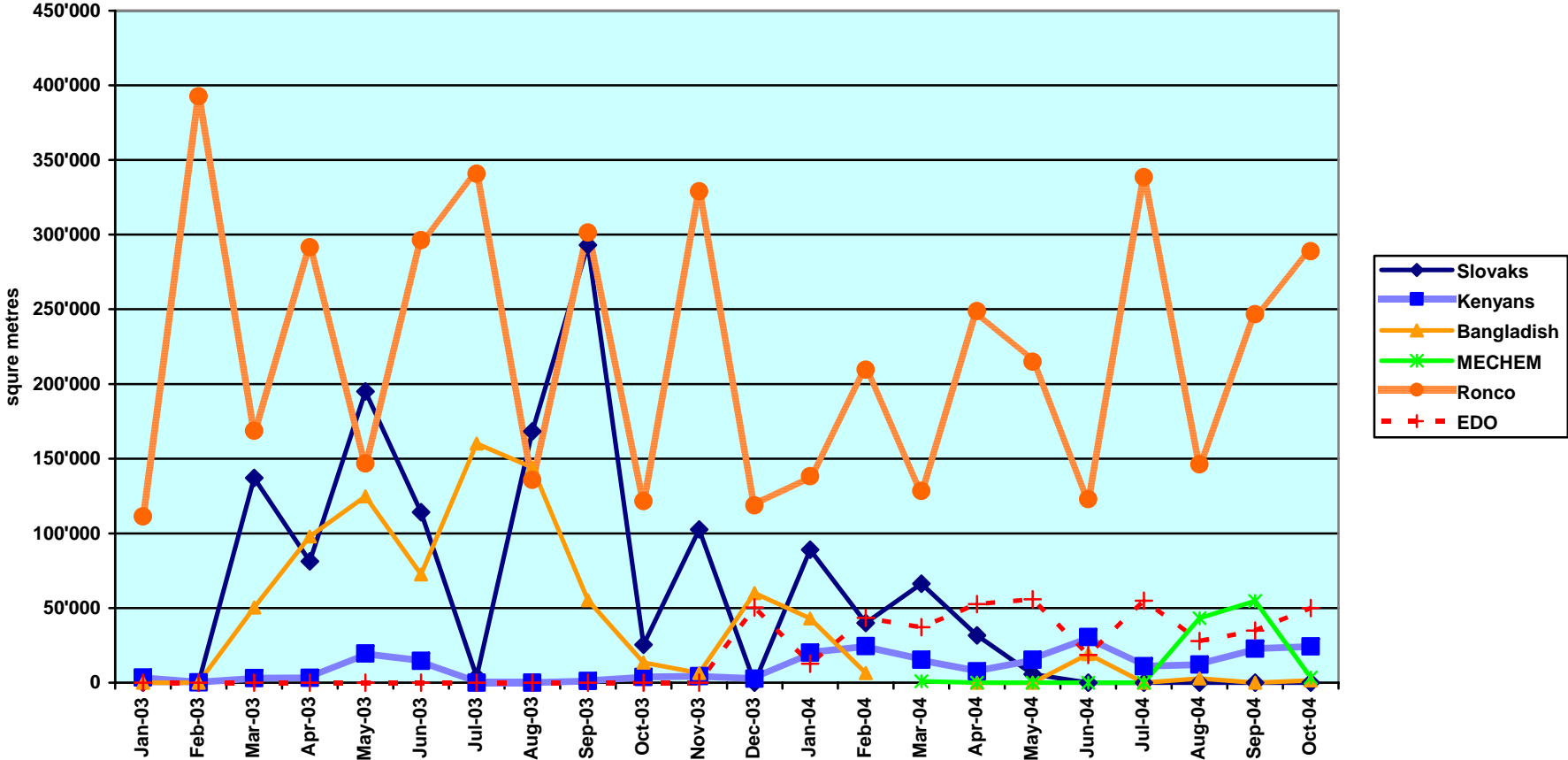
Demining staff intended to be used in the UN area of responsibility must be trained, prior to deployment, to apply international mine action standards.

UNMAS may wish to consider quality assuring existing regional mine action training centres for future training purposes of TCC contingents.

Donors should be requested to contribute equipment and training to improve the standard of demining assets.

⁸⁰ Force Commander Major General Singh, interview with the evaluation team, ...

Progress Statistics - Area Cleared TSZ



Graph 2 – Area Clearance in the Temporary Security Zone

Chapter 9 – Cost-Effectiveness Analysis

9.1 Comparison of Military and Civilian Demining Units

The TORs list the following as one of the three goals of the evaluation:

Provide a cost benefit analysis of peacekeeping demining versus commercial demining in support of a security council mandate.

The GICHD proposal incorporated the following to elaborate our understanding of what was required and feasible:

A comparative cost-benefit or, more likely, cost-effectiveness analysis of demining in support of a Security Council mandate performed by (i) peacekeeping forces and (ii) commercial firms, together with a comparative assessment of the two types of demining service providers in terms of other relevant performance criteria (access, flexibility, safety, timeliness of availability, capacity to deliver integrated mine action services, etc.).

Cost-Effectiveness Analysis is part of the broader family of analytic techniques termed Cost-Benefit Analysis (CBA), which are used to compare inputs into a production system (such as a demining service) relative to the goods and services produced by that system. The goods and services produced can be assessed at the point of immediate outputs (for demining, areas surveyed or cleared, lengths of road surveyed or cleared, devices destroyed, etc.) or outcomes – how the people receiving the outputs actually make use of them (e.g. planting crops on the areas cleared, travelling on the roads cleared, etc.) for their benefit.

Full CBA can be done when four conditions are met:

- i. a reasonably complete and accurate set of data on the quantities of resource inputs,
- ii. a reasonable basis for determining the financial costs of those inputs,
- iii. a reasonably complete and accurate set of data on the quantity of outputs (and, if possible, outcomes), and
- iv. a reasonable basis for determining the financial value of the outputs/outcomes.

While problems may arise in obtaining or determining any of these data, satisfying the third and fourth conditions is generally challenging. In meeting the third condition (quantities of outputs), we need to ensure we are comparing similar outputs. There are three common problems, all of which arise frequently in the field of demining:

Table 8 – Common Problems in Comparing Productivity Figures

Problem	Examples of errors
Apples versus Oranges (comparing dissimilar things)	Comparing suspected hazards rendered safe by (i) combined survey and clearance versus (ii) full clearance.
Apples versus rotten apples (dissimilar quality of clearance)	Comparing areas cleared to high (or humanitarian) standards versus areas cleared to a level of “acceptable” risk (e.g. breaching)
Apples versus mixed fruit (dissimilar numbers of benefits)	Comparing single capacity units (e.g. demining) versus multiple capacity units (e.g. demining and peacekeeping)

Meeting the fourth condition (value of outputs) is particularly challenging when the outputs lead in turn to benefits which are intangible (such as an enhanced sense of security for civilians or for peacekeeping troops) or which are not comfortably expressed in financial terms (such as the value of lives and limbs saved). Thus, for demining, one may be able to determine values for cleared land, buildings, roads, etc. based on the market value or the value of future production made possible by the clearance, but some of the benefits – security; lives and limbs saved – are not easily reduced to financial terms. In some mine action situations, it is precisely these intangible or non-financial benefits that are the most important.

When only the final condition (financial values of outputs/outcomes) is not met, Cost-Effectiveness Analysis (CEA) can be used to compare the cost of producing the same set of outputs using different organisations, clearance assets, and so on. However, using CEA in a rigorous fashion to produce a clear and unambiguous result still requires that the first three conditions are met to a reasonable degree at least. Often – as in this case – some data are missing or ambiguous. Good practice then entails (i) identifying the data questions or problems, (ii) making reasonable assumptions for how to address these and stating these assumptions clearly, and (iii) testing to assess whether the results obtained are sensitive to reasonable changes in the assumptions employed.

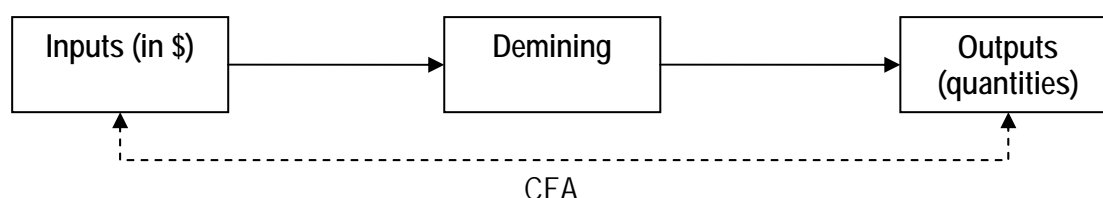
9.1.1 Data Problems and Questions

There are good data to meet the first two conditions: (i) the quantities of resource inputs and (ii) their costs to UNMEE. There are however problems in meeting the third condition (quantities of outputs). We need to guard against the three errors outlined in the previous table, but more fundamentally there are serious discrepancies in the figures reported on the areas and roads cleared. Just a few examples include:

Table 9 – Serious Data Discrepancies

Data Source	IMSMA data ⁸¹	Annual Report 03	Audit Report
Area cleared m² – 2003			
Slovak	1,120,740	1,634,975	385,682 or 1,282,033 or 1,667,715 ⁸²
Bangladeshi	784,996	1,576,874	1,310,563
Kenyan	55,868	104,611	102,620
Ronco	2,754,528	7,208,758	N/A
Road cleared km – 2003			
Slovak	91	274	N/A
Bangladeshi	651	263	N/A
Kenyan	13	0	N/A
MECHEM	791	649	N/A

Discrepancies of this magnitude mean that CEA calculations for even the simplest cases (as in the diagram below) can be called into question.



Based on advice from the Head of the MACC Information Section, we have used the IMSMA data.

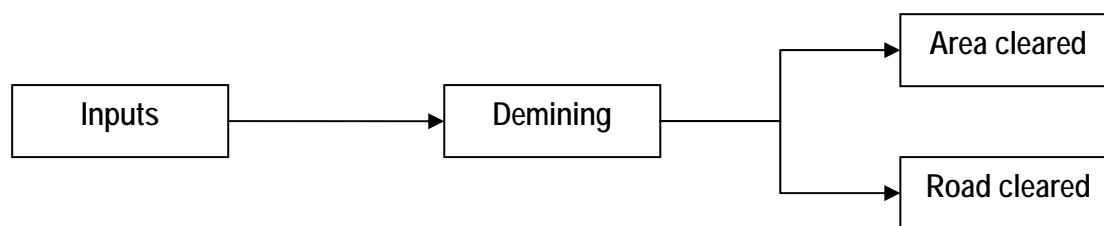
The second problem is that (at least) two different types of demining outputs are being produced, and these are measured in different ways:

1. areas cleared (measured in square metres)
2. roads cleared (measured in linear kilometres)

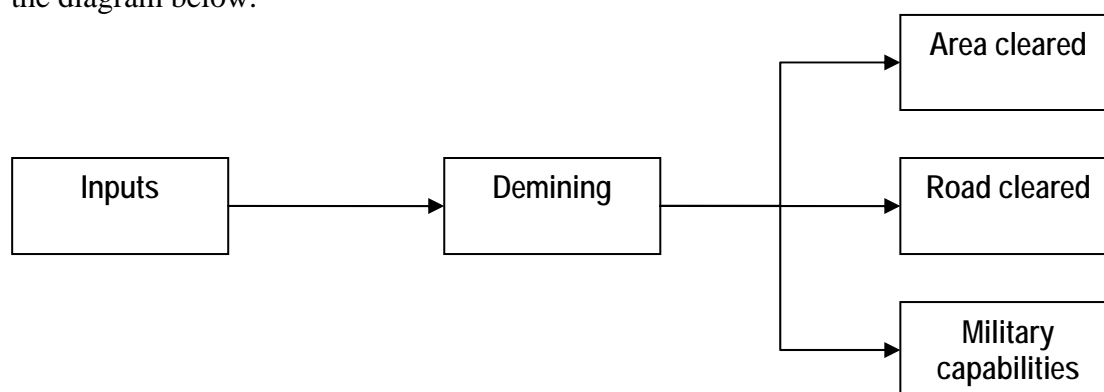
This is not a problem when comparing like-with-like, but creates a problem of the “apples versus mixed fruit” sort when comparing a unit engaged to produce a single type of output (such as MECHEM, contracted for road survey and clearance alone) with a unit producing two types of outputs (such as the Slovak contingent, as depicted below) unless we have reliable data on which assets worked on which type of task and for how long. We do not have these data.

⁸¹ From file *Copy of Statistics_2003-2004.xls*

⁸² Table 2 on page 4 of the Audit Report gives separate figures for clearance by manual deminers (385,682 m²) and by mechanical assets (1,282,033 m²). The mechanical assets available to the Slovak contingents are not capable of clearing roads or areas to acceptable standards. The T55s with rollers can do risk-reduction on roads, while the flails can do ground preparation. Further, it is unclear whether the Slovaks did manual clearance on land that had already been prepared by machines, or worked on entirely separate hazards.



A closely related issue in the case of Eritrea is the fact that, inherently, military demining units offer additional benefits. If necessary, they can be pressed into other tasks to support the mandate of the peacekeeping mission (peacekeeping, civil construction works, etc.). They are also equipped to defend themselves and can be deployed in situations in which the presence of civilian contractors would be inappropriate or politically unacceptable. Their military capabilities – even if never called upon – are available to the force commander as a reserve, allowing more active use of other contingents. These capabilities are valuable (and a cost estimate is provided later in this chapter). Therefore, the “production” of the Slovak, Bangladeshi, or Kenyan demining contingents might be more correctly depicted as in the diagram below.



9.1.2 Calculations

Area clearance

We have adequate data for a good comparison between a military demining contingent (the Kenyans) and a commercial demining firm for both calendar year 2003 and (with somewhat more confidence) the U.S. fiscal year 2004 (1 October 2003 to 30 September 2004). The calculations are summarised below and depicted in the graph on the following page.

Table 10 – Cost-Effectiveness Calculations for Area Clearance

	m ²	\$	\$/m ²	Ratio
Kenyan 2003	55,868	\$2,626,054	\$47.00	59.86:1
Ronco 2003	2,754,528	\$2,163,000	\$0.79	
Kenyan FY 04	170,071	\$2,626,054	\$15.44	25.13:1
Ronco FY 04	2,363,415	\$1,452,000	\$0.61	

Notes: Area cleared figures from IMSMA (*Copy of Statsics_2003-2004.xls*). Costs for Kenyans from memo ‘Possibility of purchasing Slovak COE’ by Sergiy Mazurov, (minor re-calculations by T. Paterson. Costs for Ronco from *To Walk the Earth in Safety: 2004*, p. 7

We should note that Ronco uses MDDs in support of its manual teams. Depending on weather and ground conditions, the support of MDDs can significantly enhance the productivity of manual deminers.⁸³ While this is not an issue from the perspective of cost-effectiveness, it would be possible to decompose the cost-effectiveness advantage of Ronco into two components: (i) better mix of assets and (ii) better ‘management’ of assets.⁸⁴ For example, if we determined that Ronco was 25 times as cost-effective as the Kenyans (equal to the ‘best case’ figures for 2004), and that MDDs increased the cost-effectiveness of manual teams by two-thirds (about 67%) on average, the decomposition would give:

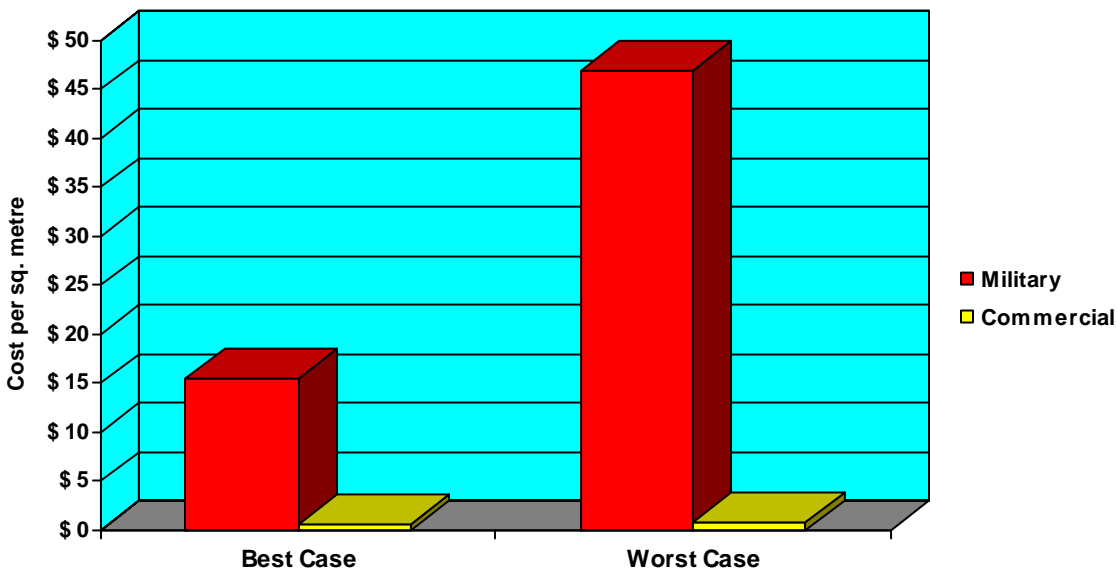
$$\begin{aligned} \text{Total difference} &= \text{different asset mix} * \text{different management} \\ 2500\% &= 167\% * \text{different management} \\ \text{different management} &= 2500\%/167\% = 15 \text{ (i.e. 15 times as cost-effective)} \end{aligned}$$

Thus, the bulk of the cost-effectiveness ‘advantage’ stems from different management approaches (broadly defined and from the perspective of cost-effectiveness).

Intangibles:

1. Both the Kenyan and Ronco clearance SOPs are IMAS compliant, so safety for deminers, peacekeeping troops, and civilian populations is comparable.
2. Kenyan forces have military capabilities.

Graph 3 – Cost-Effectiveness: Area Clearance Comparisons



⁸³ MDDs particularly enhance productivity of manual teams when there is high metal content in the soil. This significantly slows manual clearance as the metal fragments give many ‘false positive’ readings with metal detectors.

⁸⁴ Of course, we do not mean to imply the Kenyan officers or others in the Force chain of command are bad managers. We have not studied this question in detail and are in no position to make a pronouncement. It does seem reasonable to conclude that military forces and their officers face very different incentives than do commercial firms and managers and – put simply – the top priority of military officers is not to maximise the cost-effectiveness of their demining operations.

Road clearance

We have comparable IMSMA data for production for MECHEM and the Slovak demining units. We also have solid cost data for both organisations. However, the Slovak units also conduct area clearance operations (both clearance and ground preparation by machine) and civil engineering works. We do not have detailed data on which Slovak assets were assigned to which tasks, so cannot allocate the total costs for the Slovak contingent with confidence. Therefore, we have compiled “best case” and “worst case” figures (from the Slovak perspective):

Best case – We assume that only the assets specifically designed for road clearance (albeit, not in compliance with IMAS) and the minimum necessary troops and supporting assets are charged to road clearance, along with a contribution to overheads based on the numbers of troops. Specifically, the “Road Clearance Package” of assets and associated costs are:

Table 11 – Minimum costs of Slovak Road Clearance Capacities

Item	Unit cost/mo.	Units	Cost/month
Tanks, mine clearing	\$8,477.00	4	\$35,630.00
Roller system for tanks	\$1,422.00	4	\$6,003.00
Ambulances	\$4,727.00	4	\$19,828.00
Troops & leader for above	\$1,181.93	19	\$22,456.73
Supporting	\$1,181.93	5	\$5,909.67
Petrol, oil, lubricants			\$18,000.00
Total, direct costs of Road clearance package			\$107,827.40
All other costs for Slovak contingent			\$715,634.91
Allocation of other costs (36 troops/200 troops * cost)			\$85,876.19
Total costs/month, Road clearance package			\$193,703.59
Annual total costs, Road clearance package			\$2,324,443.07
Notes: Cost figures from data in memo ‘Possibility of purchasing Slovak COE’ by Sergiy Mazurov, with supplemental calculations by T. Paterson.			

Worst case: All road clearance by the Slovaks and by MECHEM are converted to estimates of areas cleared (m²)⁸⁵ and combined with those given for area clearance. The total costs of both Slovaks and MECHEM are then used to calculate costs per m². To compare full year periods, clearance data for January-December 2003 is used for the Slovaks (who departed mid-2004), while October 2003 – September 2004 are used for MECHEM (which started operations in September 2003). The intermediate calculations are:

	km	m ² (Roads)	m ² Other	Total m ²
Slovaks (2003)	91	637,000	1,120,740	1,757,740
MECHEM (2003-04)	2,156	15,092,000	0	15,092,000

The cost-effectiveness calculations are then:

⁸⁵ Road width averaged 7 meters (e-mail from D. Bax to J. Dirscherl, dated 9 December 2004). Therefore, 1 km or road is estimated as 7 meters * 1000 meters = 7,000 m².

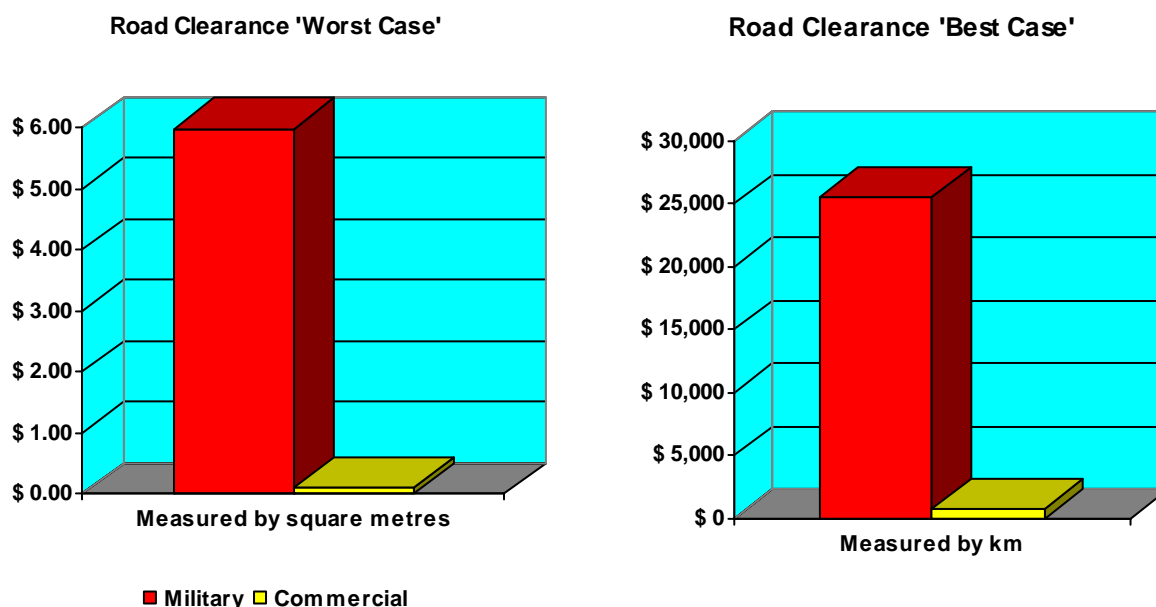
Table 12 – Cost-Effectiveness Calculations for Road Clearance

	km or m ²	\$	\$/unit	Ratio
Best case:				
Slovaks (2003)	91 km	\$2,324,443	\$25,543	35.12:1
MECHEM (2003-04)	2,156 km	\$1,568,371	\$727	
Worst case:				
Slovaks (2003)	1,757,740	\$10,522,201	\$5.99	57.62:1
MECHEM (2003-04)	15,092,000	\$1,568,371	\$0.10	
Notes: Area cleared figures from IMSMA (file <i>Copy of Statistics_2003-2004.xls</i>) Cost figures for Slovaks from data in memo 'Possibility of purchasing Slovak COE' by Sergiy Mazurov, with minor re-calculations by T. Paterson, and from the MOU for the Slovaks. Cost figures for Mechem from the OIOS Audit Report (September 2004), p. 3				

Intangibles:

1. The Slovak road clearance machines (tanks and rollers) are not IMAS compliant, but the combined assets deployed by MECHEM are. Safety for deminers, peacekeeping troops, and civilian populations is likely to be higher for roads surveyed and cleared by MECHEM. Roads “cleared” by the Slovak contingents may have to be re-cleared for full civilian use.
2. Slovak forces have military capabilities.

Graph 4 – Cost-Effectiveness Examples: Road Clearance



Valuing Military Capabilities

To this point, we have referred to military capabilities as an intangible benefit associated with military demining units. However, the TCCs are paid for their personnel and equipment and, assuming this payment is a reasonable reflection of the value of the military capabilities, this would allow us to make a concrete estimate of the value of this ‘intangible’. Reviewing the MOUs in detail and deducting the

equipment useful only for demining allows us to generate the following estimates (in millions of dollars per year):

Table 13 – Valuing Military Capabilities

Total cost of Force demining units	\$18.6 m
Less: specialised demining equipment	-\$2.3 m
Cost of military capabilities	\$16.3 m
Savings (for paying civilian deminers)	\$2.3 m

Thus, it would be wrong to conclude that the primary benefit from replacing military demining units with commercial demining firms will be a reduction in the total costs of UNMEE operations. If the troops in the demining units were, for example, infantry without specialised equipment, the reimbursement from the UN to the TCCs would still be in the neighbourhood of \$16.3 million per annum. Thus, the principal benefits of using commercial demining firms are: (i) higher productivity, (ii) clearance to higher standards, and (iii) enhanced flexibility in deployment of assets.

9.1.3 Conclusions

In Eritrea, military demining assets have been between 25 and 60 times more expensive than civilian⁸⁶ demining assets from the perspective of the areas surveyed and cleared. In addition, civilian assets have been working to higher standards of quality and safety than have most of the military demining units available to UNMEE to this point in time.

Military demining units embody both demining capacities and military capacities. This same set of capacities could be provided at less expense by (i) civilian demining assets coupled with (ii) conventionally equipped combat and support units from TCCs. In addition, UNMEE would benefit because far more roads and dangerous areas would be cleared, and to higher standards. Civilians who will also use those roads and areas will similarly benefit.

9.2 Effectiveness of UNOPS as Executing Agency

One of the subordinate objectives listed in the TORs was to:

Review the performance of UNOPS as Executing Agency and its effectiveness in providing substantive and management services as well as administrative and financial support.

The evaluation team did not have the time to conduct the kind of detailed analysis of the performance of UNOPS that would be necessary for an authoritative response to whether the agency provides services in a cost-effective manner – a question which would require a comparison with other organisations discharging similar

⁸⁶ The data available do not allow a direct comparison of different categories of civilian demining organisations – commercial firms versus not-for-profit NGOs. Therefore, we use the generic term ‘civilian’.

responsibilities or, at the very least, a comparison with performance benchmarks which do not, to our knowledge, exist.

Our investigations do, however, support the following conclusions:

- The UNOPS mandate, policies, and procedures allow it to respond more flexibly – including by contracting specialised assets & expertise from civilian organisations – than DPKO, which must deal with sometimes quixotic Security Council resolutions and mobilise resources through complex negotiations with TCCs;
- UNOPS has extensive experience in supporting mine action programmes for both UNMAS and UNDP, and has developed a large roster, a variety of specialised policies and procedures, administrative aids, etc.;
- UNOPS has played a key role in overall management of the programme, including technical, contractual, financial and administrative support;
- In reviewing the role of UNOPS with respect to identification, selection and recruitment of personnel, the evaluation team considered that good judgement had prevailed;
- Drawing upon its specialised experience, UNOPS has been able to identify and contract appropriate assets for the principal demining challenge facing the Force (road survey and clearance);
- When performance requirements changed for a commercial demining firm, UNOPS took appropriate action and engaged a second firm using appropriate and efficient tendering procedures. The performance of the second firm has been most satisfactory;
- While the evaluation did not entail a management audit which would allow us to pronounce more fully on the efficiency & effectiveness of UNOPS relative to other organisations providing project management support services in complex environments, the evaluation team found no evidence of errors, omissions, or unwarranted delays on the part of UNOPS which have jeopardised the effectiveness of the MACC.

9.3 Recommendations

In light of the conclusions drawn concerning civilian versus military assets and the capacities and performance on UNOPS, the following recommendation is proffered:

DPKO should actively consider using non-military resources – engaged through UNOPS when appropriate – in support of its security council mandates, particularly when:

- **A specific role or task is well defined (including quality standards) and can be used as the basis for a contract with clear performance specifications;**
- **Civilian organisations have more appropriate equipment, procedures, and/or experience for that role or task;**
- **The overall security situation allows the deployment of civilians.**

Chapter 10 – Conclusions, Recommendations and Lessons Learned

We may identify two defining moments in the unfolding of UNMEE MACC's programme: (i) the initial Security Council Resolution of the year 2000 allowing the MACC to become active in coordinating humanitarian mine action, a mandate so imprecise that the scope of work was only limited by one's own creativity; and (ii) the President's Proclamation 123 of mid-2002 with the effect of drastically confining the role of UNMEE MACC to activities in support of the Force only.

The ambiguous mandate of the MACC stemming from the first Security Council Resolution led to a liberal interpretation of activities, and the first two years were characterized by a fast pace of work, under competent management, that included institutional development tasks. Unfortunately, the MACC did not succeed in coordinating demining in the TSZ, a task that can only be properly exercised given a number of pre-conditions that were not there, including a clearly defined appreciation of the mandate, and a good understanding of contamination. The fact that the mandate was not backed up by explicit concurrence at the highest level, as well as an outline of strategy accompanied by a definition of detailed roles and responsibilities right at the start, made the mandate unsustainable. The fluid and unpredictable political sentiment in the country was a serious complicating factor.

The President's Proclamation 123, effectively curtailing the mandate, forced the MACC to re-invent itself with respect to both its role and its management structure. From the point of view of management, the Proclamation was perhaps a blessing in disguise. It resulted in an integrated structure combining FMAC and UNMACC management under one roof without diminishing the Force Commander's authority. The innovative idea won the UN 21 award, and can be applied to similar situations elsewhere with good benefit. With respect to operations, however, the MACC's role was seriously diminished. Its capacity-building work became confined to supporting the new Eritrean Demining Authority in the field of information technology and medical support.

As is evident from the Force's QIP programme, there is a close congruence between the needs of the communities and the needs of the Force (as part of Mission requirements), if only to build good relations with one another. This is especially relevant after a state of emergency has transformed itself into a state of stability. The currently confined mandate of the UNMEE MACC has significant scope for enhancement by prioritising demining tasks in such a way that important secondary benefits accrue to the population.

The MACC currently presents noteworthy strengths: a close management connection to the troops sharing a common command structure that could serve as an example elsewhere, MRE integrated into clearance priorities, a map production capability that is state of the art, a very useful database system (the latter still in need of improvement, however), stability of staff, and good programme management willing to look ahead particularly in terms of the need for alternative demining assets.

Yet, there remain significant challenges. Sensitivity to a volatile political climate is constantly required. The currently limited mandate can generally be enhanced only by acknowledging political realities, and acquiring the concurrence of national authorities. The MACC is staffed with competent individuals, but with a restricted mandate there seems to be over-capacity. Staff economies of scale are exceedingly low compared to the situation in, say, Afghanistan where a relatively modest number of international staff manages a very large number of deminers.

Of greatest concern is the low productivity of demining contingents, the inappropriateness of mechanical devices employed, and the lack of sufficient mine action standards exhibited by at least one contingent, the Bangladeshis. Evidence strongly suggests the need for prior agreement on the type and quality of demining assets before the deployment of demining contingents, and the insistence on prior training in order that international mine action standards be introduced and maintained.

The deployment of commercial demining assets has proven to be very cost-effective considering their relatively modest costs and high productivity. The introduction of some complementary commercial demining assets should be contemplated at the very start of a peacekeeping mission, and certainly when a phase of stability has been reached.

A summary of recommendations and lessons learned is offered below.

Recommendations – UNMEE MACC Specific

It is recommended that UNMEE MACC prepare a costed proposal for the further enhancement of its mine action activities that would accomplish the three-fold objective of force protection, force mobility and community support designed to gain the goodwill of the population.⁸⁷

It is recommended to re-examine UNMEE MACC staffing options, including further staffing amalgamation options, and define a mine action programme that would enhance current activities by ensuring: (i) the satisfaction of military requirements; and (ii) the satisfaction of community aspirations in line with Force or Mission objectives.

In spite of important recent upgrades that now allow the IMSMA system to operate relatively smoothly, work still needs to be done to resolve remaining technical problems, with particular emphasis on removing remaining ‘add-ons’, and facilitating ease of access by significantly simplifying the system.

⁸⁷ Subsequent to the evaluation mission, UNMAS and UNOPS contracted commercial organisations to provide mechanical and EDD assets in support of the Kenyan demining contingent, creating a combined commercial-military capacity. This is termed the Integrated Demining Contract (IDC), and is in line with our recommendation. More generally, we encourage UNMAS to update its analysis of the capacities required to meet the Force Commander’s objectives on a periodic basis, and give active consideration to alternative means for providing the requisite capacities in the most cost-effective manner.

Additional efforts will have to be made for handover of IMSMA expertise to the national authorities (EDA), an effort that requires full EDA participation (especially the recruitment and training of an IT specialist) and continued close cooperation between UNMEE MACC and UNDP.

Recommendations – General

Any involvement of a peacekeeping mission, or an entity closely associated with a peacekeeping mission, to support building of indigenous mine action capacity, should generally be contemplated with a full understanding and consideration of the consequences. Such involvement should be subject to a clear and unambiguous agreement between the UN and the Government at the highest level identifying mutual commitments and responsibilities.

It is recommended that, in defining the mandate of a civilian mine action coordination centre attached to a peacekeeping mission, considerable effort be made to outline, for Security Council deliberations, the precise scope of the MACC's responsibilities within the evolving context of political, humanitarian and peacekeeping realities, and in line with the MACC's comparative advantage.

It is recommended that the mandate of a civilian Mine Action Coordination Centre within a peacekeeping mission be enhanced by tying it very closely to the objectives of the Peacekeeping Mission itself, necessitating a careful analysis of ways in which the MACC can satisfy basic aspirations of the people in the region in line with the Force's goals.

UNMAS should be actively involved in the planning for peacekeeping missions, including the definition of mission requirements, and work with the Force-generating unit in areas of equipment planning and establishment of standards.

Mission requirements should be reviewed on an agreed basis and schedule to assess whether comparative advantages between military/commercial/civilian mine action entities have shifted.

A MOU with a TCC covering the operation of a demining contingent should include the authority of a MACC to ensure IMAS compatibility.

A Joint Assessment Mission should include a highly experienced mine action specialist thoroughly familiar with force demining requirements as well as demining in accordance with IMAS. The specialist should also have a sound knowledge of all demining technologies available and their appropriate application. DPKO may have to fall back on external expertise to cover the whole range of aspects.

The need for a judicious mix of demining assets will need to be anticipated right at the start of the mission, based on:

- i. a clear definition of tasks expected to be performed, combined with a liberal rather than a narrow interpretation of the Security Council**

- Resolution defining the mandate (see also above recommendation calling for a substantially enhanced definition of mandate);**
- ii. the realization that there is a considerable dual benefit of demining accruing to both the Mission and the affected communities; and**
 - iii. the significant scope that exists to supplement and/or complement traditional contingent demining assets with commercial demining assets.**

DPKO needs to institutionalise the authority and competence to negotiate with TCC in order to ensure the best contribution suited to circumstances. UNMAS could play an important role in this respect.

The Assessed Budget should include a well-considered mix of expenditures that takes into account the natural unfolding of demining activities that normally change significantly when the mission moves from an emergency state to a state of stability.

Military demining assets offered by TCCs have to be assessed accurately prior their deployment with the prospect of their potential utilization, clearance performance, suitability for the particular environment and cost-effectiveness.

DPKO should arrange for a review of the use of the assets deployed to a mission after one year aiming to do adjustments, if necessary.

The potential advantage of commercial assets should be taken into consideration from the beginning of a mission if the security situation allows.

Demining staff intended to be used in the UN area of responsibility must be trained, prior to deployment, to apply international mine action standards.

UNMAS may wish to consider quality assuring existing regional mine action training centres for future training purposes of TCC contingents.

Donors may have to be requested to contribute equipment and training to compensate for second rate demining assets belonging to demining contingents.

DPKO should actively consider using non-military resources – engaged through UNOPS when appropriate – in support of its security council mandates, particularly when:

- A specific role or task is well defined (including quality standards) and can be used as the basis for a contract with clear performance specifications;**
- Civilian organisations have more appropriate equipment, procedures, and/or experience for that role or task;**
- The overall security situation allows the deployment of civilians.**

Lessons Learned

The integration of civil and military mine action assets under a joint mine action structure, fully respecting Force authority, is an efficient and effective way to plan and execute a mine action response.

The revised MACC work plan was a creative and appropriate response to the unexpected and drastic decisions of the Eritrean Government in mid-2002. It resulted, in fact, in increased efficiency of UNMEE MACC operations by integrating military demining assets into a civilian-run mine action centre.

Capacity development support by a specialized agency with a relevant core mandate, should start immediately after cessation of hostility and the arrival of a peacekeeping force, not two years later.

Mine action must have national ownership to be successful and sustainable. This also infers that demining should be included in national development plans as a pre-condition to achieve development goals.

Annex 1 – Terms of Reference Evaluation Mission of the UNMEE Mine Action Co-ordination Centre

Background

Based on Security Council Resolution 1320 of 15 September 2000, the United Nations Mission in Ethiopia and Eritrea (UNMEE), through the United Nations Mine Action Service (UNMAS) and the United Nations Office for Project Services (UNOPS), established a Mine Action Programme responsible for the UN established Temporary Security Zone (TSZ) along the disputed border between Ethiopia and Eritrea and in areas adjacent to the TSZ. The aim was to provide coordination and technical assistance for humanitarian mine action within the TSZ and areas adjacent. To that end, the UNMEE Mine Action Co-ordination Centre (MACC) was established in Asmara.

The programme was initiated in late 2000. Soon after beginning its coordination function with three international and one national non-governmental organizations (NGOs), a bi-laterally funded international contractor and the UNMEE force demining assets as implementers, the MACC began working with the Eritrean government to build a national mine action programme. In response to an increasing number of anti-tank mines planted on roads in the TSZ, the MACC added a mechanical route clearance contractor under its direct tasking. The national NGO for mine action and the Eritrean Mine Action Programme (EMAP), though never formally incorporated by the government, was supported by the MACC and later additional assistance was provided by the UNDP mine action capacity building programme starting in early 2002. The support to EMAP came to an end in July 2002 with the issuance of Presidential decree 123/2002 that established the Eritrean Demining Authority (EDA). The decree meant the dissolution of EMAP and all cooperative agreements it had signed. In August of the same year, the government issued a letter to all mine action NGOs to cease operations in Eritrea. All but HALO Trust terminated activities in 2002, though HALO was eventually asked to leave and did so in June 2003.

With the end of EMAP and direct assistance to the Eritrean Government, the MACC concentrated on mandated activities in support of the peacekeeping mission. The UNMEE mandate for mine action was expanded through Resolution 1430 adopted on 14 August 2002 to provide demining in key areas to support the demarcation work of the Ethiopian Eritrean Boundary Commission (EEBC). The revised work plan implemented at the end of 2002 brought the force demining assets and command structure under the coordination of the MACC, an achievement that earned the MACC a UN 21 Award for increased team productivity in 2003. The work of the MACC related to the EEBC demarcation is currently suspended due to a political dispute between the two parties over portions of the proposed border. The MACC is currently overseeing a major shift in UNMEE demining assets with the repatriation of a mechanical contingent from Slovakia with a proposal to hire a commercial firm to fill that role.

The MACC recently under-went an internal audit performed by the resident OIOS auditors in UNMEE.

Goals of the Evaluation

The goals of the evaluation are:

- Define the coordination role of the programme in Ethiopia and Eritrea through mid-2002
- Define the optimal integration of peacekeeping force demining assets under a civilian-run coordination centre
- Provide a cost benefit analysis of peacekeeping demining versus commercial demining in support of a security council mandate

Objectives of the Evaluation

The objectives of the evaluation are:

- to evaluate the original build-up of the MACC, the organizational structure and its overall effectiveness as a coordination/oversight body;
- to evaluate the implementation arrangements under which the MACC has operated and to determine the efficiency and effectiveness of this approach;
- to evaluate the coordination role of the MACC from start-up through mid-2002 and assess its impact on mine action activities in Eritrea
- to evaluate the revised work plan designed in late 2002 and its implementation, including the effectiveness of peacekeeping force demining assets under the MACC;
- to assess the use of peacekeeping demining assets versus commercial assets including indicators of access, productivity, flexibility, cost and related factors;
- to analyze the relationship with the UNDP Eritrea Mine Action Capacity Building Programme with a focus on how the relationship has impacted UN coordination and humanitarian mine action in Eritrea;
- to determine how the donors that support mine action in Ethiopia and Eritrea evaluate the MACC and what, in their view, is the added value it offers;
- to determine lessons learned and to make recommendations for the UN and international donors.
- to comment on the future resource requirements of the MACC.

Issues to be addressed:

In order to achieve the objective of the evaluation the team members will address the following issues:

Phases of peacekeeping mandated mine action in Ethiopia and Eritrea:

- Review the sequence of events that led to the initiation of the programme and its development since;

- Assess the timeliness and effectiveness of the UN and international mine action response throughout the operation;
- Assess the cooperation and coordination between the MACC, UNMEE HQ, other UN agencies, government bodies and NGO operators as the programme evolved;
- Draw lessons for future emergency operations;

Inputs versus outputs during the life of the programme:

- Review the financial and human resource inputs and how they have changed with the real and perceived responsibilities of the MACC;
- Evaluate the total real cost of UN supported assets and interventions and the results achieved for each;
- Consider what alternate arrangements would have been feasible given the operating environment and how they would compare to the inputs used during the programme.

Current status of mine action in the TSZ and areas adjacent:

- Review the operational requirements of the programme and the resources available and recommend any changes required to meet operational needs;
- Review the implementation modalities of the programme and recommend what action should be taken for future programmes implemented under similar circumstances;

Efficiency of project management arrangements:

- Analyse the Programme's management role, resource mobilization role, coordination role, reporting, communications and planning, review the roles and responsibilities of the project manager and international contracted and in-kind experts;
- Review MACC relation to bilaterally funded operators, bilateral contracts and terms supporting or complicating the MACC's coordination role;
- Review the relationship with UNMEE to determine the effectiveness of Programme within the context of the larger UN Mission;
- Evaluate the effectiveness of the IMSMA system and determine how it has contributed to the overall management of the mine action programme in Eritrea;
- Review the performance of UNOPS as Executing Agency and its effectiveness in providing substantive and management services as well as administrative and financial support;
- Review the performance of UNMAS in supporting the project in terms of resource mobilization and advocacy, management, and project implementation.

Resource mobilization and donor support:

- Assess the UNMAS and MACC roles as perceived by donors;
- Assess the impact of the assessed budget funding on the implementation of the programme.

Programme results and achievements:

- Determine to what extent the objectives and outputs outlined by the Programme have been met;
- Comment on the effect of funding in terms of levels and timeliness during the duration of the programme;
- Recommend what actions should be taken to ensure that the project objectives are met as planned for future mine action programmes;
- Review project results with emphasis on Security Council mandates and longer-term impact.

The main stakeholders are:

- UNMAS
- UNMEE
- UNOPS
- Ethiopia Eritrea Boundary Commission (EEBC)
- Eritrean Demining Authority (EDA);
- Ethiopian Mine Action Office (EMAO);
- Mine Action organisations operators in Eritrea and Ethiopia (i.e. International NGO and commercial companies);
- International community as donors
- UNDP
- UNICEF
- Eritrean Commission for Coordination with the Peacekeeping Mission (CCPM);
- Eritrean Resettlement and Rehabilitation Commission (ERRC);
- Population in mine affected areas;

Scope of the Evaluation

The team should consider the primary objectives and outputs for the phases as stated by the original Strategy document, work Plan 2002 and work Plan 2004 in the context of all aspects of an integrated mine action programme: mine awareness, mine information, training, surveys and minefield marking; mine clearance; victim assistance and rehabilitation, quality management, accreditation and tasking procedures.

Methodology of the Evaluation Team

The evaluation team will (in New York):

- Be briefed by the UNMAS and UNOPS immediately upon arrival to New York. A series of meetings will be organized with UNDP, UNICEF, UNOPS etc.
- Compile documentation for review such as the Strategy, concept of operations, progress reports, monthly reports, etc

The evaluation team will (in Eritrea):

- Conduct interviews with major stakeholders, including the UN Mission in Ethiopia and Eritrea, UNDP, UNICEF, Ethiopia Eritrea Boundary Commission (EEBC), Eritrean Demining Authority (EDA), CCPM, representatives of major donor contributing countries, clearance NGO (EDO), commercial companies, etc
- Conduct targeted field visits to verify Programme plans and implementation of priorities in accordance with international standards and to identify further needs for assistance if any
- Have discussions with staff involved in program implementation
- The MACC will facilitate and coordinate a schedule of meetings for the evaluation team, provide logistics and support for gathering the information.

The evaluation team will (in Donor Capitals):

- Conduct interviews with donor agencies to determine the rationale and expectations
- review funding decisions to the MACC
- assess the outlook for future funding for the MACC and mine-action in general in Eritrea and Ethiopia
- Have discussions with representatives of NGO implementers where possible to collect relevant information on MACC-NGO coordination (most former operators no longer operate or have representatives in Eritrea).

Evaluation Team

The Evaluation team will be composed of two independent consultants (experts) of whom one will focus on questions of organizational design and management, and the other will focus on technical aspects of the mine action activities. The team should offer a broad range of experience and skills offering both UN and NGO perspectives.

UNMAS will assume the role of managing the evaluation exercise, working closely with the members of the evaluation team to ensure effective monitoring of the exercise and concurrence with the objectives as defined by the TOR.

Time Frame and Conclusions of the Mission

The Evaluation Mission is planned to take place from September to November 2004. The total duration of the mission is eight weeks. One week prior to deployment in New York, four to five weeks in Eritrea and Ethiopia, up to two weeks visiting key donor capitals and two weeks drafting the report.

Annex 2 – MACBP Key Milestones⁸⁸

Feb-02	CTA MACBP arrives Formation of UNDP advisory team initiated (CTA, TA, VA, LIS)
Mar-02	STA LIS arrives
Apr-02	Original MACBP Project Document signed, includes only <ul style="list-style-type: none">- LIS- EDA500 K equipment for old EDA- Some assistance to EMAP headquarters- Remainder of programme vested with UNMEE MACC and NGOs Project Cooperation Agreement UNDP and UNOPS Project Cooperation Agreement UNDP and EMAP TA LIS and TA AFL (LIS) arrive Equipment for LIS, EMAP, VA ordered.
May-02	LIS national staff selected Capacity building in EMAP initiated in MACC Departments
Jul-02	Proclamation 123 published to establish the Eritrean Demining Authority EMAP and old EDA cease operations MAT, DDG, DCA expelled
Sep-02	ESCA engaged as partner for Implementation of LIS
Oct-02	GM EDA appointed TA Victim Assistance arrives
Dec-02	Initial MACBP project document fully funded (approx US \$3m) Staff assembled for EDA/EDO Assisted UNMAS with production of UN policy for VA
Jan-03	MACBP leases office accommodation for EDA/EDO VA training initiated to identify priorities
Feb-03	GM certifies EDA/EDO conduct in compliance with IMAS Interim Strategic Framework Drafted
Mar-03	EDA/EDO office equipment installed Computer training and English classes initiated Proposal for analysis of national survey for people with disability developed

⁸⁸ Verbatim from MACBP document

- Apr-03 Prodoc revision initiated (to include new activities affordable within existing budget (e.g. TAs)
Equipment ordered for EDA read only database
Equipment ordered for disability survey analysis
Briefings initiated with EU and Norwegians
MOU initiated between HAL and EDO
Minister of Labour and Human Welfare endorses *Direction Paper in Victim Support*
- May-03 Field equipment starts to be transferred from MACC to EDO
Agreement with MACC/SRSA to share IMSMA officer
Approval for TAs Ops and Field Ops; recruiting initiated
- Jun-03 First intervention in Strategic Planning by Cranfield University
LIS TA departs; LIS management restructured, new TA arrives
HALO departure directed
- Jul-03 Revised programme document for three years submitted for approval
TA field Ops arrives
LIS operations review, 2nd QA complete
EDA deputy director attends Cranfield Senior Management course
LIS evaluation by EU
- Aug-02 TA Ops arrives
LIS restructured, increased production by 30%
Six MRE teams complete refresher training
UNICEF Project Cooperation Agreement in MRE
- Dec-03 3 x MCT accredited and commence operations
MAP 04 launched at Open House
EDA QA team commences operations
- Jan-04 Refresher training conducted for operational teams
RONCO MDDT integrate ops with EDO teams
- Mar-04 Equipment ordered for 2x20 deminer MCTs and 2xEOD
- Jun-04 LIS completed
- Jul-04 Training commenced for new MCTs
Prodoc approved
Emergency Access order sent to UNOPS
Implementation national survey (disability) analysis underway
- Aug-04 PWC mission completed
Appraisal completed
Draft National Strategic Plan completed
Draft Article 5 completed
- Sep-04 Article 7 update submitted

New team training completed, preparing for accreditation
PCA for emergency access approved
Workshop studies Integrated Community Approach

Annex 3 – Bilateral Donor Contributions to Eritrea (US\$ m)

Donors	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Canada								1.072	0.068	0.150	1.290
Denmark								2.199			2.199
Eur.Union								1.551			1.551
Finland								0.099			0.99
Germany								0.728	0.100		0.827
Japan									0.563		0.563
Netherlands							4.200	0.500	3.500	1.548	9.748
Norway	0.837							0.333			1.170
Switzerland								0.075	0.488		0.563
U. S.					2.025		0.500	1.205			3.730
Total	0.837	0	0	0	2.025	0	4.700	7.762	4.720	1.698	21.742

Source: MBZ, Netherlands (Norway has additional contributions not reflected here for 2002 and 2003.)

Annex 4 – People Interviewed

UNMEE

Legwaila J. Legwaila Senior Representative of the Secretary General, Eritrea
General Rajender Singh Force Commander

UN Head Office – New York

Angela Kane Assistant Secretary General
Hiroshi Murakami Secretary, EEBC

DPKO / UNMAS - New York

Martin Barber Director, UNMAS
John Flanagan Chief, Programme Support Section, UNMAS
General Cammaert Military Advisor to the Secretary General
Hiroshi Murakami Chief, Cartographic Section, Situation Centre, DPKO
Justin Brady Programme Officer, UNMAS
Akiko Ikeda Victim Assistance Officer, UNMAS
Arezou Azad Policy Coordination Officer, UNMAS
Sebastian Kasack Mine Risk Education Officer, UNMAS
Andreas Sugar Political Affairs Officer, Africa Division, OO
Nicolas von Ruben Chief, Engineering Section, OMS
Lt. Col Fernando Martins Force Generation Service, MD
Major Xuqiang Qiu Military Planning, MD
Ilene Cohn Chief, Policy, UNMAS
Noel Mulliner Technology Coordinator, UNMAS,
Fred Malya Best Practices, PBPU

UNOPS - New York

Lisa Gomer Manager, Global and Inter-Regional Division
Michael Mersereau Senior Portfolio Manager, Mine Action Unit
Johan van der Merwe Technical Advisor, Mine Action Unit

UNDP – New York

Oren J. Schlein Advisor, Mine Action Unit
Archie Law Advisor, Mine Action Unit

UNICEF-New York

Julie E. Meyers Project Officer, Office of Emergency Programmes

UNMEE MACC

Phil Lewis Programme Manager
Venkata Raman Chief, Administration and Finance

Gerhard Bechtold	Chief of Information
Lars Lundberg	Medical Coordinator
Bob Kudyba	Operations Officer
Christopher Whatakope	Regional Manager, QA Officer
Petrus Brink	Regional Manager, QA Officer
LtCol Kalume Mbitha	Mine Action Liaison Officer
LtCol Suleiman Nyamwaya	MRE Officer, Kenya Army

UNDP-EDA/EDO, Eritrea

Simon R. Nhongo	Resident Representative
B.Nyarko-Mensah Snr.	Deputy Resident Representative
Joseph Wenkoff	CTA/Programme Manager, MACBP
Rita Mazzocchi	Programme Analyst
Jane Brouillette	Advisor, Victim Assistance
Per-Olof Saelen	Technical Advisor, MABCP
David Harrison	IMSMA, UNMEE MAC / MACBP
Hansie Heymans	Planning Officer, MABCP

Ronco-Eritrea

Will Haynes	Programme Manager, Ronco
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UNICEF-Eritrea

Lejla Susic	Mine Risk Education Coordinator
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UNHCR-Eritrea

Pirjo Dupuy	Representative
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Bilateral Donors(in Eritrea)

Geert Heikens	Head of Delegation, EU
J. Sonderbert	Mine Action Advisor, EU
HE Scott H. Delisi	Ambassador, USA
Arild Skara	First Secretary, Royal Norwegian Embassy
Pim Kraam	Deputy Head, Humanitarian Aid, (Dutch) MBZ
Joseph Hoenen	Head Dev. Cooperation, Royal Dutch Embassy

Representatives in European Capitals

Johanneke de Hoogh	Sr. Policy Advisor, Humanitarian Affairs, (Dutch) MBZ
Elizabeth Narrowe	Programme Officer, Swedish Int. Dev. Agency
Pehr Lodhammer	Head, Mine Action Section, SRSA
LtCol Jelinek	Ministry of Defence, Slovakia

Annex 5 – Letter from UNMAS Management

UNITED NATIONS



NATIONS UNIES

MINE ACTION SERVICE
SERVICE DE LUTTE ANTIMINES

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DID

29 July 2005

MAE

Dear Ian,

Thank you for sending the final version of the UNMEE Evaluation, which we recently received.

We appreciate the effort involved in bringing the evaluation to fruition and the many hours of work that have been put into it by staff at the GICHD and the evaluation team. The recommendations contained in the report are instructive and will be useful in planning future programmes in peacekeeping settings.

Almost all of the issues raised in my letter commenting on the earlier draft have been addressed, or clearly explained. The issue of the Security Council mandate, which we feel is important enough to warrant an explanation from our side, is covered in a "response from management", which could be included as an annex to the report, and is attached.

Please pass on our appreciation to the members of the team.

With warm regards,

Yours sincerely,

A handwritten signature in black ink, appearing to read "M. Barber".

Martin Barber
Director

Mr. Ian Mansfield
Operations Director
Geneva International Centre for Humanitarian Demining
Geneva, Switzerland

United Nations Mine Action Service – 2 United Nations Plaza, Room DC2-610, New York, NY 10017, USA
Telephone: (+1 212) 963 1875 - Facsimile: (+1 212) 963 2498 - Email: mineaction@un.org
Webpage: <http://www.mineaction.org>

UNITED NATIONS



NATIONS UNIES

MINE ACTION SERVICE
SERVICE DE LUTTE ANTIMINES

Response from Management

The United Nations Mine Action Service (UNMAS) and the United Nations Office for Project Services (UNOPS) thank the Geneva International Centre for Humanitarian Demining (GICHD) for the time and effort that went into the evaluation of the United Nations Mission in Ethiopia and Eritrea (UNMEE) mine action programme. As the evaluation team points out, the goals of the evaluation were ambitious. They required a broad understanding of not only mine action, but also peacekeeping operations and the complex situation between Ethiopia and Eritrea. GICHD, UNMAS and UNOPS spent many hours reviewing the concepts on which findings, conclusions and recommendations were based. This process in itself has been beneficial in clarifying our understanding of key concepts and how they are perceived by those outside the organization.

One area that UNMAS differs with the findings of the evaluation team is in the description of the mandate of the MACC as it appears in Security Council Resolutions. Unlike the detailed Secretary General's reports on which they are based, Security Council resolutions are usually no longer than a few pages and leave much of the implementation to staff on the ground. The evaluation team interprets Resolution 1320 (2000) in such a way as to place the civilian MACC under the authority of the Force Commander as a non-distinct component of the authorized UNMEE Force.

Certainly since the start of the mission, DPKO and UNMEE have interpreted the role of the MACC differently than did the evaluation team. The MACC has been treated as a distinct component with the MACC Programme Manager reporting directly to the Special Representative of the Secretary General and his Deputy. Understanding this relationship gives a different context to some of the findings, conclusions and recommendations of the evaluation, most importantly the emphasis on the Force Commander's objectives as the lens through which the MACC mandate is analyzed; objectives which UNMAS sees as only a subset of the broader mission objectives that it supports. While there is some overlap between the Force and UNMEE objectives, the mine action programme should be considered an UNMEE asset, and not only as a Force asset, as contended by the evaluation team.

A handwritten signature in black ink, appearing to read 'Martin Barber', written over a horizontal line.

Martin Barber
Director

United Nations Mine Action Service – 2 United Nations Plaza, Room DC2-610, New York, NY 10017, USA
Telephone: (+1 212) 963 1875 - Facsimile: (+1 212) 963 2498 - Email: mineaction@un.org
Webpage: <http://www.mineaction.org>

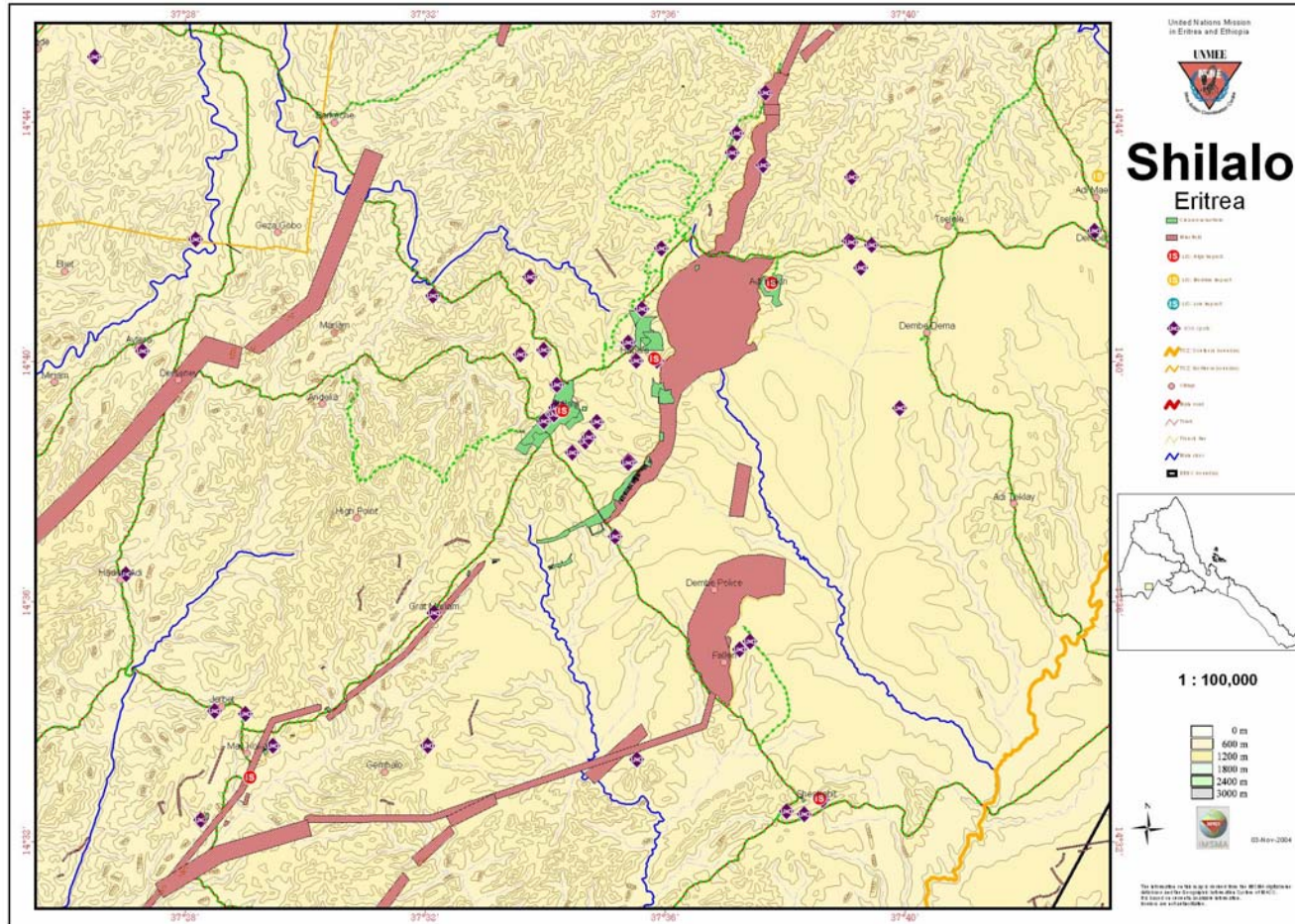
Maps

Map of Senafe



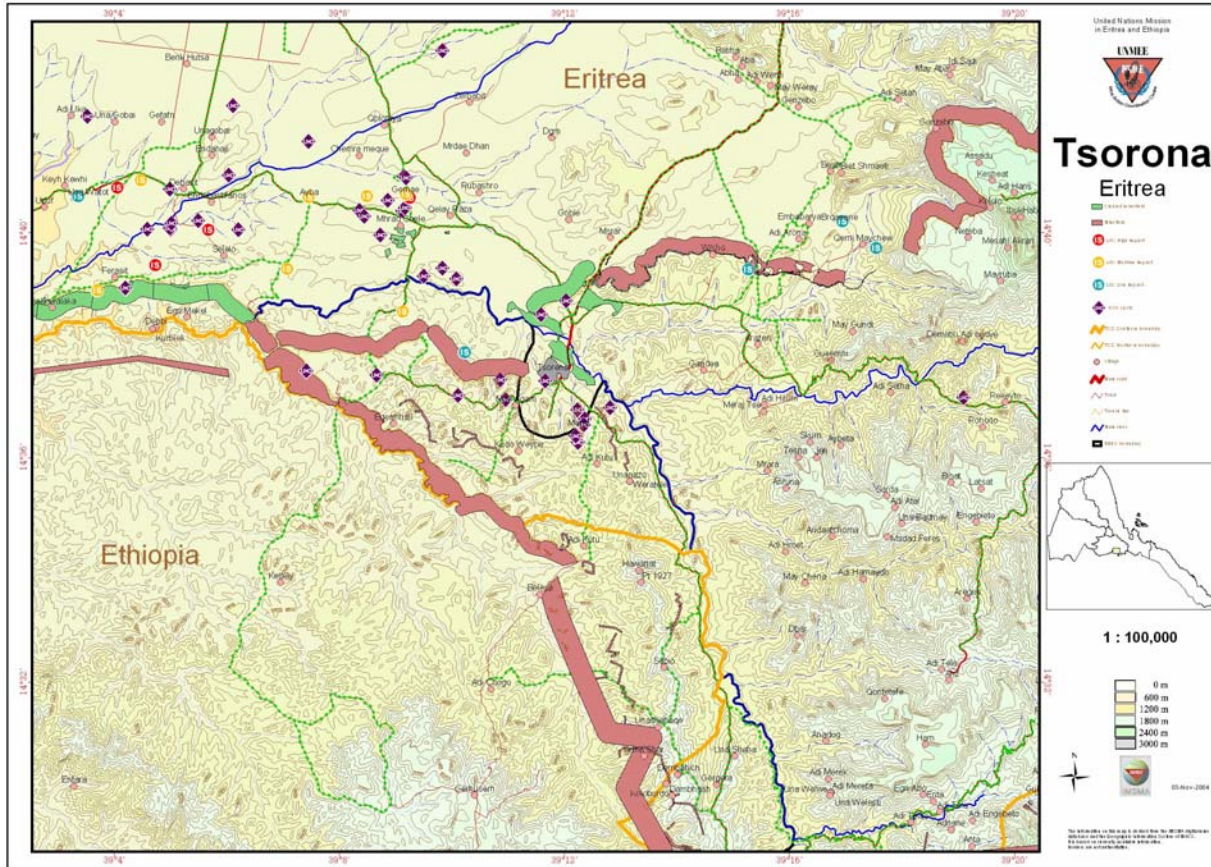
The boundaries and names on the maps do not imply official endorsement or acceptance by the United Nations.

Map of Shilalo



The boundaries and names on the maps do not imply official endorsement or acceptance by the United Nations.

Map of Tsorona



The boundaries and names on the maps do not imply official endorsement or acceptance by the United Nations.

