

# Mine Action Programme for Afghanistan

## Strategic plan 2003 - 2012

### Executive Summary

#### Introduction

Afghanistan is heavily contaminated with landmines and unexploded ordnance, known contaminated totalling approximately 788.7 sqkm, of which 157.7 sqkm. of land affects high-impacted communities. The Afghan Transitional Authority and state institutions are now working to restore proper function, and real progress is being demonstrated; there is massive international investment in rebuilding the infrastructure. In July 2002, President Karzai announced that Afghanistan would become a state party to the Mine Ban Treaty (the Ottawa Convention), and the Government established an ambitious target - to free Afghanistan from the impact of anti-personnel mines within five years. The strategic plan has been designed to achieve this objective.

#### Strategic Vision

Afghanistan shall be a country free from the threat of landmines and unexploded ordnance, where individuals and communities live in a safe environment conducive to development, and where mine victims are fully integrated into society.

#### Strategic Objective

By 2007, the impact of landmines and UXO shall be removed from all high impacted areas in all regions of Afghanistan.

#### Mine Action Strategic Response

In support of the overall strategic objective, sectoral objectives have been developed as follows:

Advocacy and the Mine Ban Convention: *To promote effective implementation of Afghanistan's Mine Ban Convention obligations and to encourage support for the humanitarian norm of banning landmines among the Afghan population.*

Coordination: *To implement a coordinated strategy for mine action in Afghanistan in order to achieve safer, more efficient and effective implementation of mine action components.*

Mine survey: *Impact Survey - To gather information on the impact of hazards at a community level and, for the Afghan specific Retrofit Survey, to verify the presence and whereabouts of hazards. Technical Survey - To gather precise technical and geographical information on mine and UXO contamination land and marking areas for the protection of civilians and subsequent clearance activities*

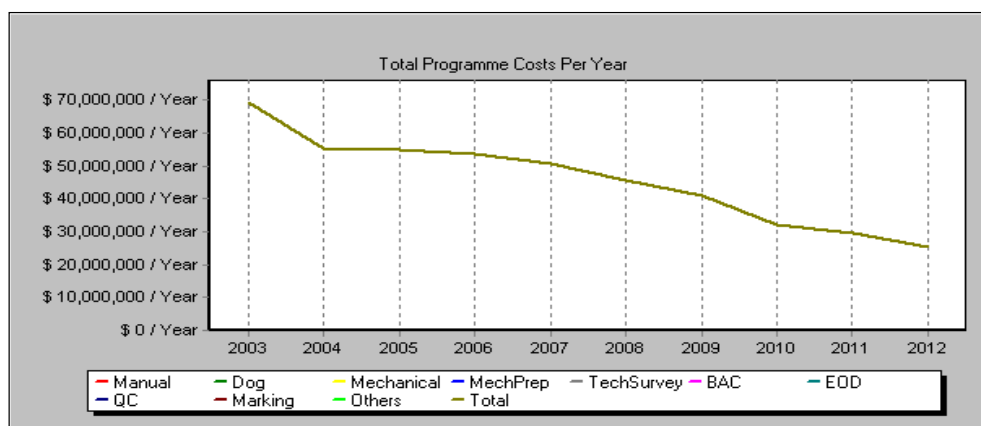
**Mine and UXO Clearance:** *To ensure that priority areas are made mine and UXO-free in order to prevent injury to innocent civilians (especially refugees and other vulnerable groups) and to allow for economic activity and reconstruction to take place unhindered by mines/UXO.*

**Mine Risk Education:** *To reduce injuries and casualties related to mines and UXO in Afghanistan by raising awareness about mines/UXO amongst all sectors of Afghan society with a special emphasis on women, children and youth and to promote safe behaviour for affected communities.*

**Training:** *To ensure that appropriate capacity-building and technical training are carried out within MAPA and among selected Government representatives so that the safety and efficiency of mine action component activities is enhanced.*

**Monitoring and Evaluation:** *To implement a Total Quality Management (TQM) plan that will guarantee the standard of MAPA component activities, and assist MAPA agencies to achieve continuous improvement in the quality of their work, as well as the safety, efficiency and effectiveness with which they carry out their activities.*

## Resource Requirements



Total programme costs peaked in 2002/03 at \$67m, with substantial expenditure on vehicles and equipment, and on the training of new teams. The annual costs are expected to drop to \$52 million in 2004, and thereafter will reduce steadily over the next 10 years

## Conclusion

This paper outlines a strategic plan for the MAPA that is ambitious but achievable. Investment in vehicles, equipment and human skills has created a most effective national mine action capability - but a significant level of international funding must be maintained if the programme is to reach its full potential.

## **Humanitarian and Emerging Reconstruction Requirements**

### Background

Afghanistan is a landlocked, mountainous, geographically remote, sparsely populated, ethnically diverse, yet geopolitically important country. From the 1930s to the late 1970s, the country was at peace and underwent a modest degree of economic and social development. During this period, development was concentrated in the cities and towns, whilst most rural areas retained their traditional way of life, governance structures and social practices.

More than two decades of conflict since 1978, combined with the current four-year drought, have resulted in widespread human suffering and massive displacement of population (both within Afghanistan and as refugees in neighbouring countries). An estimated seven million people are vulnerable to famine, its infrastructure has been destroyed or degraded, its human resource base severely depleted, and its social capital eroded.

An Afghan Transitional Authority is established, with many of the state institutions now working to restore proper function in a society and economy that as yet remain fragmented. The needs and expectations of the Afghan population are enormous, and the lack of security remains a pressing problem. Notwithstanding these challenges real progress is being demonstrated in many ways across the country. There is a massive investment in rebuilding the infrastructure and transportation. Schools and universities have re-opened. Local markets are thriving with locally grown produce and locally manufactured goods. And the capital, Kabul is full of energy, enthusiasm and a sense of purpose.

### The landmine problem

Afghanistan is heavily contaminated with landmines and unexploded ordnance. Most of the mines were laid during the Soviet occupation and the subsequent communist regime between 1980 and 1992. Landmines were also used in the internal fighting among various armed groups after 1992, particularly in Kabul city and its outskirts. The problem was made worse in October 2001, with newly laid mines and booby traps reportedly used by the Northern Alliance, Taliban and Al-Qaeda fighters, from unexploded cluster munitions and ammunition scattered from storage depots hit by air strikes.

Despite continued progress made by the Mine Action Programme for Afghanistan (MAPA) and its implementing partners over the past decade, Afghanistan is still believed to be one of the most severely contaminated

countries in the world. MAPA continues to discover, at a rate of 12 to 14 sq.km. per year, areas that were mined years ago but remained inaccessible due to armed conflict. Notably, until recently, there was no access to 100 sq.km. of former Northern Alliance front lines. The known mine and UXO contaminated area is estimated to total approximately 788.7 sqkm in [206] districts of 31 provinces. Of this, 157.7 sqkm. of land affects high-impacted communities. The areas affected include important agricultural land, irrigation systems, residential areas, grazing land and roads.

On July 2002, President Karzai announced that Afghanistan would become a state party to the Mine Ban Treaty (the Ottawa Convention), and subsequently the Government of Afghanistan officially ratified the Treaty. At that time, the Government established an ambitious target - to free Afghanistan from the impact of anti-personnel mines within five years. The strategic plan has been designed to achieve this objective.

## **Strategic Vision**

Afghanistan shall be a country free from the threat of landmines and unexploded ordnance, where individuals and communities live in a safe environment conducive to development, and where mine victims are fully integrated into society.

*Note: The vision is the desired future end state of the landmine problem in Afghanistan. It is an aspiration around which the Government, MAPA, the affected communities, mine action NGOs and other interested groups and organisations including international donors can focus their attention and efforts.*

## **Strategic Objective**

By 2007, the impact of landmines and UXO shall be removed from all high impacted areas in all regions of Afghanistan.

*Note: The strategic objective is a realistic target set by MAPA to achieve its vision, and in particular to meet President Karzai's requirement '... to free Afghanistan from the impact of anti-personnel mines within five years' in a way that is both achievable and affordable.*

Implicit in this objective is the need by 2007 to clear all mined areas affecting all high-impacted communities, and to remove the threat from all other areas by risk reduction measures such as fencing, marking and mine risk education.

## Mine Action Strategic Response by Sector

### Advocacy and the Mine Ban Convention

*To promote effective implementation of Afghanistan's Mine Ban Convention obligations and to encourage support for the humanitarian norm of banning landmines among the Afghan population.*

#### Background

The Mine Action Programme for Afghanistan (MAPA) has been heavily involved in the movement to ban landmines. In view of the fact that Afghans have suffered the terrible consequences of landmines and unexploded ordnance for the several decades, MAPA implementing NGOs have been at the forefront of raising this issue with the international community. The Afghan Campaign to Ban Landmines (ACBL) was one of the founding members of the International Campaign to Ban Landmines (ICBL) and was therefore a co-recipient of the Nobel Peace Prize in 1998 for its role in bringing about the *Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction* (also known as the Mine Ban Convention or Ottawa Convention). Despite the fact that there was no recognized government that could accede to this treaty until 2002, the ACBL worked with Afghan communities and with the Taliban Government to attempt to secure support for the humanitarian cause of banning landmines and informal agreements not to use this weapon.

With the advent of a recognized Afghan Interim Administration in 2002, a partnership between the United Nations, the ACBL, MAPA NGOs and the international community began to raise the issue of a ban on landmines with President Karzai and senior Afghan Ministers. On July 28<sup>th</sup>, 2002, His Excellency President Hamid Karzai announced that Afghanistan would become a State Party to the Mine Ban Convention at a meeting that brought international experts together with the mine action community to educate the Government on the need to ban landmines and the details of the Mine Ban Convention.. The Afghan Government became the 126<sup>th</sup> state to ratify the Convention, depositing its instrument of ratification on September 11, 2002. On 1 March, 2003, the Convention's entry into force enshrined the complete ban of all anti-personnel mines as a legal obligation for Afghanistan.

The Ottawa Convention not only contains the obligation to implement a complete ban on anti-personnel (AP) mines, but also provides an overarching framework for mine action. This framework includes: the clearance of all AP mines within a ten year period; the destruction of all stockpiles; the provision of mine risk education; assistance to landmine victims; and monitoring and reporting on the implementation of Convention obligations. The strategic plan embodies all the elements contained within the Convention and provides a

roadmap to for Afghanistan to meet its obligations within the framework of the Convention.

### Future Challenges

A number of challenges remain in order to reach the ultimate goal of a mine-free Afghanistan. Legislation must be implemented by the Afghan Government; mine and UXO clearance operations must continue; mine risk education must be completely integrated into community structures so that all Afghans are sensitised to existing dangers; and landmines survivors must be assisted to integrate into their communities so that they have the chance to use their skills productively. Finally, stockpiles of mines must be destroyed so that no new mines are never again used in Afghanistan. The challenges ahead are not easy to overcome within a short period of time. The Afghan Government has, however, clearly expressed its strong commitment to the principles of the Convention and its intention to work closely with the mine action community to implement Convention obligations.

In order to implement Convention requirements, the mine actions in Afghanistan will require strong support from the International Community. This assistance will be necessary to create lasting peace and to eliminate the threat of injury from mines and UXO. The strategic plan will assist this process in providing both cost break-downs and justifications to that donors can more accurately assess the outcomes from their support of mine action and can measure progress by tracking benchmarks within the Strategy.

### **Coordination**

*To implement a coordinated strategy for mine action in Afghanistan in order to achieve safer, more efficient and effective implementation of mine action components.*

### Methodology

Coordination of the Mine Action Programme for Afghanistan (MAPA) has been carried out by the Mine Action Centre for Afghanistan (MACA) for the past 13 years. Under direction of the Programme Manager, UNMAS/UNDP/UNOPS policy is coordinated by the MACA Section Chiefs, senior international staff, and implemented through a network of Working Groups. At the head of this network is the Mine Action Working Group (MAWG), chaired by the Minister of Foreign Affairs and with members drawn from the MACA, Government ministries, relevant UN agencies, donors and NGOs. It is part of the national development forum and is mandated to provide a coordinated policy and resource mobilization response for mine action in Afghanistan. The Programme Management

Team (PMT) is responsible for programme policy decisions within MAWG guidelines. PMT is chaired by the Programme Director, with membership including the NGO directors and all MACA senior staff. At operational and technical levels, issues are covered by the 7 remaining elements of the network through the Mine Awareness, EOD, Quality Management, Mechanical, Finance Administration & Logistics, Operational and Technical Working Groups.

MACA key appointments are currently filled by International experts who have a dual role; in addition to carrying out their normal duties they are responsible for capacity building of national staff in their departments. The MACA structure includes departments and sections to coordinate and manage all eight mine action components. The structure is designed so that over the next 2–3 years it can transition to a national agency, manned by national staff with a small number of supporting International Technical Advisors.

### Factors Considered

The need for coordination is undisputed, though the form it takes may vary. Currently the situation reflects a UN owned coordinating body that is mandated by the Afghan Transitional Administration to coordinate on its behalf. A series of options have been considered for future coordination of the programme, and for an appropriate form and status of the MACA to enable smooth transition to a Government-run programme. In the approach chosen by the current administration, the MACA will probably become a parastatal organization under UN stewardship until the Government is confident that it is able to undertake full responsibility for the coordination role.

### Objectives

The Objectives for the Coordination Component are as follow:

- To implement the Mine Action Strategy, achieving the mission in 10 years.
- To maintain and develop the management capacity of MAPA national staff to ensure safe, efficient and effective implementation of Mine Action in Afghanistan, providing the necessary skills by 2004.
- To develop and instill values of safety, excellence, efficiency, effectiveness and sustainability in compliance with International Mine Action Standards (IMAS).
- To develop and implement Afghan Mine Action Standards and other policies and procedures in line with IMAS by the end of 2003.

- To develop appropriate systems, processes and structures for Mine Action in Afghanistan.
- To coordinate Mine Action advocacy and awareness in Afghanistan.
- To lead and assist in resource mobilization, aiming for the programme to be fully funded until 2012.
- To facilitate transition to a national programme by 2005

## **Mine survey**

*Impact Survey - To gather information on the impact of hazards at a community level and, for the Afghan specific Retrofit Survey, to verify the presence and whereabouts of hazards.*

*Technical Survey - To gather precise technical and geographical information on mine and UXO contamination land and marking areas for the protection of civilians and subsequent clearance activities.*

## **Methodology**

Survey in Mine Action gathers the data essential for informed decisions on strategy, funding, resource allocation, priorities, tasking, capacity and capability requirements. It is designed to capture socio-economic information, mine and UXO information and mine/UXO survivor data. Survey is approached at four levels; general survey, impact survey, technical survey and post clearance survey.

General survey obtains basic information about extent of contamination and the nature of the threat, giving a “snapshot” of the problem in general terms. The impact survey assesses socio-economic effects due to mines and UXO, identifying blockages to normal activity. Information of the kind gathered by general and impact surveys can be combined to produce a general mine action assessment. Information from previous surveys has been captured on the Information Management System for Mine Action (IMSMA). It will be verified and added to in the Retrofit Survey due to commence April/May 2003. Technical survey is the process whereby suspect areas are investigated and further defined; they may also be reduced, marked or fenced as part of the process, reducing the threat. This process is normally carried out by qualified demining staff, supported by IMSMA, and enables efficient and effective use of clearance assets. Post clearance survey is usually carried out 6-12 months after the land has been cleared to check land use and assess benefits to the (previously) affected community. This is in effect a quality check to validate prioritization procedures, but the information gathered may also

be used in donor reports or cost-benefits analyses to further justify or adjust procedures in use.

### Factors Considered

Current data is the cumulative result of two major general surveys and an ongoing general survey processes. Some of the information is dated, and areas have since been affected by conflict. There is a need for data to be checked, updated, and for additional socio-economic information to be added. The retrofit survey will accomplish this, and together with IMSMA will result in a more powerful planning tool. Technical survey output has resulted in 53.226 square kilometers awaiting clearance. The current clearance rate exceeds survey output, and with current procedures the difference will grow as clearance assets increase in number and efficiency. It will be necessary to balance outputs through a combination of new procedures and allocation of resources. There is also scope to accelerate the release of land through improved area reduction procedures using dogs and mechanical assistance. The introduction of a permanent marking program will also impact on the survey output. The programme has not yet undertaken post clearance surveys, but will be introducing procedures during 2003.

### Objectives

The objectives for the survey component are:

- To implement and complete a retrofit landmine impact survey for all 32 provinces of Afghanistan by 2004, maintain a residual impact survey capacity.
- To improve the quality and quantity of data held in the IMSMA system.
- To improve technical survey and area reduction capacity and thereby increase the productivity of technical survey.
- To design and implement a post clearance survey process by end of 2003.
- To design and implement a permanent marking system by end of 2003.
- To implement a comprehensive data gathering system for landmine survivors in all 32 provinces in Afghanistan by the end of 2004.

### **Mine and UXO Clearance**

*To ensure that priority areas are made mine and UXO-free in order to prevent injury to innocent civilians (especially refugees and other vulnerable groups) and*

*to allow for economic activity and reconstruction to take place unhindered by mines/UXO.*

### Methodology

Mine and UXO contamination is dealt with by three types of clearance procedures according to the nature of the contamination; minefield, battle area and EOD. Minefield clearance clears all mines and UXO from the area in question, using procedures that address the “worst case” scenario for contamination. Battle Area Clearance (BAC) techniques result in more rapid area clearance, but may only be employed when it is known with high confidence that there are no mines present. EOD operations are often less predictable, usually being carried out against larger or more sophisticated items that require specialist location, access or disposal techniques. These operations can take place in all types of terrains or land types such as residential, agricultural, irrigation, road and grazing area clearance. In many cases a combination of techniques and equipment must be used to achieve clearance.

### Factors Considered

The main factors to consider are the change to High, Medium and Low Impact classification and the amount of estimated (at this stage) land in each category. These figures will be reviewed once the Retrofit LIS has been completed. As indicated in the analysis, the following figures are used for planning:

- High Impact – 157.748 square kilometers.
- Medium Impact – 236.622 square kilometers.
- Low Impact – 394.370 square kilometers.
- BAC – 51 square kilometers

The need to resolve the High Impact mine problem within 5 years and the remainder within 10 years has resulted in the development of the plan at Annex.... This plan requires progressive expansion to the year 2005 with a gradual capacity reduction over the following years. It relies on clearance and permanent marking to achieve these goals.

### Objectives

The objectives for the clearance component are:

- To improve the efficiency and effectiveness of clearance by 20% through the development of manual clearance, dog and mechanical support capacities.
- To reduce demining accidents by improving training and safety.

- To reduce civilian accidents by 30% each year to approach zero accidents in 2013 by hazard reduction.
- To clear all High Impact mined areas by the end of 2007.
- To clear all Medium and 90% of Low Impact mined areas by the end of 2012
- To clear all BAC areas by 2007.

## **Mine Risk Education**

*To reduce injuries and casualties related to mines and UXO in Afghanistan by raising awareness about mines/UXO amongst all sectors of Afghan society with a special emphasis on women, children and youth and to promote safe behaviour for affected communities.*

Mine Risk Education (MRE) in Afghanistan is coordinated through a partnership between UNICEF and the MAPA that is working to ensure standardized, practical and cost efficient methods of MRE programming. Four programming methodologies are employed to meet specific needs; community based programmes, school based programmes, mass media campaigns and emergency/quick response.

### Factors Considered

Community based MRE aims to involve communities in the provision of MRE by developing links between mine action partners and existing community infrastructure elements such as health and social services networks. As well as providing an integrated, sustainable vehicle for MRE, these programmes are also well-positioned to provide information identifying new threats, data on landmine survivors and their needs, and on socio-economic blockages, that will help in future mine action planning. School based MRE augments community based programmes, integrating the subject into the curriculum of formal and non-formal schools, while mass media campaigns strengthen both these approaches by reinforcing the messages learned. Emergency/quick response methods are directed at high-risk elements of the population unfamiliar with their environment, such as families in IDP or refugee camps or those returning after long absences.

Emergency response programmes will continue only while there are still elements of the population at risk moving in unfamiliar areas. In the interests of cost-effectiveness, efficiency and sustainability, MRE activity will shift from direct implementation towards integration into Government and institutional structures. It will also focus on child-to-child, peer education and community based activity aimed at recognizing and adopting safe behaviour patterns, increasing their ability to lead safer lives within the current environment.

## Objectives

- Develop training packages, material and guidelines appropriate for community based, school based and mass media campaigns.
- Train and provide materials for 2500 community liaison mine action volunteers targeted by the Retrofit Survey during 2003/2004.
- Identify and integrate appropriate community based networks for expansion of community based MRE programmes.
- Support training and capacity building through the Ministry of Education and non-formal school agencies targeting 30,000 teachers during 2003, and an additional 40,000 teachers by 2005.
- Augment community and school based programmes through mass media, public information systems and multi-media campaigns that reinforce messages and promote discussion.
- Review and assess emergency response requirements and methods to determine appropriate responses to needs.
- Develop appropriate evaluation methodologies and establish an external monitoring and evaluation system by the end of 2003.

## **Training**

*To ensure that appropriate capacity-building and technical training are carried out within MAPA and among selected Government representatives so that the safety and efficiency of mine action component activities is enhanced.*

Effective training underpins the safety and quality of work throughout the MAPA. Training needs are satisfied through a combination of courses run by the Monitoring, Evaluation and Training Agency (META), in-house training conducted by other NGOs, management training under a partnership between META and Cranfield University, and direct skills transfer from Technical Advisers (TAs).

## Factors Considered

The Strategy calls for a significant increase in capacity during its first 2-3 years, followed by a gradual decrease after the 5-year point. Training plans match this requirement. Additional clearance personnel are needed at all levels up to Site Supervisor. These will be trained by META, where in addition to programmed courses 3 temporary regional training camps will be established to train demobilised soldiers as part of the Disarmament, Demobilisation and Rehabilitation (DDR) programme. Middle management training will be carried out in Kabul, and is planned to continue until the MAPA requirement is met. The MRE sector has already responded to the move towards a community-based programme, training

over 18,000 teachers. An appropriate level of continuation training will be provided according to sector requirements throughout the period of the strategy, but it is planned to be independent of TA assistance for all but specialist areas by 2005.

### Objectives

- To fully satisfy training needs for the programme expansion.
- To provide training on a regional basis for up to 1000 demobilised soldiers under DDR.
- To continue management courses until at least 300 middle managers have been trained.
- To identify and satisfy training needs to support transition to a national programme.
- To introduce a systems approach to training by 2004

### **Monitoring and Evaluation**

*To implement a Total Quality Management (TQM) plan that will guarantee the standard of MAPA component activities, and assist MAPA agencies to achieve continuous improvement in the quality of their work, as well as the safety, efficiency and effectiveness with which they carry out their activities.*

Monitoring and evaluation are carried out within MAPA via a close partnership between MACA and the national NGO, META. The TQM approach has been adopted as an opportunity for efficient and sustained achievement of the component objectives; this approach is deemed viable in a totally NGO programme, but will need gradual introduction.

### Factors Considered

In a programme planned to total more than [8500] personnel, the direct cost of quality by inspection would be prohibitive. There is also a measure of uncertainty over programme requirements as Government emphasis moves from humanitarian to redevelopment aims. In order to retain flexibility during the early years of the Strategy, as reconstruction needs impact upon the programme, all of the traditional quality management elements are included. The manner of their initial application will introduce and encourage the TQM ethos, but they can be adapted to follow a more conventional approach should programme needs demand. Regular monitoring and evaluation of all mine action sectors is key to the system, with a focus on prevention rather than cure, but TQM aims to embed these functions in sector activities. This will allow inspection teams to focus on quality management systems rather than technical output,

reducing the size and expense of the monitoring and evaluation bodies required.

### Objectives

- Implementation of Total Quality Management System, with all elements meeting the increased requirements of the MACA five year strategic plan;
- The development of new techniques and procedures to improve safety and efficiency;
- Investigation of demining accidents to identify the factors and causes leading to such incidents so that appropriate preventive measures can be adopted.
- Development of national level mine action standards, based on the International Mine Action Standards (IMAS);
- Evaluation and trial of new mine/UXO technologies regarding their applicability for Afghan conditions;

### **Assistance to Landmine Survivors**

(To follow)

### **Resource Requirements**

Using data and assumptions provided by MACA and mine action NGOs currently operating in Afghanistan, several strategic options were considered. The preferred option aims to clear 223 sqkm, i.e. all high-impacted land and 65 sqkm of medium and low-impacted land by 2007. The medium and low-impacted land refers to mined areas where essential development and reconstruction work will be carried out. It also acknowledges that some communities may be re-classified as high-impacted, perhaps as the result of a mine accident or as a result of information gathered or updated by the LIS.

The anticipated annual clearance rate is shown in Figure 1, and the total area to be cleared during the 10-year period until 2012 in Figure 2.

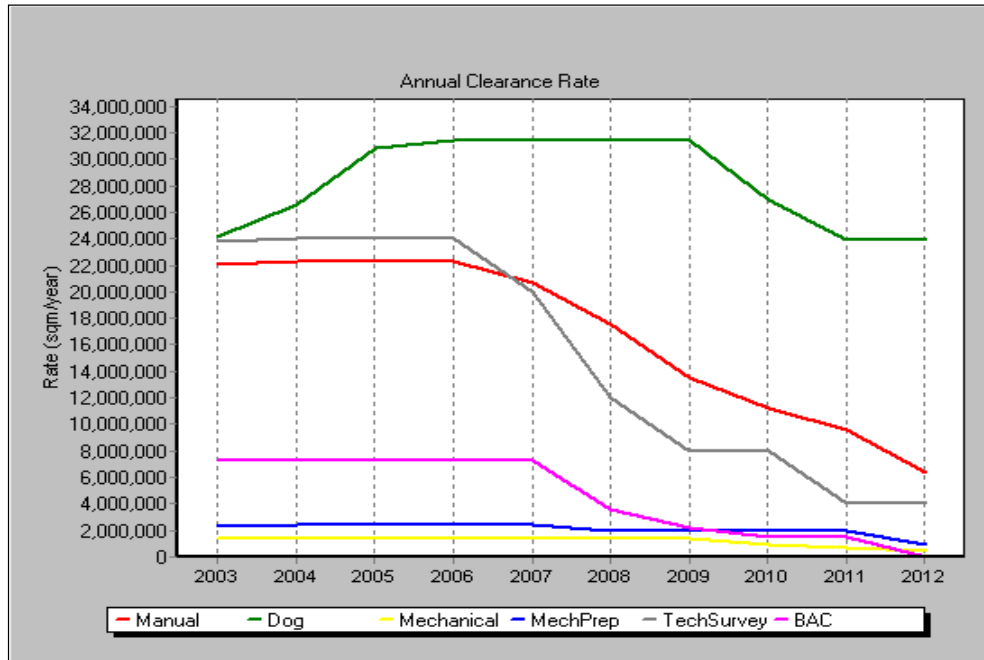


Figure 1: Annual Clearance Rates

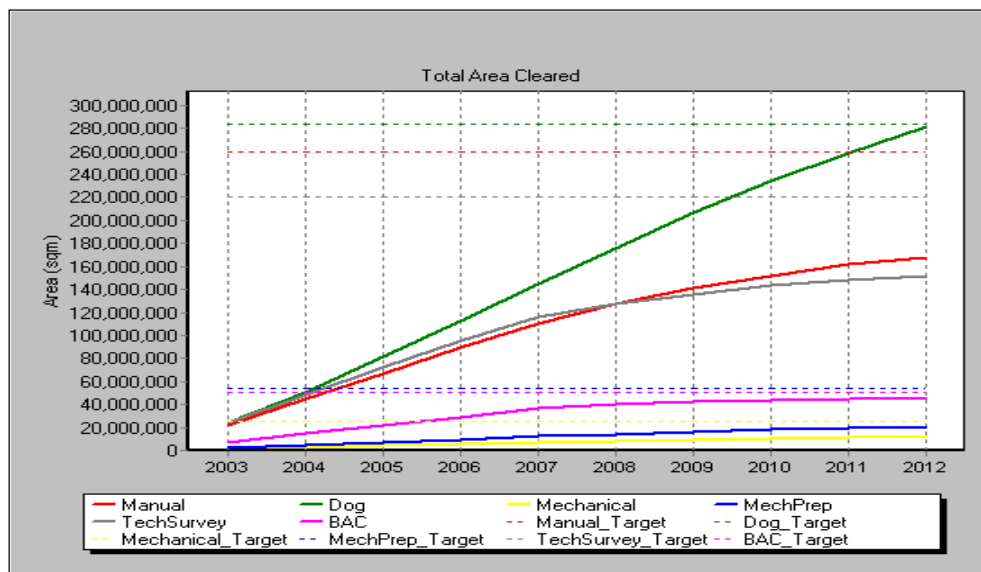


Figure 2: Total Area to be Cleared

Revised manual clearance rates have been used - based on an in-depth assessment of current work. The programme remains heavily dependent on the use of mine detection dog teams. Indeed, their importance will further increase over time as the focus of clearance shifts from the mine problem in and around villages (where manual clearance is more appropriate) to large open areas such as grazing land (where dogs are more efficient).

CAPABILITIES	NUMBER OF TEAMS									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Manual clearance	130	140	140	140	130	110	85	70	60	40
Mine detection dogs	28	33	36	42	42	42	42	36	32	32
Mechanical clearance	13	14	14	14	14	14	14	10	7	5
Technical survey	55	60	60	60	50	30	20	20	10	10
Mech ground preparation	19	25	25	25	25	20	20	20	20	10
Battle area clearance	10	10	10	10	10	5	3	2	2	0
EOD	46	46	46	46	35	23	10	8	8	5
Quality control	16	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd

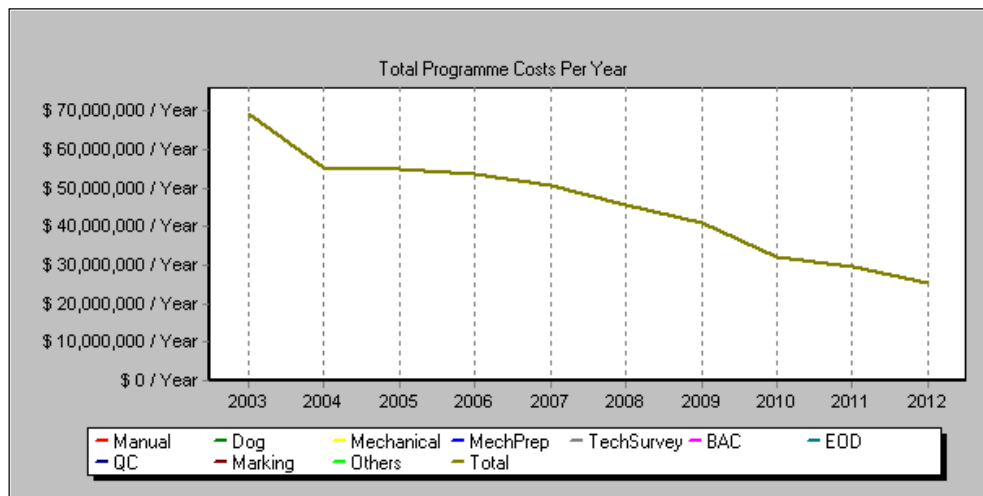


Figure 4: total programme costs per year 2003 – 2012

It should be noted that the total programme costs peaked in 2002/03 with the substantial expenditure on vehicles and equipment, and on the training of new teams. The annual costs are expected to drop to \$52 million in 2004, and thereafter will reduce steadily over the next 10 years. Costs could be reduced further by increasing the productivity of clearance teams and by application of procedures for area reduction, but this must not be at the expense of safety or quality of work.

## **Conclusion**

This paper outlines a strategic plan for the MAPA that is ambitious but achievable. The key challenge during the first five years of the plan will be to ensure that the donor community remains committed to the programme. The Government of Afghanistan has many competing demands on its limited budget, and it will be many years before nationally-generated funds are available for use by MAPA. The substantial investment in vehicles, equipment and human skills has created a most effective national mine action capability - but a significant level of international funding must be maintained if the programme is to reach its full potential.

## Abbreviations

AMAC	Area mine action centre
ATA	Afghan(istan) Transition Authority
CMA	Cranfield Mine Action
GICHD	Geneva International Centre for Humanitarian Demining
IMSMA	Information Management System for Mine Action
LIS	Landmine Impact Survey
MACA	Mine Action Centre for Afghanistan
MAPA	Mine Action Programme for Afghanistan
UXO	Unexploded ordnance
UNDP	United Nations Development Fund
UNICEF	United Nations Children's Fund
UNMAS	United Nations Mine Action Centre
UNOPS	United Nations Office of Project Services

Reference Documents (Details to follow)

Internal Environment

External Environment

Socio-Economic Environment

Landmine Impact Survey