

**Request for an extension of the deadline for completing the
destruction of anti-personnel mines in mined areas in
accordance with Article 5, paragraph 1 of the Convention on
the Prohibition of the Use, Stockpiling and Transfer of Anti-
Personnel Mines and on their Destruction**

Zimbabwe

**Submitted to His Royal Highness Prince Mired Raad
Al-Hussein of Jordan
President of the Eighth Meeting of the State Parties to the
Convention**

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EXECUTIVE SUMMARY

Zimbabwe still has 813.3 km² of land contaminated with Anti-Personnel Land Mines. The clearing efforts that started soon after independence in 1980 has seen 306.6 km² cleared from an initial contaminated area of 1119.9 km² recovering 33 032 AP mines in the process. Zimbabwe is doing everything possible within its capability and without any meaningful international support to rid itself of AP mines in compliance with the Anti-Personnel Mine Ban treaty of 1999.

The AP mines in the country were laid during the war of liberation which lasted up to 1980. At independence, the new government of Zimbabwe inherited numerous mined areas within the country and six (6) well-marked minefields along its borders with Zambia on the North and Mozambique on the East and South East. The minefields covering a total area of 1 119, 9km² was estimated to contain a total of 2 605 400 mines of the following types:

- | | |
|----------------|-----------|
| a. Ploughshare | e. VS 50 |
| b. R2M2 | f. Carrot |
| c. R1M1 | g. PMD 6 |
| d. M972 | h. M969 |

Apart from the marked minefields, other smaller minefields were discovered either during clearance of the marked minefield or when reported by the locals.

Through its own efforts Zimbabwe has managed to clear the 1.5 km² Kariba Power Station minefield, and numerous others inland which were unfortunately not recorded. With assistance from the USA government we cleared the Victoria Falls to Mlibizi minefield (286) km². However, the support dried or was abruptly stopped after one and half years of operation leaving the Zimbabwean government to complete the clearance on its own, an operation that lasted a total of seven years. The EU also funded, during the same period, for the clearance of Musengezi-Rwenya minefield by commercial deminers. Again when funding abruptly dried up, the deminers left, leaving the job uncompleted and no quality assurance was done as a result the area cannot be considered safe.

The mines have caused untold suffering to the communities living in those areas. They are unable to carryout economic activities such as farming and in some cases their livestock constantly detonate mines killed or badly injured that the only solution will be to kill. Since 1980 a total of 1550 people were reported killed or maimed and 120 000 livestock killed. The areas where the minefields were laid are remote therefore some

casualties go unreported. The communities are denied a total of 45 700 ha of productive land. Tourism has also been affected especially by Sango Border_Post to Crooks Corner minefield where a tripartite of South Africa, Mozambique and Zimbabwe Game Park was established. The operation of this park is affected by the presence of mines on the Zimbabwean side.

Zimbabwe established a National Mine Action Authority (NAMAZ) through an Act of Parliament, Anti-Personnel Mines (Prohibition) Act Chapter 11:19 which is responsible for the general policy direction of mine action activities in the country. The Zimbabwe Mine Action Centre (ZIMAC) is responsible for the planing and co-ordination of all mine action activities in the country. Currently demining activities are undertaken by military engineers. A Squadron of six (6) officers and 132 men (10 supporting staff) are currently deployed on humanitarian military demining. Extensive mine risk education is carried out in the affected areas. A total of 25 000 people have been reached from 2004. These people include community leaders but most of them are woman and youth.

In carrying out the demining operations, both mechanical and manual means were applied. Safe lanes were opened first by driving a bulldozer across the minefield with its blade raised thereby detonating some mines. This process is repeated at least three times to ascertain the number of lanes within that minefield. A survey team would then move in with mine detectors carrying out manual clearance of the safe lanes. The safe lanes opened would then be the base line for the subsequent manual demining operation. Once the survey team finished the manual clearance of the lane, the dozer then removes the top soil and vegetation of the lane. De-mining teams clear the areas between the safe lanes using the safe lanes as the starting lines

Zimbabwe would have made far much more progress on its obligation to clear the country of landmines. What we have achieved so far has been largely due to our own efforts. If we continue at the current funding level about \$10 000 000 (USD) we could go beyond 30 years before we completely clear the country of AP mines. However if assistance is provided by 2009, we could take up to 2015 (7 years) to complete demining all AP mines in the country. This will be achieved by carrying out combined military humanitarian and commercial de - mining and USD 138.3m will be required. **There will be two (2) military and one (1) civilian groups carrying de-mining concurrently.** The programme of activity for the seven years requested is given in this document.

We are very hopeful that the international community will fulfil its obligation and Zimbabwe demining activities will be supported. The request for extension is for seven years that is up to 2015 if we get support from 2009.

II. EXTENSION REQUEST

1. ORIGINS OF THE ARTICLE 5 IMPLEMENTATION CHALLENGE

The origin of Zimbabwe's Article 5 implementation challenge derives from the War of Liberation between 1976 and 1979. The Rhodesian Army laid minefields along the northern and eastern borders of the country to disrupt the supply lines of liberation movements operating from Zambia and Mozambique. Combat action between the two forces also resulted in a large amount of unexploded ordnance lying around the country.

2. NATURE AND EXTENT OF THE ORIGINAL ARTICLE 5 CHALLENGE: QUANTITATIVE ASPECTS

Background to the Zimbabwe Minefields

a. Following considerable research by the then Rhodesia army, minefield construction commenced in 1976, in the North East border area of what is now Zimbabwe. By 1979 minefields had been laid in six areas. Several other small minefields were also laid further inland to protect key infrastructure and permanent bases. The six minefields laid are:

- (1). Area 1 Victoria Falls to Mlibizi (286km²) Cleared.
- (2). Area 2 Musengezi to Rwenya Minefield (435.5km²).
- (3). Area 3 Sheba Forest to Beacon hill (65km²) Still intact.
- (4). Area 4 Burma Valley (3.9km²) Still intact.
- (5). Area 5 Rusitu to Muzite Mission (97.5km²).
- (6). Area 6 Sango Border Post to Crooks Corner (182km²).

b. Other minefields laid inland are:

- (1). Mukumbura Minefield not yet surveyed.
- (2). Kariba Power Station. 1.5km².
- (3). Lusulu in Gwayi Matebeleland North. Not yet surveyed to ascertain the extent of the minefield.

(4). Sango Border Post to Crooks Corner 3rd minefield. Newly discovered and not yet surveyed to ascertain its extent.

Please note that some minefields are not given their extent and stretch as they are newly discovered and a survey is yet to be done.

c. Three types of minefields were laid:

(1) Cordon Sanitaire (CS). A 25m wide strip of ground, fenced on both sides, containing 5 500 AP Mines per km laid in no fixed pattern. Mines were laid in clusters of three mines using a knotted rope system to place a cluster every 1/2/3m.

(2) Ploughshare Minefield (PSF). Initially laid behind the Cordon Sanitaire minefield in order to reinforce it. A PSF could vary in depth from 0.5km to 23km although only three lanes (rows) of PS were laid within that area. Mine density in a PSF was 100 PS and 300AP Mines per km. A PS is an above ground AP mine placed on a stake/picket 0.75 to 1m in height and activated by tripwire. Around each picket, three AP Mines were laid at the 3/12/9 o'clock position within 1.0m of the picket. The tripwire was linked to a further picket some 30m away, which was placed at the 11 o'clock position to the PS. The tripwire picket was generally placed immediately in front of the previous PS, thus creating an inter-laced line of tripwires covering the entire front. The PS device itself was a directional AP mine which fired shrapnel forward in an arc of 45⁰ (degrees). The lethal range was 100m. subsequently, in some areas, PSFs were laid on their own.

(3) Reinforced Ploughshare Minefield (RPSF) An RPSF is a PSF reinforced with a single lane of AP-mines laid in front of each of the lanes of PS. AP-mines were laid in clusters of three mines, each at 3/12/9 o'clock position. Each cluster was laid at no set distance in front of each lane of PS, but not less than 2/3m forward. The method of laying AP-mine clusters was as for Cordon Sanitaire minefield, using a 1/2/3m knotted rope in no fixed pattern. Mine density in a RPSF was 100 PS and 5 800 AP-mines per km of front. In some areas there is only a RPSF.

(4) As the Liberation War progressed, there were areas where Rhodesian Army Engineers laid booby traps within minefields. They also increased the number of mines per each hole. Up to five AP-mines were laid, one on top of another in a single hole. AP-mine clusters were linked with detonating cord so that a mine detonating in one part of the minefield would initiate a simultaneous detonation elsewhere. Mine clusters were sometimes reinforced by aircraft bombs and in the Mutare area, by 90mm ATK ammunition.

(5) AP-mine types varied and up to six different types. Different models can be found in any one minefield since maintenance/replacement used whatever mines which were available at the time.

d. Minefield Types and Current Activity Levels

(1). Minefield types vary from area to area and over the years, many mines have detonated due to either being activated by humans or animals, or due to bush fires. Hence the recent mine activity levels are lower than when the minefields were first established some 28-32 years ago.

(2) Minefields types and estimated present activity levels are:

Area	Minefield Type	Minefield Mine density		Estimated Present Density	
		AP	PS	AP	PS
1	CS & PSF	1 796 200	35 900	1 005 872	5 385
2	RPSF	290 000	5 000	246 500	250
3	PSF	1 200	400	60	20
4	PSF	21 600	7 200	12 960	720
5	RPSF	353 800	6 100	247 660	2 440
6	PSF	66 000	22 000	19 800	1 110
7	AP	3 000	Nil	3 000	-
	Total	2 528 800	76 600	1 535 852	9 915
GRAND TOTAL		2 605 400		1 545 767	

3. NATURE AND EXTENT OF THE ORIGINAL ARTICLE 5: QUALITATIVE ASPECTS

Socio-Economic Impact of Landmines in Zimbabwe.

Minefields in Zimbabwe were laid mostly on the borders and some further inland. After the hostilities, people who lived closer to the borders and those in mined areas were greatly affected as they could no longer enjoy free movement and socialise with their relatives across the mined areas. Agricultural activities, tourism, mining, infrastructural development and grazing land were also affected as mines claimed some of the land. Some people also got injured and some killed due to mines. Casualties for both human and animals given below could be very much under-stated since there are no official records. Information was gathered by interviews in the areas but only from a sample number of people relative to the total number of inhabitants in an area. In essence, no impact survey to account for landmine casualties has ever been conducted in Zimbabwe to date. Details on the impact posed by landmines is as given below.

a. Casualties (Since 1980)

(1) Human

(a) Killed or maimed 1550

(2) Animal

(a) Cattle Killed 120 000

(b) Wild Animals No records

b. **Land Denial**

Land denied include communal lands (30 000ha), commercial farm land (10 700ha), game parks (5 000ha), plantations (tea and timber), mining and border posts. It is estimated that only 5% of the total 1119.9km² is not required for immediate economic development. This area is predominantly mountainous and rugged but its potential for minerals cannot be overruled. Further details of the land denied will be covered on each minefield.

c. **Impact: Communal Lands**

The areas of communal land are inhabited by rural (peasant) farmers. The impact of the minefields is both economic and social and very severe especially to areas adjacent to minefields where there is land pressure. Loss of cattle has got a telling effect to the ordinary rural peasant. Cattle represent the only real wealth of a peasant family being the only savings and insurance they have. Income from crops is minimal, and then only likely if there is a good harvest, a rare occurrence since most of the mined areas are in the dry region where good rains are a rare occurrence. Thus the loss of cattle and other livestock is very, very serious. The denial of arable land, access to water and grazing caused by minefields is equally serious. The denial is, with very few expectations, the direct cause of most deaths in the minefields.

d. **Impact: Commercial Farming**

(1) Denial of arable land to commercial farming enterprises affects both crop farming and forestry. However taken over period that the minefields have existed in the particular area affected, this represents Z\$45 Billion on straight-line basis.

(2) Denial of access to commercial timber is far more serious, being estimated at Z\$500 trillion now. Losses that can be attributed by denial of re-planting would make this figure much more significant. Timber losses are important in a macro-economic sense since most of the timber lost/denied could be exported to earn hard

currency. Much of the timber affected is now well past its maturity and obviously has already lost its intended commercial value.

e. **Impact: Tourism**

Area 1: Victoria Falls was initially affected by the minefields before the successful clearance of the Victoria Falls to Mlibizi minefield in year 2005. The expansion of the town was severely hampered. Access to the Zambezi river, game viewing and hunting activities were inhibited by minefields. However the area is now free of mines and development now taking place.

Area 6: Sango Border Post to Crooks Corner lies largely within the Gonarezhou National Park which has now been merged into the Great Limpopo Trans-frontier Park (GLTP) which Zimbabwe shares with South Africa and Mozambique. Hundreds of wild animals (particularly elephants) have been killed or maimed by mines in this area of which the carnage is on-going. Regrettably no records of these deaths are available, but National Parks sources indicate that the level is very high and is causing a serious ecological impact. Whilst this minefield is being cleared albeit at a slow pace because of economic challenges the country is facing, it is feared that Zimbabwe will lose a considerable amount of foreign currency if this minefield is not cleared before the 2010 Soccer World Cup to be hosted by South Africa.

Having realised the threat posed by mines to the social and economic structures of Zimbabwe. The government of Zimbabwe is clearing these mined areas though at a slow pace. The pace of demining is greatly affected by a number of factors. Funding being the major factor, aspects of soil characteristics, terrain weather, accessibility to other mined areas, correct details about the minefield pattern and its extent and the discovery of yet other minefields which were not originally planned for also affected the demining pace.

In some areas, the ground is so hard and difficult to unearth thereby posing a lot of care and reduced pace. In areas with loose soils, mines were either unearthed by running water or were deeply buried down by the effect of soil erosion. There are cases of ragged terrain and mountains where access to the minefield becomes very difficult. More so the pace of demining is equally reduced as more concentration and care will be called for in such terrain. The pattern of the minefield also varies inconsistently in bad terrain. Furthermore, there are some minefields which were recently discovered either along or at tangent to the known ones. The type, density and extent of these newly discovered minefields is still to be established as no survey has been done on them.

Weather conditions obtaining in the mined areas is also another factor affecting the demining pace. Most places are in dry and very hot regions such that deminers cannot withstand the heat for too long before they get exhausted. In essence it implies that demining work has to be done in the early hours of the day before it is too hot. The

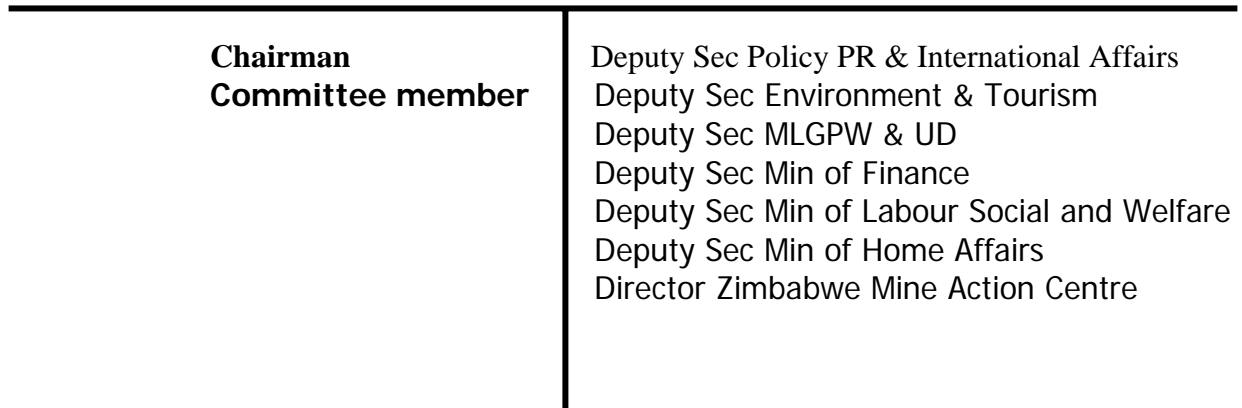
rainfall pattern also puts the demining activity to a total halt. No demining activities take place when it is raining. However it should be noted that lack of funding remains the major reason affecting the pace of demining in Zimbabwe.

4. **METHOD USED TO IDENTIFY AREAS CONTAINING AP MINES AND REASONS FOR SUSPECTING THE PRESENCE OF AP MINES IN OTHER AREAS**

Initially, information about minefields in Zimbabwe was obtained from ex-Rhodesian Armed Forces members after attaining independence in 1980. Existence of other minefields was established either after action of the mine to both personnel and animals. Level 1 survey was carried out in areas suspected to be mined and more often results of the survey indicated the presence of minefields in such areas. Most of the minefields used to be fenced making it easy to locate them. The fence has since been vandalised by the local populace but the fence pickets are still in place.

5. NATIONAL DEMINING STRUCTURES

NATIONAL MINE ACTION AUTHORITY OF ZIMBABWE (NAMAZ)



ZIMBABWE MINE ACTION CENTRE (ZIMAC)



Zimbabwe has one national mine action body the National Mine Action Authority of Zimbabwe (NAMAZ) which is a regulatory and implementation body. There is Zimbabwe Mine Action Centre (ZIMAC) under NAMAZ which is the national mine action co-ordinating centre. ZIMAC reports all its activities to NAMAZ. ZIMAC is the focal point and the coordination centre of all mine action activities in the country. The NAMAZ was established in 1999 and has got eight (8) members on board. It is anticipated that the Chairmanship and administration of NAMAZ will shift to Ministry of Environment and

Tourism. ZIMAC was established in 2000 with nine (9) officers and clerical staff to run its affairs. It is also to be administered by Ministry of Environment and Tourism. The National Mine Clearance Squadron was established in 1982 with two hundred (200) deminers.

MANDATE OF NAMAZ

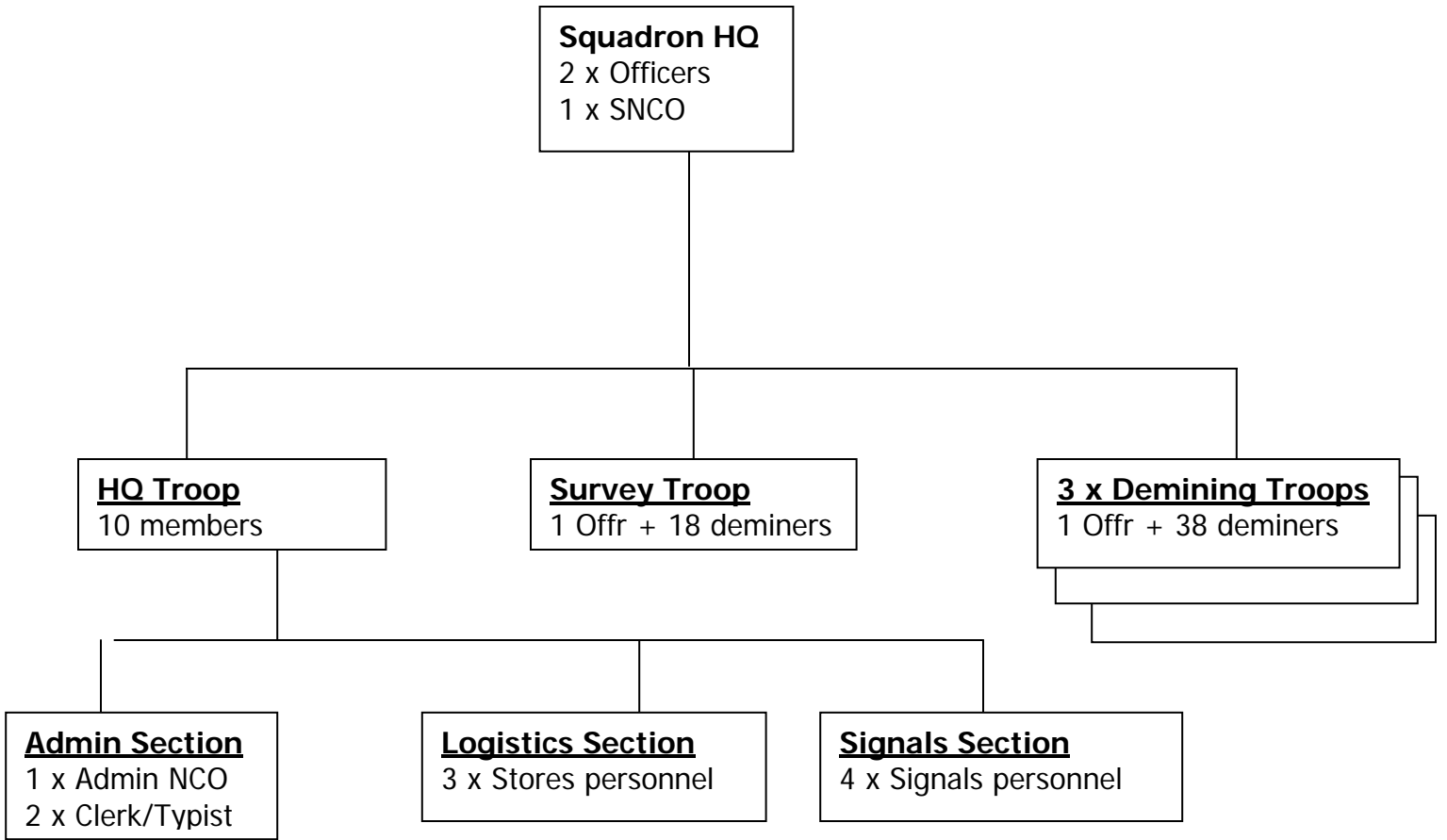
- Policy making and mine action implementation coordinating body.
- Concentizing the nation and International Community about the landmine problem and demining activities in Zimbabwe.
- Sourcing funds to finance various mine action projects.
- Setting out national mine action programme priorities.
- National Landmine Victim Assistance Policy formulation.
- Seeking any assistance required from the UN and other organisations or states parties on the implementation of national plan under article 6 of the mine ban treaty.

MANDATE OF ZIMAC

- Co-ordination of all landmine victims, care, rehabilitation and reintegration.
- Establishment and maintenance of a mine action database.
- Production and co-ordination of a national plan to destroy banned landmines.
- Monitoring adherence to the OTTAWA convention in Zimbabwe and elsewhere.
- Supervision of the destruction of banned AP mines.
- Planning for the conduct of Mine Risk Education (MRE) campaigns.
- Establish communication with all mine action stakeholders and interested groups at both national and international level.

Demining operations are being carried out by National Mine Clearance Squadron (NMC) which is a military unit. No commercial demining company is clearing mines in Zimbabwe as of now due to funding problems. The organisational structure for NMC is as given below.

National Mine Clearance Squadron



6. NATURE AND EXTENT OF PROGRESS MADE: QUANTITATIVE ASPECTS

ser	Name of area under the State Party's jurisdiction or control in which anti-personnel mines were/are known to be emplaced	Location	Coordinates	Total area under the State Party's jurisdiction or control in which anti-personnel mines were/are known to be emplaced (km ²)	Total area in which the State Party destroyed or ensured the destruction of all anti-personnel mines contained within (km ²)	Suspected mines	Number of mines destroyed by animals and climate	Number of AP mines destroyed	Number of AT mines destroyed	Number of other explosive ordnance destroyed	Area in which the State Party must still destroy or ensure the destruction of all anti-personnel mines contained within (km ²)	Number of Mines pending destruction	Completion Date
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(p)
1.	Victoria Falls to Mlibizi			286	286	1800100	788843	25 959		12			June 2005
2.	Musengezi to Rwenya			435.5	169	295000	48250	162419				246750	
3.	Sheba Forest to Beacon hill				5			500					
4.	Burma Valley			3.9		28800	15120				3.9	13680	
5.	Rusitu to Muzite Mission			97.5									
6.	Sango Border Post to Crooks Corner			182	16	88000	68200	4573			182	19800	
7.	Kariba Power Station			1.5									
8.	Lusulu in Gwayi-Matebeleland North			Not yet surveyed									

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)	(m)	(n)	(p)
9.	Sango Border Post to Crooks Corner third minefield			Not yet surveyed									
10.	Rushinga district minefields			Not yet surveyed									

Minefields Measurement Variations

Ser	Minefield	Level 1 Survey	Zimbabwe Assessment Report	History Study of Landmines Rupiah (1995)	Used by ZIMAC
(a)	(b)	(c)	(d)	(e)	(f)
1.	Vic Falls to Mlibizi	143km	220km	220km	220km After demining
2.	Msengezi to Rwenya	335km	359km	359km	335km
3.	Sheba Forest to Beacon hill	50km	50km	50km	50km
4.	Burma Valley	3km	4km	4km	3km
5.	Rusitu to Muzite	75km	72km	72km	75km
6.	Sango to Crooks Corner	50km	61km	61km	70km double stretch
7.	Kariba		1km	1km	Laid in 1963

NOTE

Differences shown in distances given above are as a result of errors made during level 1 survey. The Vic Falls to Mlibizi minefield was initially reported as 143km but turned out to be 220km after demining. The Sango to Crook Corner minefield was initially reported as 50km but we established 70km double stretch.

Sheba Forest to Beacon Hill minefield and Stapleford to Vumba mountains are one minefield.

Used by ZIMAC. These are the measurements used by ZIMAC as the established and authentic measurements of the minefields in Zimbabwe.

7. NATURE AND EXTENT OF PROGRESS MADE: QUALITATIVE ASPECTS

Mine Action Achievements to Date.

Our notable achievements are the destruction of our anti-personnel mines stockpiles in year 2001. We have already cleared the 286km² Victoria Falls to Mlibizi minefield in addition to the list of gaps which we cleared prior to 1998.

In the North Eastern Border on the 435.5km² Rwenya to Musengezi minefield, 169km² was cleared but this area continue to kill or maim people since it was not properly cleared and therefore needs total re-clearance. This was cleared by a commercial company courtesy of funding from the EU in 1999-2000.

On cleared gaps, people have been able to move freely from one point to another. Construction of government offices and other infrastructural developments have also taken place.

Completely nothing has taken off in this country in terms of victim assistance owing to mostly lack of donor support. Our Government has not treated landmine survivors as a special group and the injured ones are treated like any other injured person.

An area which has been achieved albeit not comprehensively is the conduct of MRE to vulnerable communities. We plan to conduct more comprehensive MRE programmes. Lack of funding has not been doing our endeavors any good.

Areas Cleared So Far Are:

- a. 286km² Victoria Falls to Mlibizi minefield.
- b. Cleared gaps 10km².
- c. Forbes border post for ZESA pylons, the railway line and oil pipeline from Beira. (5km²)
- d. 5.6km² Sango Border Post to Crooks Corner.

8. METHODS AND STANDARDS USED TO RELEASE AREAS KNOWN OR SUSPECTED TO CONTAIN AP MINES

Ser	Name of mined area	Total area cleared (km ²)	Means used to destroy the mines	Number of anti-personnel mines destroyed	Number of other explosive munitions destroyed
(a)	(b)	(c)	(d)	(e)	(f)
1.	Victoria Falls to Mlibizi minefield	286	Explosive demolitions	25 959	No records on all minefields
2.	Sheba Forest to Beacon Hill (Forbes border Post)	5	Explosive demolitions	500	
3.	Sango to Crooks Corner minefield	5.6	Explosive demolitions	4573	
4.	Cleared gaps	10	Explosive demolitions	2000	
5.	TOTAL	306.6		33 032	

A survey team would move in first to ascertain the existence of mines in an area reported to be having mines. In carrying out the demining operations, both mechanical and manual means were applied. Safe lanes are opened first by driving a bulldozer across the minefield with its blade raised thereby detonating some mines. This process is repeated at least three times to ascertain the number of lanes within that minefield. A survey team would then move in with mine detectors carrying out manual clearance of the safe lanes. The safe lanes opened would

then be the base line for the subsequent manual demining operation. After the confirmation of the presents of mines, demining teams would start clearing the assigned area. Each point where a mine is recovered, a white or blue coloured picket will be put and a red picket is placed where a mine was suspected to be according to the pattern of the mine field. The blue picket if placed where there was a ploughshare mine. Recovered mines are collected together and destroyed later unless they are suspected to be unstable, in which case they are destroyed on site by explosive demolitions.

All the cleared area was cleared by military deminers save for the 130km stretch in Musengezi to Rwenya minefield which was done by a contracted commercial demining company.

There are no records for UXOs recovered from a particular minefield. However, annual recoveries of about 600 are currently reported country wide which gives a cumulative figure of 19800 since 1980.

9. METHODS AND STANDARDS OF CONTROLLING AND ASSURING QUALITY

In respect to the progress noted in section 8 after the total clearance of a particular minefield, a Quality Control/Quality Assurance team would carry out quality inspection on the cleared area. This was done on all cleared portions save for the Sango to Crooks Corner minefield which is still under demining operations. However it should be noted that even after the quality inspection have been done, elements of up to 0.01% of either UXOs or mines may go unnoticed due to human and mechanical error. No quality assurance was done to the Musengezi to Rwenya minefield and reports of incidents continue to be received even to present date. This is major reason why we are considering it as still intact and no work was done on it.

Quality Control/Quality Assurance involves the process of inspecting cleared land before it is formally released to the beneficiaries for use. A different team of deminers is assigned to carryout de-mining of the already cleared area. They particularly focus on those points marked with red pickets to ascertain that there was no mistake. They also verify whether the minefield conforms to the known pattern and where there are variants, there area is thoroughly cleared.

10. EFFORTS UNDERTAKEN TO ENSURE THE EFFECTIVE EXCLUSION OF CIVILIANS FROM MINED AREAS

The need to clear the minefields became apparent soon after the cessation of hostilities between the then Rhodesian Government and liberation movements in 1980. Massive demining operations started in the year 1998 and the USA government also responded by donating a host of demining equipment and tools. This was all efforts directed towards ensuring the effective clearance of landmines from the ground. However civilians were not removed from their places to allow for demining. This was probably due to land pressure in Zimbabwe and the costs involved in relocating to some other areas. The perimeter fence, which was used to mark the minefields, was removed by the local civilians for their domestic use. No other fence was later on put save for danger warning signs to alert civilians of the existence of a minefield. In some other places, there are fencing steel poles which were used to mark the minefield.

A lot has been done to educate civilians on the dangers of mines. MREs are conducted in mine affected areas and agricultural shows and the trade fair. In mine affected areas we conduct MRE before we start the de – mining operations and throughout the period of the operations. In areas where there are no operations, MRE teams are constituted every year to educate those people living close to the minefields about the dangers of mines. In the past only one team was constituted per year but now every province affected (four provinces) has a MRE team and the coverage is wider. An average of seven thousand (7 000) people were reached from 2004. These include community leaders, adults – both women and men) and children especially school children. On shows and trade fairs, we rent a stand where people visit and they are informed about the dangers of mines and UXOS.

11. RESOURCES MADE AVAILABLE TO SUPPORT PROGRESS MADE TO DATE

The Government of Zimbabwe is fully committed to rid the country of all landmines. From 1980, the government has been consistently allocating an annual budget to demining operations though inadequate to totally clear all the mines. The allocations fall far too short of the total requirements especially in the area of

contracting the commercial demining companies to complement the military humanitarian demining.

The USA Government donated demining equipment and tools in 1998, which saw the start of the total demining of the Victoria Falls – Mlibizi minefield. Unfortunately the USA government withdrew its support in year 2000. The EU funded the clearance of the North Eastern minefields from 1999 - 2000. The EU also withdrew its support when only 130km of the Musengezi – Rwenya minefield had been cleared.

Funding level of the demining operations in Zimbabwe

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(l)
Financial resources made available by the State Party				USD 10m	USD 10m	USD 10m	USD 10m	USD 10m	USD 10m	USD 10m
Financial resources made available by actors other than the State Party			Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Totals				USD 10m	USD 10m	USD 10m	USD 10m	USD 10m	USD 10m	USD 10m

12. CIRCUMSTANCES THAT IMPEDE COMPLIANCE IN A 10 YEAR PERIOD

Ser	Circumstance	Comments	Degree to which circumstance may impede the ability of Zimbabwe to destroy all anti-personnel mines in mined areas
(a)	(b)	(c)	(d)
1.	Economic sanctions imposed by Britain and her allies.	Current and anticipated to last long until the bilateral impasse between Britain and Zimbabwe is resolved.	Zimbabwe is unable to access funds from multilateral financial institutions like the IMF and the World Bank. Zimbabwe will be unable to import the necessary equipment and contract commercial demining companies.
2.	Demining equipment shortage.	Few ageing equipment currently in use. Need immediate re-equipping to sustain operations. Zimbabwe does not have the capacity to manufacture most of the important demining equipment and therefore rely on imports. Unfortunately, the same source markets; the EU and USA imposed sanctions on Zimbabwe.	In the medium term, military demining will grind to a halt once the few pieces of equipment is expended.
3.	Inability for the Government of Zimbabwe to fully fund demining operations.	The government being under sanctions can only provide the little they can. The government has other pressing commitments such as food imports, power and fuel imports.	It will take Zimbabwe not less than 30 years to fully comply without other assistance.

13. HUMANITARIAN, ECONOMIC, SOCIAL AND ENVIRONMENTAL IMPLICATION

A lot more benefits will be realised in humanitarian, economic, social and environmental aspect in the endeavour to fulfil the work to be carried out during the requested period. This will allow for more land to be relieved of mines thereby creating more room for greater opportunities. Business opportunities in areas of agriculture, tourism, mining, game ranging and industrial sites would be realised over the period. On the social aspect, local inhabitants will freely access their water sources, have grazing land for their domestic animals and travel across lands to visit their relatives without fear. In such a situation, investors would be much more willing to make business in a mine free land.

14 **NATURE AND EXTENT OF THE REMAINING ARTICLE 5 CHALLENGE: QUALITATIVE ASPECTS**

Remaining work to be done in mined areas

Ser	Areas which were perimeter marked but fence vandalised (conventional minefields) Minefield area still to be cleared in (km ²)	Areas which were not perimeter marked (unmarked OP positions used during the war) Still to be surveyed and cleared	Estimated date of destroying
(a)	(b)	(c)	(d)
1.	Musengezi to Rwenya minefield- 435.5km ²	Rushinga District, Crooks Corner and Mukumbura District. Total area estimated to be 50km ²	See the demining programme of action below.
2.	Sheba Forest to Beacon hill- 65km ²		
3.	Rusitu to Muzite- 97.5km ²		
4.	Burma Valley- 3.9km ²		
5.	Sango Border to Crooks Corner- 182km ²		
	TOTAL 553.9km		
	GRAND TOTAL 833.9km		

15. **NATURE AND EXTENT OF THE REMAINING ARTICLE 5 CHALLENGE: QUALITATIVE ASPECTS**

The challenges that remain for the Article 5 are not much different from the original challenges faced given that not much has been done to address the problem although much effort is being put. Only 40% of the mined area has been cleared leaving the greater portion of land still under the control of mines. Equally the factors mentioned in section 3 to be

affecting the pace of demining continue to demonise the demining operations.

Economic growth can not be expected for as long as the land is still tied down by landmines in various places. The Great Limpopo Trans-frontier Park dream can not be realised unless the Sango to Crooks Corner minefield is totally cleared. Agricultural activities, Infrastructural developments, mining and other social activities remain at threat with the continued existence of landmines in Zimbabwe.

16. AMOUNT OF TIME REQUESTED AND A RATIONALE FOR THIS AMOUNT OF TIME

Combined Military Humanitarian and Commercial De-mining

Ser	Activity	Area to be covered	Estimated costs USD	Time Frame in Years								Remarks	
				2009	2010	2011	2012	2013	2014	2015	2016		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
1.	Survey of newly discovered mined areas	Mukumbura and Malipati	USD 150 000	Apr	Oct								
2.	Demining Sango Border Post to Crooks Corner 70km double stretch x 1.3km	182km ²	USD 30m	Apr	M1								Clearance of this minefield started in 2006 (Military demining)
3.	Demining of Musengezi to Rwenya 335km x 1.3km	435.5km ²	USD 70m			C							
4.	Demining at Sheba Forest to Beacon hill 50km x 1.3km	65km ²	USD 13m				M2						
5.	Demining at Rusitu to Muzite Mission 75km x 1.3km	97.5km ²	USD 15m						C				
6.	Demining of the Burma Valley 3km x 1.3km	3.9km ²	USD 150 000		M2								
7.	Demining of the unsurveyed/unknown minefields	Approx 50km ²	USD 10m						M1				
	GRAND TOTAL		USD 138.3m										

FOOT NOTES

M Denotes Military Humanitarian Demining.

C Denotes Commercial Demining.

The estimated cost increased because of salaries and wages of deminers.

The plan assumes that the government will receive assistance to conduct combined military and commercial demining.

Military demining will be enhanced by adequately equipping two squadrons.

Funds permitting, total clearance will be achieved in about ten years.

It costs USD 1 500 to clear 1km² (Based on Zimbabwe's experience).

17. HUMANITARIAN MILITARY DEMINING EQUIPMENT REQUIREMENTS

Ser	Expected Output	Key Activities	Budget Description				Sources of Funds	Remarks
			Key Requirements	Qty	Cost per Item (USD)	Total (USD)		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)
1.	To clear all the mined areas in the Republic of Zimbabwe	1.1 Survey of newly discovered minefields	SURVEY EQUIPMENT				See foot notes	
			❖ GTS 211D Set complete	2	5 000	10 000		
			❖ GPS set	10	2 000	20 000		
			❖ Surveyor's Pamphlets	10	200	2 000		
			❖ Husky hand held data collector	6	2 000	12 000		
			❖ Topcon field book	10	200	2 000		
			Grand Total			46 000		
		1.2 Clearance of all minefields.	DETECTION EQUIPMENT					
			❖ Mine detectors vallon VHM3	100	5 000	500 000		
			❖ Safety boots	100	2 000	200 000		
			❖ Genital protectors	100	500	50 000		
			❖ Flack aprons	100	600	60 000		
			❖ Helmet complete visor	100	70	7 000		
			❖ Anti-fragmentation suit	50	2 500	125 000		
			❖ Prodder man tool kit	100	200	20 000		
			❖ Satchel bag	100	50	5 000		
			❖ Trip-wire filler	20	40	800		
			❖ Blasting machine	20	500	10 000		
			❖ Crimpers	20	50	1 000		
			❖ Mine marker	300	20	6 000		
			Grand Total			984 800		

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)
		1.3 Provision of adequate logistical support to Demining Operations.	EARTH MOVING PLANT					
			❖ Dozer D7G	2	2 000 000	4 000 000		
			❖ Grader D7G	2	1 500 000	3 000 000		
			❖ Front-end Loader	2	1 000 000	2 000 000		
			❖ Tipper	4	500 000	2 000 000		
			❖ Tractor	2	100 000	200 000		
			❖ Compactor	2	70 000	140 000		
			Grand Total			1 340 000		
			LOGISTICAL VEHICLES & EQUIPMENT					
			❖ Troop carrier vehicle	20	500 000	10 000 000		
			❖ Ambulance	10	300 000	3 000 000		
			❖ Water Wagon	4	350 000	1 400 000		
			❖ Fuel Bowser	4	350 000	1 400 000		
			❖ Command Rover	10	250 000	2 500 000		
			❖ Stores vehicle	8	700 000	5 600 000		
			❖ Horse and Lowbed	2	1 500 000	3 000 000		
			❖ Horse and box trailer	2	1 500 000	3 000 000		
			Grand Total			29 900 000		

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)
			MEDICAL EQUIPMENT					
			❖ Wheel Chair	5	200	1 000		
			❖ Stretcher Field	20	100	2 000		
			❖ Shock bag	10	80	800		
			❖ Air way kit	10	500	5 000		
			❖ Stethoscopes	5	150	750		
			❖ Suction machines	5	300	1 500		
			Grand Total			11 050		
			STATIC PLANT					
			❖ 15 kVA Generator	12	3 000	36 000		
			❖ 7.5 kVA Generator	6	1 000	6 000		
			❖ Chain Saw	10	20	2 000		
			❖ Field Kitchen	3	5 000	15 000		
			❖ Water pump	10	300	3 000		
			Grand Total			62 000		
			MISCELLANEOUS TOOLS AND EQUIPMENT					
			❖ Trowel	200	50	1 000		
			❖ Shear pruning	200	40	8 000		
			❖ Demining brush	200	20	4 000		
			❖ Power ext cable	2000m	20/m	40 000		
			❖ Deminers knife	200	70	14 000		
			❖ Fridge	10	200	2 000		
			❖ Food container	20	80	1 600		
			❖ Jerry cane (water)	20	20	400		
			❖ Jerry cane (fuel)	20	20	400		
			Total			71 400		
			Grand Total			32 409 450		

FOOT NOTES:

1. The equipment is adequate to kit two deminer's squadron and should be replaced after every five years.

Mine Clearance Equipment in the Inventory

Ser	Date of acquisition	Organisation responsible for inventory	Detector type held	Total number of detectors	Number serviceable	Remarks
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1.	1998	Army	Schiebel	100	Nil	Donated by Mine Tech Not operationally suitable in Zimbabwe.
2.	1998	Army	EBEX	40	Nil	Donated by USA Government.
3.	2002	Army	VHM1	25	23	Donated by USA Government.
4.	2004	Army	VHM3	49	47	Purchased by Zimbabwe Government.

Ser	Date of acquisition	Organisation responsible for inventory	Personnel protective clothing	Total	Percentage serviceable	Remarks
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1.	1998	Army	Helmet with visor	200	90%	All protective clothing donated by USA govt.
2.	1998	Army	Genital protectors	40	Nil	.
3.	1998	Army	Anti-fragmentation trousers	40	75%	
4.	1998	Army	Apron	100	50%	
5.	1998	Army	Deminers boots	80	25%	

Ser	Date of acquisition	Organisation responsible for inventory	Mechanical equipment	Total	Number serviceable	Remarks
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1.	2000	Army	Dozer D7G	2	1	
2.	2000	Army	Champion Grader	1	1	
3.	2000	Army	Bush Muncher	1	1	
4.	2000	Army	3 ton Horse	1	50%	
5.	2000	Army	Low-bed trailer	1	1	
6.	2000	Army	Tipping truck	1	Nil	

18. INSTITUTIONAL, HUMAN RESOURCES AND MATERIAL CAPACITY AVAILABLE

National and International Mine Clearance Organisations.

Ser	Name of Organisation	Type of Organisation	Number of Demining personnel	Status of Teams	Remarks
(a)	(b)	(c)	(d)	(e)	(f)
1.	National Mine Clearance Squadron.	Military	200	Operational	Currently deployed on the Sango to Crooks Corner minefield. There is capacity to double the number of personnel resources permitting.
2.	Mine Link	Commercial	No records	Operational	International experience.
3.	MACHIMO Mine International	Commercial	No records	Not operational Just been formed.	International experience.
4.	Croxenham	Commercial	No records	Not operational	International experience.
5.	SADSA	Commercial	No records	Operational	International experience.
6.	Eco-Mine International	Commercial	No records	Not operational	International experience.
7.	Mine-Tech	Commercial	No records	Operational	Conducted the technical survey for all minefields in Zimbabwe. Has vast demining experience in Africa and the Middle East.

Remarks:

- Demining companies listed above less the military are operating outside Zimbabwe since there are no funds to contract them locally. Otherwise they are relying on exporting labour to other countries.
- Even those companies which are not currently operational have the capacity to quickly mobilise the abundant demining expertise in the country. All are staffed with personnel with various international experience.

- ZIMAC estimates that there are more than 1000 deminers with operational experience either gained in commercial companies or retirees from the military. ZIMAC is yet to register all deminers in the country.

MINED AREAS IN ZIMBABWE

Serial	Area Code	Minefield Name	Area Mined in km ²	Status
(a)	(b)	(c)	(d)	(e)
1.	Area 1	Victoria Falls to Mlibizi	268	Land Released
2.	Area 2	Musengezi to Rwenya	435,5	130km was cleared but not quality assured.
3.	Area 3	Sheba Forest to Beacon Hill	65	Still to be cleared
4.	Area 4	Burma Valley	3,9	
5.	Area 5	Rusitu to Muzite Mission	97,5	
6.	Area 6	Sano Border Post to Crooks Corner	182	Currently being cleared (9km ² already cleared)
7.	Area 7	Kariba Power Station	1,5	Land released
8.	Area 8	Lusulu	5?	Not yet surveyed. Area is estimate from what the locals indicated

Sheba Forest to Beacon Hill minefield and Stapleford to Vumba mountains is one minefield.

GLOSSARY OF TERMS

1. **Cleared Area**. An area that has been physically and systematically processed by a demining organisation to ensure the removal and / or destruction of all mines and UXOs hazards.
2. **Mined Area**. An area which is dangerous due to the presence or suspected presence of mines.
3. **Minefield**. An area of ground containing mines laid with or without a pattern.
4. **Quality Control (QC)**. Part of quality management focused on fulfilling quality requirements.
5. **Quality Assurance**. Part of quality management focused on providing confidence that quality requirements will be met.
6. **Level 1 Survey**. This is the survey done initially to provide detailed and reliable report of the impact of mines and UXOs contaminated areas on local communities.
7. **Safe Lane** A passage of between 2 and 8 metres cleared through a minefield or mined area.
8. **Picket** Wooden or metal 1m piece driven into the ground where mine was recovered or was suspected to be in a minfield.