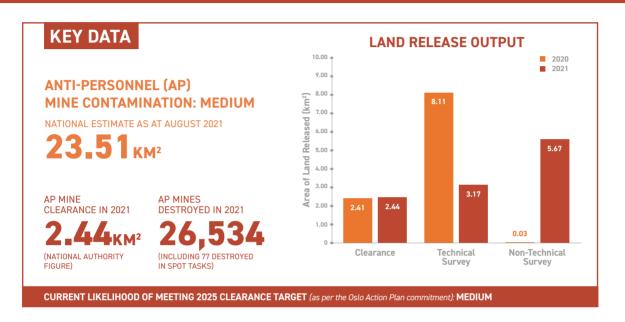
ZIMBABWE



ARTICLE 5 DEADLINE: 31 DECEMBER 2025
JUST ON TRACK TO MEET DEADLINE



KEY DEVELOPMENTS

Zimbabwe exceeded its land release targets for 2021 despite the challenges posed by the COVID-19 pandemic. In November 2021, Mount Darwin became the first district in Zimbabwe to be declared fully completed by humanitarian operators. All mined areas remaining in Zimbabwe are now confirmed hazardous areas (CHAs). The challenge for Zimbabwe in meeting its Article 5 deadline under the Anti-Personnel Mine Ban Convention (APMBC) remains securing the requisite funding from donors in a country with significant competing social and economic challenges.

RECOMMENDATIONS FOR ACTION

- The Zimbabwe Mine Action Centre (ZIMAC) should prioritise efforts to secure additional national and international funding to meet its 2025 clearance completion deadline.
- Zimbabwe should elaborate a gender and diversity policy and an implementation plan for the mine action programme.
- Zimbabwe should complete as soon as possible its review of procedures for "missed-mine drills" (executed where gaps in the pattern minefield are found) in order to improve clearance efficiency.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	8	Zimbabwe has a good understanding of remaining mine contamination with only CHAs remaining. In 2021, ZIMAC estimated that only about 11km² of land is actually contaminated with anti-personnel mines and that other mined area in the national database (more than 20km²) can be released by survey. The amount of previously unknown contamination added to the database decreased considerably in 2021 compared to 2020.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	The mine action programme is managed effectively by ZIMAC, with good consultation and collaboration with partners. There is a high degree of national ownership with the government continuing to provide US\$500,000 annually to the mine action programme despite increasing financial hardship in the country. ZIMAC's Communication and Resource Mobilisation Strategy was due to be officially launched in 2020 and has been delayed twice due to the COVID-19 pandemic. A mid-term review of Zimbabwe's National Strategy took place in November 2021.
GENDER AND DIVERSITY (10% of overall score)	6	6	ZIMAC does not have a gender and diversity policy and implementation plan but has committed to developing a policy by the end of 2022. The importance of gender is acknowledged in the National Mine Action Strategy and integrated into Annual Work Plans. Survey and community liaison teams are reportedly inclusive and gender-balanced both in their make-up and during community consultations. Operators report varying proportions of women employed. The Zimbabwean Armed Forces' National Mine Clearance Unit (NMCU) has no women in operational roles.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	8	ZIMAC continued to improve its information management in 2021. Zimbabwe submits detailed Article 7 reports annually. An information management seminar planned for 2021 was rescheduled to late 2022, due to the COVID-19 pandemic.
PLANNING AND TASKING (10% of overall score)	8	8	Zimbabwe has a National Mine Action Strategy for 2018–25. This was reviewed in 2021 and was due to be launched with the support of the Geneva International Centre for Humanitarian Demining (GICHD) in October 2022. In 2021, as in 2020, Zimbabwe exceeded the land release targets set out in its multiyear work plan published in 2019. In its latest Article 7 report ZIMAC presented revised annual land release targets to 2025 and identified the resources, time, and funding needed to complete clearance.
LAND RELEASE SYSTEM (20% of overall score)	8	8	There was a small decrease in overall capacity across operators in 2021. However, APOPO¹ began clearance activities during the year. Greater use of mechanical assets and mine detection dogs (MDDs) has increased efficiency in recent years. Time spent on "missed mine drills", when gaps in the mine pattern are found, remains a challenge. However, trials using MDDs and excavation equipment are underway to improve this. Despite this, operators continue to clear tens of thousands of anti-personnel mines annually, destroying one of the world's highest number of mines cleared per square kilometre.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	9	9	Zimbabwe released 11.28km² of mined area in 2021, exceeding its land release target for the year despite the continued challenges imposed by COVID-19. Most came from cancellation, particularly from the resurvey conducted by APOPO before commencing clearance of their task. Zimbabwe's clearance output, at 2.44km², was only marginally more than in 2020. Zimbabwe will need to secure additional funding and increase capacity in order to meet its land release targets but if it can do so should be able to meet its Article 5 deadline of end 2025. This will be a considerable achievement for one of the world's most heavily mined countries in a particularly challenging political and economic context.
Average Score	8.0	8.0	Overall Programme Performance: VERY GOOD

APOPO stands for Anti-Persoonsmijnen Ontmijnende Product Ontwikkeling, which translates into English as 'Anti-Personnel Mines Demining Product Development'. APOPO is a Belgian non-governmental organisation (NGO).

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Mine Action Authority of Zimbabwe (NAMAAZ)
- Zimbabwe Mine Action Centre (ZIMAC)

NATIONAL OPERATORS

 Zimbabwean Armed Forces' National Mine Clearance Unit (NMCU)

INTERNATIONAL OPERATORS

- APOPO
- The HALO Trust
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

 Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

Five of Zimbabwe's ten provinces are contaminated with anti-personnel mines.² As at the end of 2021, Zimbabwe reported a total of just over 23.5km² of confirmed mined area remaining (see Table 1).³ This is a decrease from the 34.1km² reported at the end of 2020.⁴ Of the seven remaining minefields, six stretch along the borders with Mozambique, covering four provinces, while one is inland in Matabeleland North province.⁵ According to the Zimbabwe Mine Action Centre (ZIMAC), the baseline of contamination is complete following the completion of significant re-survey in 2016.⁶ The Geneva International Centre for Humanitarian Demining (GICHD) believes that Zimbabwe has gained clarity on remaining contamination.⁷ Similarly, in 2021, the Committee on Article 5 Implementation noted Zimbabwe's "high degree of clarity" on its remaining contamination.⁸

All contaminated areas remaining in Zimbabwe are confirmed hazardous areas (CHAs), albeit which are, in general, very widely drawn. That said, ZIMAC believes that the true mined area is less than half of that in its official estimate. Indeed, as ZIMAC told Mine Action Review in August 2021, of the total confirmed mined area, only some 11km² is thought to be actually contaminated, with considerable area between mine lines that can be released through survey.

Table 1: Anti-personnel mined area (at end 2021)10

Province	CHAs	Area (m²)
Mashonaland Central	43	4,435,475
Mashonaland East	46	9,521,239
Matabeleland North	7	905,537
Masvingo	21	3,749,862
Manicaland	20	4,895,314
Totals	137	23,507,427

In 2021, a total of 448,734m² of previously unknown contamination was added to the database, primarily as a result of reshaping of polygons during pre-clearance resurveys.¹¹ It also included 41,288m² of minefield added by The HALO Trust, following reports from the local community.¹² This is a significant decrease on the 1.97km² of previously unknown contamination added to the database in 2020, also due to both the expansion of existing CHAs as a result of pre-clearance re-survey¹³ and some areas reported to HALO by local communities.¹⁴

Zimbabwe National Mine Action Strategy, 2018–2025, "Reviewed Version", p. 6.

³ Article 7 Report (covering 2021), p. 2.

⁴ Email from Maj. Cainos Tamanikwa, Operations Officer, ZIMAC, 27 April 2021.

⁵ Article 7 Report (covering 2021), p. 2.

⁶ Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

⁷ Email from Asa Massleberg, Programme Manager and Senior Advisor, GICHD, 8 July 2022.

⁸ Preliminary Observations, Committee on Article 5 Implementation, APBMC Intersessional Meetings, 20–22 June 2022, Geneva, p. 1.

⁹ Email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

¹⁰ Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

¹¹ Ibid

¹² Email from Samuel Fricker, Programme Manager, The HALO Trust, 30 May 2022.

¹³ Emails from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; Peter Avenell, Country Director, Mines Advisory Group (MAG), 15 April 2021; and Chimwemwe Tembo, Programme Manager, Norwegian People's Aid (NPA), 16 April 2021; and Article 7 Report (covering 2020), p. 2.

¹⁴ Email from Samuel Fricker, HALO Trust, 13 April 2021.

Zimbabwe's mine contamination, the overwhelming majority of which is of anti-personnel mines, originates from the laying of minefields in the late 1970s during a decolonisation war. At the time of its independence in 1980, Zimbabwe was left with seven major mined areas along its borders with Mozambique and Zambia, and one inland minefield laid by the Rhodesian Army.¹⁵ Initially, anti-personnel mines were laid in very dense belts (on average 2,500 mines per kilometre of frontage) to form a so-called "cordon sanitaire", with up to 5,500 mines per kilometre in some places. Over time, this cordon sanitaire was breached or subject to erosion. In response, in many sections, a second belt of "ploughshare" directional fragmentation mines protected by anti-personnel mines was laid behind the cordon sanitaire. Few areas contain anti-vehicle mines and it is thought that the number of such mines remaining is low.¹⁶

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The National Mine Action Authority of Zimbabwe (NAMAAZ) is a policy and regulatory body on all issues relating to mine action in Zimbabwe. ZIMAC was established in 2000 within the Ministry of Defence (MoD) as the focal point and coordination centre of all mine action in the country. ZIMAC is mandated to report to NAMAAZ.¹⁷ In August 2019, ZIMAC's office relocated outside of a military cantonment allowing access to civilian operators.¹⁸

ZIMAC holds quarterly coordination meetings with all stakeholders; operators report being closely involved in the decision-making process. Communication between ZIMAC and NAMAAZ, operators, and other Zimbabwean government ministries is reported to be good with regular bilateral meetings and visits from the director of ZIMAC.¹⁹ To date, donors have not attended quarterly coordination meetings but ZIMAC is seeking to improve coordination with donors.²⁰

Operators report co-operative and productive working relationships with ZIMAC, but also identify areas for practical improvement. The approval processes for international visas for staff and visitors is very slow, normally requiring a minimum of three months. However, ZIMAC has provided long-term memorandums of understanding (MoUs) and does its best to assist.²¹ APOPO also notes that it would be helpful to receive reports or recommendations from ZIMAC more frequently after quality assurance (QA) visits and to have increased support from ZIMAC in donor interactions.²²

The GICHD has provided strategic planning support to Zimbabwe since 2016.²³ The GICHD also provides information management (IM) support to ZIMAC with an advisor working with the ZIMAC information management team and operators on the Information Management System for Mine Action (IMSMA) and data handling improvements.²⁴ A mid-term review of Zimbabwe's national strategy, supported by the GICHD, took place in Harare in November 2021, bringing the relevant national and international stakeholders together. ZIMAC planned to launch the updated strategy to 2025 in October 2022.²⁵ The 2021 mid-term review meeting has been described as a "very participatory process",²⁶ which resulted in "greater clarity on achievements and challenges".²⁷

According to ZIMAC's Article 7 Report covering 2021, a total of \$51.34 million is required by the mine action programme to meet its extended Article 5 deadline by 2025. ²⁸ In 2021, the government provided US\$100,000 to cover the cost of the national mine action centre and US\$400,000 for survey and/or clearance of anti-personnel mined area, ²⁹ matching the funding it provided in 2020. ³⁰ For 2022, ZIMAC expected government funding levels to remain the same, though more support is expected for the Zimbabwean Armed Forces' National Mine Clearance Unit (NMCU) from Army channels. ³¹

According to ZIMAC, the Government of Zimbabwe has committed US\$500,000 to the NMCU and for the operational costs of ZIMAC every year since $2010.^{32}$ In 2021, however,

- 15 2013 Article 5 deadline Extension Request, Executive Summary, p. 1; and email from (then) Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017.
- 16 Email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.
- 17 2013 Article 5 deadline Extension Request, p. 7.
- 18 Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.
- 19 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; Chimwemwe Tembo, NPA, 25 March 2020; Samuel Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.
- 20 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022 and interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva, 24 June 2022.
- 21 Emails from Samuel Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.
- 22 Email from John Sorbo, Programme Manager, Mine Action, Mozambique and Zimbabwe, APOPO, 16 August 2022.
- 23 Email from Asa Massleberg, GICHD, 8 July 2022.
- 24 Email from GICHD, 30 April 2021,
- 25 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Asa Massleberg, GICHD, 16 August 2022; and interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva. 24 June 2022.
- 26 Email from Samuel Fricker, Programme Manager, The HALO Trust, 30 May 2022.
- 27 Email from Asa Massleberg, GICHD, 8 July 2022.
- 28 Article 7 Report (covering 2021), Appendix A, p. A-20.
- 29 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Article 7 Report, (covering 2021), p. 12.
- 30 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.
- 31 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 32 Article 7 Report (covering 2017), Form D.

ZIMAC raised concerns about rising operational costs, particularly in fuel and labour, as well as the significant loss of United Kingdom funding.³³ As at August 2022, it was reported that the UK had reconsidered and would continue to fund Zimbabwe's mine action programme.³⁴ Even so, further resource mobilisation efforts will be essential going forward. ZIMAC stresses that all operators were highly active in engaging potential new donors and encouraging existing donors to increase support.³⁵ Zimbabwe also held a virtual side-event for potential donors at the APMBC Nineteenth Meeting of States Parties in 2020.³⁶ At the time of writing, a sector-wide funding proposal to the European Union (EU) was being elaborated.³⁷

With assistance from the GICHD and the International Committee of the Red Cross (ICRC), ZIMAC finalised a Communication and Resource Mobilisation Strategy in the first half of 2019. This was due to be officially launched in May 2020 but, due to the COVID-19 pandemic, was delayed twice, with an new expected launch date of the third quarter in 2022.³⁸ The GICHD planned to visit ZIMAC in October 2022 to update the resource mobilisation strategy and support its launch.³⁹ Some operators have called for urgency on the implementation of the resource mobilisation strategy and stress the time-critical importance of gaining increased donor support in order to meet the 2025 deadline.⁴⁰

As mentioned, ZIMAC has been receiving ongoing capacity development support from the GICHD. In addition, Norwegian People's Aid (NPA) has planned to conduct a week of Quality Management System (QMS) training with ZIMAC in the third quarter of 2022.41 While The HALO Trust is not providing any formal capacity development support to ZIMAC, it did host a quarterly operators' technical working group in late 2021, intended to complement the quarterly coordination meetings hosted by ZIMAC and attended by the heads of non-governmental organisation (NGO) programmes. The new technical working groups are attended by operations management personnel and focus on technical challenges. HALO has hosted two of these groups so far and operators have agreed to rotate hosting going forward.⁴² In its 2018-2025 National Mine Action Strategy, ZIMAC acknowledges the key importance of coordination and commits to continuing to organise these quarterly meetings.43

One challenge that has been highlighted is the need to develop a plan for the effective demobilisation of the several hundred local operational staff working in the mine action sector once Zimbabwe reaches completion. The issue was raised by the EU in recent discussions on its potential funding and in discussions with other potential donors. ⁴⁴ While solutions to this challenge will extend well beyond the remit of mine action stakeholders, it is something stakeholders will need to consider in a country facing high unemployment and economic instability as Zimbabwe's expected completion date pears.

ENVIRONMENTAL POLICIES AND ACTION

ZIMAC reports that Zimbabwe has a national mine action standard (NMAS) on environmental management and a policy on environmental management, 45 although not all stakeholders were aware of its existence. 46 The HALO Trust refers to NMAS 10.07, which covers "Safety and Occupational Health and Protection of the Environment". 47 This comprehensive document provides operational guidance on a range of environmental considerations, including but not limited to air, water, and soil pollution; reduction and disposal of waste, especially toxic and hazardous waste; obstruction of watercourses; burning of vegetation; environmental considerations at worksites and temporary accommodation facilities, as well as at fuel, oil and lubricant areas and maintenance areas. It also covers reduction of energy consumption and carbon dioxide (CO₂) emissions and environmental considerations related to use of land and risk to heritage. 48

In terms of good practice, ZIMAC outlines how the use of highly destructive mechanical clearance methods is not permitted in areas with very large trees. Manual clearance only is used in such areas.⁴⁹

Operators vary in the degree to which they have environmental policies and management systems in place.

- 33 Interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva, 24 June 2022.
- 34 Email from Asa Massleberg, GICHD, 17 August 2022.
- 35 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 36 Article 7 Report (covering 2021), p. 12.
- $\,$ 37 $\,$ Online interview with John Sorbo, APOPO, 11 August 2022.
- 38 Emails from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; and (as Major) 27 April 2021 and 2 June 2022; and Article 7 Report (covering 2021), Annex A, p. A-19.
- 39 Email from Asa Massleberg, GICHD, 8 July 2022.
- 40 Email from Peter Avenell, MAG, 17 May 2022 and online interview with John Sorbo, APOPO, 11 August 2022.
- 41 Email from Gemma Walsh, Programme Manager, NPA, 2 June 2022.
- 42 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 43 Zimbabwe National Mine Action Strategy, 2018–2025, Reviewed Version, p. 19.
- 44 Interview with John Sorbo, APOPO, 11 August 2022.
- 45 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 46 Emails from Peter Avenell, MAG, 17 May 2022; Gemma Walsh, NPA, 2 June 2022; and Asa Massleberg, GICHD, 8 July 2022.
- 47 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 48 Zimbabwe National Mine Action Standards 10.07, First edition (February 2013), Safety and Occupational Health. Protection of the Environment.
- 49 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

At the time of writing, APOPO had a Standing Operating Procedure (SOP) pending approval by ZIMAC, which includes environmental management. During planning and tasking for survey and clearance, APOPO adheres to the following practices to minimise potential environmental harm:

- All excavation holes and detonation craters are refilled after external quality control (QC).
- Measures are in place to prevent wildfires during demolitions
- Unnecessary cutting down of trees is avoided.
- Rubbish pits and latrines are dug to prevent environmental contamination.
- Processed soil is returned to the affected site (e.g., after soil removal in Missed Mine Drills).
- Temporary latrine holes are dug at every control point and filled in once the control point is no longer in use.
- Use of gas instead of firewood or charcoal is in place at camps.50

The HALO Trust has global policies and SOPs on environmental management, both of which are applicable to the Zimbabwe programme. HALO describes how the selection of manual versus mechanical teams to conduct clearance is the primary environmental consideration during planning and tasking, weighing the impact of the more environmentally intrusive mechanical clearance against the operational

benefits or need. HALO also aims to situate field camps in areas that will not impact the local environment, and place camps as close to minefields as possible to minimise travel times, and thus vehicle emissions. Waste generation and disposal at camps are closely monitored and HALO field camps have been run on solar power since 2016. HALO has also begun trials of electric vegetation strimmers, with the eventual aim of fully replacing the existing petrol fleet.51

MAG operations follow IMAS (07.13) and take into account the need for vegetation and ground preparation, measures to avoid soil erosion and pollution, and management of deminer worksites to ensure proper disposal of waste.52

NPA has an environmental management system in place, including an environmental policy and environmental SOP. It is in the process of updating its SOPs, including the chapter on Environmental Protection.53 NPA outlines how these regulations will "prevent or mitigate all significant harmful effects of demining camps and operations to an acceptable level", for example prohibiting the major servicing of vehicles and bulk storage of liquids at work sites. Detailed instructions on the disposal of waste fuel and lubricants are already provided in NPA's current environmental regulations. To protect vegetation, NPA cuts shrubby vegetation at ground level to allow the swinging of detectors, but only cuts trees if they present an obstruction to the use of the detector to confirm a hazard in the safe lane.54

GENDER AND DIVERSITY

ZIMAC does not have a gender and diversity policy and implementation plan. However, in its latest Article 7 report Zimbabwe stresses that it is bound by national policy, which upholds gender equality of opportunity and seeks to support women to take on roles which have been male-dominated. Zimbabwe asserts that no barriers exist to gender-balanced participation in mine action.55

ZIMAC has said it will seek assistance from international stakeholders to formulate a gender and diversity policy by the end of 2022.56 In the meantime, Zimbabwe's National Mine Action Strategy 2018-2025 refers to the importance of addressing gender and diversity considerations and existing guidelines that stakeholders should use as a reference, including the UN's Gender Guidelines for Mine Action Programmes.⁵⁷ While there is not a specific standard on gender mainstreaming in the NMAS, reference to gender, such as within NMAS 07 ("Management of Demining

Operations"), requires that "special efforts should be made to ensure gender balance and diversity of background for Community Liaison Officers".58 The GICHD confirms that gender and diversity are integrated into Zimbabwe's national mine action strategy and annual work plans.59

ZIMAC confirms that all community groups are routinely consulted in survey and community liaison activities, with efforts undertaken to ensure that all age and gender groups are consulted. Survey and community liaison teams are gender-balanced and diverse, with personnel recruited locally from affected areas to incorporate ethnic and minority groups who speak the language of the community. Demining and community liaison teams also include some women as leaders. Community liaison teams meet children of all age groups during visits to schools. 60 All mine action data are disaggregated by sex and age.61

- 50 Emails from John Sorbo, APOPO, 20 June and 16 August 2022.
- 51 Emails from Samuel Fricker, HALO Trust, 30 May and 14 August 2022.
- 52 Email from Roxana Bobolicu, MAG, 29 September 2022.
- Emails from Gemma Walsh, NPA, 2 June and 8 July 2022.
- 54 Email from Gemma Walsh, NPA, 8 July 2022.
- 55 Article 7 Report, Annex A, Zimbabwe's Revised Mine Action Work Plan for 2022-2025, p. A-1
- 56 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 57 Email from Tom Dibb, HALO Trust, 22 February 2018; and Zimbabwe National Mine Action Strategy, 2018-2025, Reviewed Version, p. 15.
- 58 Email from Samuel Fricker, HALO Trust, 20 July 2019.
- Email from Asa Massleberg, GICHD, 8 July 2022.
- Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020, and (as Major) 2 June 2022.
- Article 7 Report, Annex A, Zimbabwe's Revised Mine Action Work Plan for 2022-2025, p. A-1; and email from Asa Massleberg, GICHD, 8 July 2022.

ZIMAC reports that gender is taken into account during the planning and prioritisation of minefields for clearance, such as consideration of the risks taken usually by women and girls to cross minefields to fetch water and that of men and boys who often herd cattle or plough near mined areas. Example 12 However, given the nature of the minefields, which are essentially one long and continuous line, operational access constraints often dictate clearance priorities as much as other factors. At the same time, according to The HALO Trust, post-clearance surveys reflect the gendered impact of clearance. Women and children are often the major beneficiaries of clearance, as they are responsible for more than 80% of water collection, with clearance providing safer and more direct access to water sources.

ZIMAC reported that international operators working in Zimbabwe are encouraged to prioritise recruitment from communities living adjacent to the mine affected areas. In 2020, APOPO recruited from the minority Shangani ethnic group who live in mine-affected communities.⁶⁵ In 2022, APOPO reported prioritising recruitment of local youths from Ward 15 of the Chiredzi South District, close to the Gonarezhou national park and border with Mozambique, where APOPO is undertaking clearance. Hiring local youths has reduced cases of poaching and illegal immigration in search of employment and has been received very positively by community leaders.⁶⁶

No women are employed in operational roles in the NMCU because staff are recruited from the corps of military engineers, where very few women are working. However, according to ZIMAC, women are specifically encouraged to apply for operational positions in job advertisements by international operators. However, NMCU deminers are drawn exclusively from soldiers and are therefore all male). ⁶⁷ In 2021, 15% of ZIMAC's employees were women; all were employed in administrative positions as clerks; none was in an operational or managerial/supervisory position, with the exception of two Victim Assistance Officers, supervisory posts occupied by women. However, while attached to ZIMAC, this position falls under the Ministry of Public Service, Labour and Social Welfare. ⁶⁸

In 2021, ZIMAC found community liaison to be effective in encouraging more women to join mine action, with all

operators now employing considerable numbers of female deminers, team leaders, and supervisors. ⁶⁹ This represents some progress since 2020, when ZIMAC stated that the number of women employed in mine action fell short of "required" levels and noted that Zimbabwean women were somewhat reluctant to work in mine action. Hence, more effort was to be placed on raising awareness among women and ensuring equal opportunities to employment. ⁷⁰

International operators confirmed that each organisation had gender policies in place for their programme staff.⁷¹ While, in 2020, all operational organisations noted positive trends in the increasing number of women employed in programmes⁷² only NPA saw a slight increase in 2021. That said, all operators demonstrated continued commitment to measures that encourage and support employment of women in mine action and some recruited into new roles intended to promote this further.

NPA confirm that their recruitment process adheres to a gender policy and encourages gender balance in staff composition. In 2021, a total of 26 women were employed by NPA in Zimbabwe, representing 24% of all staff. Three women were employed in managerial/supervisory positions, representing 40% of the total, and 21 women were employed in operational positions, representing 31% of operational staff.⁷³ NPA saw an increase in the proportion of women in supervisory/managerial positions compared to 2020, when it stood at 27%, while the proportion of women in operational positions remained the same.⁷⁴ NPA has pledged to continue to adopt a non-discriminatory and fully participatory approach throughout all activities.⁷⁵

In 2021, 24% of The HALO Trust's employees in Zimbabwe were women, with 14% of managerial/supervisory positions (including a team leader), occupied by women as well as 24% of operational positions. This represents a slight decrease compared to 2020, when 15% of managerial/supervisory positions and 26% of operational positions were occupied by women. HALO notes that, while their national operations leadership is still dominated by men, the organisation is actively encouraging promotion of qualified female candidates into leadership roles, and was proud to report that their international operations management team became fully female in September 2021.

- 62 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020.
- 63 Emails from Samuel Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, Regional Director West Africa and Latin America, MAG, 1 August 2019.
- 64 Email from Samuel Fricker, HALO Trust, 20 July 2019.
- 65 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.
- 66 Email from John Sorbo, APOPO, 16 August 2022.
- 67 Email from Maj. Cainos Tamanikwa, 23 August 2022.
- 68 Emails from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021 and 2 June 2022; and interview in Geneva, 24 June 2022.
- 69 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 70 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020.
- 71 Ibid.; and emails from Samuel Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, NPA, 15 July 2019.
- 72 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; Samuel Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, NPA, 15 July 2019.
- 73 Emails from Gemma Walsh, Programme Manager, NPA, 2 June and 8 July 2022.
- 74 Email from Chimwemwe Tembo, NPA, 16 April 2021.
- 75 Emails from Gemma Walsh, NPA, 2 June and 8 July 2022.
- 76 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 77 Email from Samuel Fricker, HALO Trust, 13 April 2021.
- 78 Email from Samuel Fricker, HALO Trust, 30 May 2022.

In 2021, HALO reported positively on some changes introduced the previous year, including a small allowance to cover the costs of childcare and a female nurse to ensure confidential medical services could be offered to female staff; previously all nurses on the programme were male. 79 HALO reports that the female nurse, who rotates through the operations camps, has been extremely well received by staff and has been able to raise awareness among staff of additional resources available. HALO has also begun coordinating with the Ministry of Health to provide gender-specific trainings, screenings, and awareness sessions for staff, for example, on cervical cancer. While HALO has not vet seen an increase in the number of female staff, which has been limited by reduced funding and reduced overall capacity, HALO's existing employees have reported that these changes have significantly increased their quality of life.80

HALO hired a new female Safeguarding and Staff Wellness officer in late 2021, and a new Community Liaison Manager in early 2022 to support the community outreach team, including improving the participation of women during survey and community liaison and in the prioritisation, planning, and tasking of survey and clearance. HALO's Area of Operations, presently focused on Rushinga District, is mostly culturally homogenous, comprised of the Shona people. While their community outreach team is gender balanced and includes both Shona and Ndebele speakers, no new measures to improve the participation of ethnic minority groups during survey or planning were necessary during 2021.81

Mines Advisory Group (MAG) reports equal access to employment for qualified women and men in its survey and clearance teams in Zimbabwe, including for managerial level/supervisory positions. One quarter of MAG's staff were women in 2021, with 22% of managerial/supervisory positions occupied by women and 30% of operational positions.⁸² This is a similar picture to 2020, when approximately 30% of MAG's operational staff were women as were 20% of staff at managerial level.⁸³

In 2021, a female deminer was promoted to Deputy Team Leader in MAG, but otherwise no vacancies were opened, and thus no opportunity to recruit or promote more female staff. In 2020, MAG offered breastfeeding mothers an additional three months of arrangements to facilitate breastfeeding after the first three months of maternity leave. In 2021, MAG hoped this encouraged more women staff to remain with the organisation.

APOPO has a gender and diversity policy and implementation plan and, in June 2022, a female Human Resources Co-ordinator came into post to follow up on implementation. The organisation reports offering equal access to employment for qualified women and men in survey and clearance teams, including for managerial level/supervisory positions. In 2021, their first year of operating in Zimbabwe, 31% of APOPO's employees were women. Women occupied 50% of managerial/supervisory positions and 34% of operational positions.⁸⁷

APOPO asserts that all communities, including women, children and ethnic minorities in mine-affected areas are consulted during clearance. Their needs are measured during Impact Assessment; for example, through community meetings, school visits, household surveys, and discussions with village heads, in accordance with the organisation's SOPs. APOPO notes that their SOPs have been improved through the addition of a comprehensive section on gender-balance in survey and community liaison teams. Survey and community liaison are conducted by a team that originates from the communities along the minefield concerned, and all minority groups are said to be well represented. From time to time, beneficiary interviews are conducted to better understand how beneficiaries feel about ongoing clearance. Traditional leadership and authorities in the communities are consulted continuously. APOPO disaggregates all data by gender and age.88

INFORMATION MANAGEMENT AND REPORTING

ZIMAC operates an IMSMA New Generation (NG) database. ⁸⁹ In line with Oslo Action Plan (Point 9), Zimbabwe confirms its information database is accurate, up to date, and sustainable. ⁹⁰ The GICHD concurs that information is generally accurate and that the programme can easily extract relevant and up-to-date data as required, with effective data collection forms. ⁹¹ ZIMAC holds monthly meetings with operators to cross-reference data, which according to operators has improved the accuracy and reliability of the database. ⁹²

- 79 Email from Samuel Fricker, HALO Trust, 13 April 2021.
- 80 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 81 Ibid.
- 82 Email from Peter Avenell, MAG, 17 May 2022.
- 83 Email from Peter Avenell, MAG, 15 April 2021.
- 84 Email from Peter Avenell, MAG, 17 May 2022.
- 85 Email from Peter Avenell, MAG, 15 August 2022.
- 86 Email from Peter Avenell, MAG, 17 May 2022.
- 87 Emails from John Sorbo, APOPO, 20 June and 16 August 2022.
- 88 Ibid.
- 89 Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 90 Article 7 Report (covering 2021), p.3.
- 91 Email from Asa Massleberg, GICHD, 8 July 2022.
- 92 Emails from Chimwemwe Tembo, NPA, 25 March 2020; Samuel Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

In 2020, virtual meetings were held; both with operators' information managers to check data quality and with the GICHD information management advisor to trouble shoot the IMSMA NG system. The plan for 2021 was to have a seminar once the COVID-19 situation eased.⁹³ However, due to continued challenges imposed by the COVID-19 pandemic, the seminar did not take place and has been rescheduled again to late 2022.⁹⁴

ZIMAC states that, in 2021, information in the database was continually reviewed to ensure it was up to date and accurate and cross-checked with operator databases every one to three months. Polygon data are also reviewed when it is deemed prudent to do so, for example, whenever a resurvey takes place.95

MAG reported that, in 2021, it had made internal improvements to monthly data collection and that it reviews data before including in reports. 94

APOPO is in continuous communication with the ZIMAC Information Manager. APOPO does note data collection forms as an area where some improvements could be made. 97

The HALO Trust notes that, while IM teams across stakeholders continued to work together in 2021, changes in IM team composition and leadership across most operators during the year delayed progress. HALO also suggests that, across the mine action programme and stakeholders, use of nationally owned and shared data could be strengthened and that better access to IMSMA for operators would be helpful.²⁸

ZIMAC's latest Article 7 report covering 2021 is comprehensive and of generally good quality.

PLANNING AND TASKING

In 2018, with the support of the GICHD, ⁹⁹ Zimbabwe launched its first ever National Mine Action Strategy, covering 2018–25. The strategic plan complements Zimbabwe's Article 5 deadline extension request to 2025, which was approved by States Parties to the APMBC in December 2017. Operators have lauded the Strategy for its detail and its realistic outlook on delivery, which it is hoped will encourage donor funding.¹⁰⁰ A strategy review in 2021 concluded that the national programme remains on track to complete clearance by its current Article 5 deadline. ZIMAC planned to launch the updated strategy with the support of GICHD in October 2022.¹⁰¹

Zimbabwe's latest Article 7 Report, covering 2021, includes an updated estimate of remaining contamination and updated annual targets for the remainder of the extension period. These include 6.3km² to be addressed in 2022; 7.5km² to be addressed in 2024; and the remaining 3.9km² to be addressed in 2025 (see Table 2).¹⁰²

Zimbabwe exceeded its land release target for 2021, as it had done in 2020 with 11.28km² released in total in 2021, despite some continued challenges posed by the COVID-19 pandemic.

Going forward, once an operator has completed clearance of their assigned area their capacity will be redeployed to other minefields (see Table 2). 103

Clearance is prioritised according to impact, with contaminated areas closest to highly populated areas addressed first. 104 NPA uses an impact assessment to prioritise areas for release once they have been allocated by ZIMAC. 105 The HALO Trust also prioritises minefields which are closest to impacted populations and which have had a high number of accidents. For reasons of efficiency, however, operations tend to proceed linearly west to east or east to west (allowing concentrated logistical support and command and control), rather than opening tasks all over the frontage of the border. 106 APOPO also assigns areas close to communities as highest priority when undertaking clearance. 107

Operators report positively on the support offered by ZIMAC to their operations. For example, APOPO notes that clearance and survey task dossiers are issued in a timely and effective manner 108 and The HALO Trust notes the support provided by ZIMAC's monitoring and QC teams. 109

- 93 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.
- 94 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 95 Ibid., and interview, in Geneva, 24 June 2022.
- 96 Email from Peter Avenell, MAG, 17 May 2022.
- 97 Email from John Sorbo, APOPO, 20 June 2022.
- 98 Emails from Samuel Fricker, HALO Trust, 30 May and 14 August 2022.
- 99 Email from Asa Massleberg, GICHD, 16 August 2022.
- 100 Email from Samuel Fricker, HALO Trust, 20 July 2019.
- 101 Email from Asa Massleberg, GICHD, 16 August 2022.
- 102 Article 7 Report (covering 2021), Appendix A, Table A1, P. A-21.
- 103 Ibid.
- 104 Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.
- 105 Email from Chimwemwe Tembo, NPA, 25 March 2020.
- 106 Email from Samuel Fricker, HALO Trust, 17 April 2020.
- 107 Email from John Sorbo, APOPO, 20 June 2022.
- 108 Ibid.
- 109 Email from Samuel Fricker, HALO Trust, 30 May 2022.

Table 2: Annual land release targets 2022-25 (m²)110

Minefield	2022	2023	2024	2025	Totals	Comments
Musengezi to Mazowe (HALO)	1,400,000	1,400,000	1,300,000	335,475	4,435,475	
Mazowe to Rwenya River (Cordon Sanitaire) (MAG)	800,000	1,835,653	1,600,000	1,615,610	9,521,239	Complete figures to be confirmed after NPA's survey MAG to retain cordon-sanitaire
Nyamapanda to Mazowe Ploughshare (HALO and NPA)	N/A	N/A	1,800,000	1,869,976		tasks. Ploughshare tasks to be split between HALO Trust and NPA. ¹¹¹
Crooks Corner to Sango Border (Reinforced Ploughshare) (NMCU)	900,000	1,017,880	N/A	N/A	1,917,880	On completion NMCU capacity will be moved to Lusulu and APOPO's area and later to other minefields.
Crooks Corner to Sango Border (Cordon Sanitaire) (NMCU)	138,918	N/A	N/A	N/A	138,918	
Crooks Corner to Sango Border (Cordon Sanitaire) (APOPO)	500,000	590,000	503,064	100,000	1,693,064	
Rusitu to Muzite Mission (NPA)	1,500,000	2,401,766	N/A	N/A	3,901,766	
Sheba Forest to Leacon Hill (NPA)	993,548	N/A	N/A	N/A	993,548	
Lusulu (NMCU)	100,000	300,000	505,537	N/A	905,537	
Totals	6,332,466	7,545,299	5,708,601	3,921,061	23,507,427	

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national legislation specific to mine action in Zimbabwe. ZIMAC reported that Zimbabwe conducts a review of its NMAS every three years in line with updates to international mine action standards (IMAS).¹¹² ZIMAC planned to review the NMAS in 2021 with input from operators to keep them in line with new developments in the IMAS.¹¹³ Although this was not completed in 2021, it is a work in progress, with the reviews of standards for mine detection dogs (MDDs) and mechanical clearance scheduled to be completed by the end of June 2022¹¹⁴ and an aim to complete the full NMAS review by the end of 2022.¹¹⁵

Operators report that ZIMAC have embarked on the process of gaining input on the NMAS review from operators, though HALO remark that this has been somewhat ad hoc. 116 MAG undertook a minor review of SOPs with ZIMAC, resulting in some adjustments which, at the time of writing, were with ZIMAC pending final approval. 117 ZIMAC also requested that The HALO Trust support the NMAS review with a first draft of the Mechanical National Standards and that NPA consider the animal detection system (ADS) NMAS. Both drafts have been submitted and at the time of writing, were currently under review by the ZIMAC Technical Team, with a view to conducting a workshop where the standards can be finally adjusted to the Zimbabwe country context. 118

¹¹⁰ Article 7 Report (covering 2021), Appendix A, Table A1, P. A-21.

¹¹¹ Email from Samuel Fricker, HALO Trust, 14 August 2022.

¹¹² Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

¹¹³ Article 7 Report (covering 2020), p. 35.

¹¹⁴ Article 7 Report (covering 2021), p. 3.

¹¹⁵ Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and interview in Geneva, 24 June 2022. Article 7 Report (covering 2021), Annex A, p. A-19.

¹¹⁶ Email from Samuel Fricker, HALO Trust, 30 May 2022.

¹¹⁷ Email from Peter Avenell, MAG, 17 May 2022.

¹¹⁸ Email from Gemma Walsh, NPA, 2 June 2022.

An ongoing challenge for operators and ZIMAC alike continued to be the search for technical solutions to decrease the time spent on missed-mine drills, when gaps in the mine pattern are found. 119 According to operators, the drills should be reviewed to establish a more efficient method of conducting them as they are time consuming and seemingly ineffective as mines are found only very rarely. 120 COVID-19 hampered progress on a full review in 2020, as opportunities for field visits and coordination meetings were severely limited.¹²¹ However, discussions were held on the issue between operators and ZIMAC in 2021, and operators have been given autonomy to explore their own innovations for full assessment at a later stage. Such exploration includes the use of MDDs by NPA and use of a Minelab GPZ700 excavator by HALO.122 HALO notes use of the GPZ700 has been extremely promising so far and hoped to have the method accredited by the middle of 2022.123 ZIMAC reports that research is also underway to see how MMD efficiency can be improved, including trials of a new detector, which can detect mines at greater depth than previous detectors.124 It is a positive development that ZIMAC is seeking solutions to this longstanding challenge and encouraging operators to innovate. APOPO suggests that ZIMAC could support operator efforts further through production of case studies and closer assessment of productivity using the various solutions under trial.125

With regard to use of dogs in the drills, ZIMAC explains that it has not been possible to establish the maximum depth at which dogs can detect. This is a key consideration given that mines are being found at depths of up to 40cm. Now that ZIMAC has a standard for use of MDDs, they may be employed in future, but likely in combination with surface excavation, to ensure sufficiently deep exploration. ZIMAC plans to test use of MDDs in the missed-mine drills in 2022, based on a new standard. PAPA adds that, following use of their MDD teams in 2021 to focus on Targeted Technical Survey, there is now capacity to trial MDDs specifically for missed mine drills.

ZIMAC conducts regular QA, and, in recent years, an independent QC team was dispatched to conduct QC by sampling a minimum of 10% of completed tasks. 128 Operators have previously confirmed that the ZIMAC QA/QC process was rigorous, with well trained and experienced staff. The HALO Trust noted that the combination of a separate sampling team and a highly accessible monitoring team worked especially well, with the former providing thorough external oversight and the latter helping teams to work through any problems.¹²⁹ Although the handover process can be time-consuming, delaying the return of land to communities, this is a logistical challenge and not a problem with the NMAS. 130 This said, it may be helpful for ZIMAC to coordinate with other government departments as necessary and explore what could be done to speed up the return of land to communities.

OPERATORS AND OPERATIONAL TOOLS

The Zimbabwean Armed Forces' NMCU and, since 2013, The HALO Trust and NPA, all conduct land release in Zimbabwe. MAG became operational in December 2017, and APOPO signed their MoU in 2016, but were not operational until December 2020 when they began training their first demining teams. ¹³¹ APOPO began survey and clearance operations in 2021. ¹³²

APOPO has been tasked to survey and clear a 7km² area on a 37km-long stretch of minefield along the border with Mozambique. The minefield is in Chiredzi district, Masvingo province, in south-eastern Zimbabwe, in a conservation area just outside Gonarezhou national park in an area known as the Sengwe Wildlife Corridor.¹³³ Through clearance, the aim is to create a safe passage for both local communities and tourists, as well as reduce the human-wildlife conflict, caused by wildlife overpopulation, where the presence of landmines has prevented normal animal migration.¹³⁴

- 119 Emails from Samuel Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, MAG, 1 August 2019.
- 120 Emails from Samuel Fricker, HALO Trust, 5 August 2021; Peter Avenell, MAG, 20 May 2020; and John Sorbo, APOPO, 16 August 2022, and online interview, 11 August 2022. APOPO, for example, notes that in June 2022, 74 operational hours were spent on missed mine drills.
- 121 Email from Samuel Fricker, HALO Trust, 13 April 2021.
- 122 Emails from Peter Avenell, MAG, 17 May 2022; Samuel Fricker, HALO Trust, 30 May 2022; Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Gemma Walsh, NPA, 2 June 2022
- 123 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 124 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 125 Interview with John Sorbo, APOPO, 11 August 2022.
- 126 Interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva, 24 June 2022.
- 127 Email from Gemma Walsh, NPA, 2 June 2022.
- 128 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 12 June 2018.
- 129 Email from Samuel Fricker, HALO Trust, 20 July 2019.
- 130 Email from Samuel Fricker, HALO Trust, 17 April 2020.
- 131 Article 7 Report (covering 2020), p. 15; and email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.
- 132 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and John Sorbo, APOPO, 20 June 2022.
- 133 Emails from Ashley Fitzpatrick, APOPO Zimbabwe, 27 July 2019 and 9 August 2020.
- 134 "Switzerland Boosts APOPO Zimbabwe Demining Project", 13 December 2021, at: https://bit.ly/3PbEuFA.

Table 3: Operational clearance capacities deployed in 2021¹³⁵

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
HALO Trust	30	249	0	3	Deminers includes medic-deminers who operate as deminers, and mechanical operator deminers.
					7% decrease in personnel but 3 additional machines compared to 2020.
NPA	5	53	2 dogs/2 handlers	0	33% decrease in deminers compared to 2020. Four manual deminers are attached to MDD Team.***
APOPO	4	34	0	0	New capacity in 2021.
MAG	3	30	0	0	14% decrease on peak personnel of 35 in 2020.
NMCU	16	134	0	1	11% decrease in personnel since 2020.
Totals	58	500	2 dogs/2 handlers	4	

^{*} Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters. *** NPA MDD team authorised to conduct clearance only of metalized areas where a detector cannot be employed, as well as for technical survey. 136

There was an 6% decrease in overall manual clearance capacity across all operators from 534 personnel at peak in 2020 to 500 in 2021. This compares to an overall increase of 6% from 2019 to 2020, which was possible due to an increase in donor funding.¹³⁷ Zimbabwe has highlighted the exclusion of Zimbabwe from the United Kingdom's 2022 funding plans as a "major blow to the programme", with the Foreign, Commonwealth and Development Office (FCDO) previously contributing approximately half of total programme funding received.¹³⁸ In August 2022, however, it was reported that the United Kingdom had reconsidered and would continue to offer funding.¹³⁹ This being said, efforts to secure increased support from new and existing donors remain urgent.

In 2021, uncertainties in funding from the United Kingdom (FCDO) and the United States Department of State (DoS) led to a reduction in capacity of three teams from NPA and two teams from HALO, though HALO managed to adjust budgets and reduce a potential loss of 60 deminers to a loss of just 20. Zimbabwe did see an increase in dog teams employed by NPA, from two to three in 2021, as well as an increase from three to six machines, due to additions by HALO.¹⁴⁰

APOPO did not have a non-technical survey team in place in 2021 but had four technical survey teams operating, including a total of 34 deminers. APOPO's technical survey

teams operating in 2021 also functioned as clearance teams, as shown in Table 3.¹⁴¹ APOPO expected to hire additional clearance staff in 2022, ideally a male and female team, if sufficient donor funding could be secured. In July 2022, APOPO planned to begin Team Leader training, covering its new SOPs, Leadership, Quality Management, and Reporting Procedures, as well as presentation skills and staff training abilities.¹⁴²

MAG had two non-technical survey teams of five personnel and three technical survey and clearance teams of thirty personnel in 2021. As at June 2022, MAG did not expect any major changes to the number of non-technical or technical survey and/or clearance personnel in 2022. However, MAG cautioned that they had experienced some uncertainties over donor funding and faced a "confusing scenario for planning". 143 Given these uncertainties over funding and capacity, ZIMAC reassigned some of MAG's task area, which encompasses the Mazowe to Rwenya River minefield in Mashonaland East, to NPA and The HALO Trust, who are expected to reach completion of their current tasks ahead of 2025. ZIMAC commends MAG's work as "instrumental in changing the behaviour of the communities living close to this stretch" through its community liaison work, leading to a reduction in the number of mine accident victims. 144

¹³⁵ Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; Peter Avenell, MAG, 17 May 2022; Gemma Walsh, NPA, 2 June 2022; and John Sorbo, APOPO, 20 June 2022.

¹³⁶ Email from Maj. Cainos Tamanikwa, ZIMAC, 12 August 2022.

¹³⁷ Emails from Samuel Fricker, HALO Trust, 13 April 2021; Chimwemwe Tembo, NPA, 16 April 2021; and Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

 $^{138 \}quad \text{Statement of Zimbabwe, APMBC 19th Meeting of States Parties (19MSP), virtual meeting, 15-19 \ November 2021.}$

¹³⁹ Email from Asa Massleberg, GICHD, 16 August 2022.

¹⁴⁰ Interview with Maj. Cainos Tamanikwa, ZIMAC, 24 June 2022.

¹⁴¹ Email from John Sorbo, APOPO, 20 June 2022.

¹⁴² Ibid.

¹⁴³ Email from Peter Avenell, MAG, 17 May 2022.

¹⁴⁴ Article 7 Report, (covering 2021), Annex A, p. A-9.

In 2021. The HALO Trust had one non-technical survey team of two personnel. Like other operators, HALO deploys combined technical and clearance personnel, consisting of 30 teams of 249 deminers, (see Table 3 above).145 HALO's capacity decreased slightly in 2021 compared to 2020, with a reduction from 32 manual demining teams in March 2021 to 30 manual demining teams in the middle of the year, but maintaining two mechanical operator demining teams throughout the year.146 This loss in manual demining capacity was due to a reduction in regular funding from the UK government as well as completion of one-off UK government Aid-Match project for which funding was not renewed. In 2022, HALO expected a further reduction in funding from the UK government. Combined with increasing local costs, this will likely lead to a further reduction in capacity in the latter half of the year.147 ZIMAC highlights that The HALO Trust needs to secure further funding to increase its current capacity and be able to meet its 2025 deadline in Mashonaland Central as well as the area to be re-assigned from MAG to HALO in Mashonaland East. 148

NPA had one non-technical survey team of two personnel in 2021, along with one MDD team dedicated to technical survey and comprising four manual deminers and two dog handlers. Due to funding cuts from the UK FCDO and the US PM/WRA, (Bureau of Political-Military Affairs, Office of Weapons Removal and Abatement), NPA reduced the number of its clearance teams from eight to five in 2021. At time of writing, NPA was working on a resource mobilisation strategy and hoped to secure funding to increase future capacity once more.¹⁴⁹ As per 2020, NPA used its two MDDs to conduct technical survey in 2021.¹⁵⁰ NPA's 2021 operations were funded by the Norwegian Ministry of Foreign Affairs, which has guaranteed funding to 2025.¹⁵¹

In 2021, Zimbabwe's NMCU had 15 manual demining teams, totalling 150 deminers, and one mechanical team, used solely for ground preparation. As has been highlighted, opportunity for reduction through technical survey continued to decrease in the NMCU's assigned area from Mwenezi to the Sango Border. NMCU teams that had completed their tasks were relocated to support clearance of the Cordon Sanitaire minefield assigned to APOPO. Similarly, in 2022, ZIMAC envisaged using some of the NMCU's capacity to support any areas assigned to operators that are lagging behind target. ZIMAC notes that government funding for NMCU is guaranteed at the current level until clearance is complete. However, ZIMAC adds that funding requirements will increase beyond this 2023, when old detectors will require replacement. 152

ZIMAC expects the number of deminers in the country to further fall by over forty in 2022, due to funding shortages, ¹⁵³ something which must be addressed if Zimbabwe is to remain on track to meet its 2025 deadline.

Zimbabwe notes that mechanical assets, first introduced in 2016, have been useful in tackling deeply buried mines on hard ground as well as in areas with highly mineralised soils. MDDs have been instrumental in quickening technical survey and enabling fast deployment of manual deminers to lanes.¹⁵⁴

In 2020, The HALO Trust began trials of a new mechanical asset: the "MMD Sizer". This is a custom-built mobile sizer/ crushing unit, donated by equipment manufacturer MMD, which processes minefield spoil through two sets of crushing teeth without the need for subsequent physical inspection. Full trials of the machine were hampered by the COVID-19 pandemic in 2020.¹⁵⁵ However, in the first half of 2021, HALO was able to complete successfully trials and full deployment of the MMD Sizer, reporting that it did prove more effective than other mechanical assets previously used. However, the unit is only able to function effectively in certain conditions, limited to use in the dry season, and limited by task accessibility, as the machine is not highly manoeuvrable. HALO notes that the MMD Sizer is extremely effective when deployed near communities, as the crushing units can ignore significant metal contamination, which would normally slow down manual demining extensively. 156

In 2021, HALO also managed to deploy some demining equipment obtained from Mozambique in 2020, which Mozambique had held since declaring completion of its Article 5 obligations, four and a half years earlier. HALO describes how, after restoring the equipment to full working order, it has helped with operations, noting that the detectors have proved extremely useful. However, given the age of these assets, breakdowns have been more frequent than with newer equipment, bringing maintenance requirements and costs. 157

MAG does not currently use any mechanical assets or MDDs in its operations but, since 2020, has been pursuing the possibility of procuring a digger asset to support the programme. A representative from the digger provider was unable to meet with MAG in 2021, due to COVID-19 quarantine restrictions. As at May 2022, MAG was still awaiting security clearance for this visit to go ahead, despite repeated requests.¹⁵⁸

- 145 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 146 Article 7 Report (covering 2021), Annex A, p. A-7.
- 147 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 148 Article 7 Report (covering 2021), Annex A, p. A-8.
- 149 Email from Gemma Walsh, NPA, 2 June 2022; and Article 7 Report (covering 2021), Annex A, p. A-11.
- 150 Emails from Chimwemwe Tembo, NPA, 16 April 2021; and Gemma Walsh, NPA, 2 June 2022.
- 151 Article 7 Report (covering 2021), Annex A, p. A-12.
- 152 Ibid., p. A-14.
- 153 Zimbabwe National Mine Action Strategy, 2018-2025, Reviewed Version, p. 9.
- 154 Article 7 Report (covering 2021), Annex A, Zimbabwe's Revised Mine Action Work Plan for 2022–2025, p. A-2.
- 155 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; and Samuel Fricker, HALO Trust, 17 April 2020, 13 April 2021, and 14 August 2022.
- 156 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 157 Ibid.
- 158 Emails from Peter Avenell, MAG, 24 July 2020 and 17 May 2022.

As highlighted in the Land Release System section above, in 2021 and continuing into 2022, Zimbabwe was running trials of new tools to improve the efficiency of Missed Mine Drills, as well as excavation and detection of deeply buried mines. The outcome of these trials was expected by the middle of 2022.¹⁵⁹ ZIMAC has supported these trials by operators through involvement of its QA staff; monitoring to see whether the emerging practices are likely to meet national requirements.¹⁶⁰ APOPO planned to implement ArcGIS (a Geographical Information System mapping and analytics platform) in the second part of 2022.¹⁶¹

The HALO Trust comments that the commencement of operator working groups in 2021, attended by operations management teams, are proving an excellent platform for sharing innovations and lessons, and that changes to SOPs and processes are likely to occur as a result of this platform, later in 2022.¹⁶²

DEMINER SAFETY

ZIMAC reported four accidents involving deminers in 2021, all involving excavation of R2M2 anti-personnel mines. One APOPO deminer suffered amputation of two fingers and another was involved in an accident but sustained no injuries. Two HALO Trust deminers also suffered injuries during clearance operations. If ZIMAC states that, in 2021, all accidents were investigated as per the national standards, and that lessons learnt were shared with other operators and highlighted during quarterly stakeholder and operations meetings. If APOPO notes that, after any accident, all its deminers are pulled out to reflect on lessons learned, with refresher trainings undertaken to mitigate against future accidents. If The HALO Trust concurs that accidents were investigated by a team comprising of HALO and ZIMAC staff. The findings were then presented to HALO Headquarters' technical team for external review, then shared with ZIMAC for review and dissemination. HALO also presented key findings at the ZIMAC coordination meetings, attended by all operators.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

A total of 11.28km² of mined area was released in 2021, 167 exceeding Zimbabwe's 2021 target of 9.34km². 168 Of the 11.28km², more than 2.44km² was cleared, more than 3.16km² was reduced through technical survey, and more than 5.67km² was cancelled through non-technical survey. A total of 26,457 anti-personnel mines were found and destroyed.

Zimbabwe saw an increase in land released compared to the 10.55km² released in 2020. ZIMAC reports that this was mainly due to an increase in cancellation, particularly from resurvey by APOPO before commencing clearance of their task. The width of the minefield concerned was originally thought to be over 100 metres, but after resurvey, was discovered to have an average width of only 30 metres.¹⁶⁹

A total of 0.45km² of previously unknown contamination was added to the database in 2021.¹⁷⁰

SURVEY IN 2021

In 2021, a total of 8.84km² was released through survey, of which more than 5.67km² was cancelled through non-technical survey (see Table 4), and more than 3.16km² was reduced through technical survey (see Table 5).⁷¹ There was a huge increase in non-technical survey output from 0.29km² cancelled in 2020, mainly due to APOPO's resurvey. There was also a significant 61% decrease in the amount of technical survey, down from 8.11km² the previous year.⁷²

- 159 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 160 Email from Maj. Cainos Tamanikwa, ZIMAC, 23 August 2022.
- 161 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 162 Email from Samuel Fricker, HALO Trust, 30 May 2022
- 163 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Samuel Fricker, HALO Trust, 30 May 2022.
- 164 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 165 Email from John Sorbo, APOPO, 20 June 2022.
- 166 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 167 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 168 Article 7 Report (covering 2020), Annex A, p. A-22.
- 169 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 170 Ibid.
- 171 Ibid.; and Article 7 Report (covering 2021), pp. 4–5.
- 172 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 2 June 2022 and 6 April 2020.

MAG cancelled 908m² through non-technical survey and reduced 82,361m² through technical survey in 2021. MAG reported a decrease of approximately 78% in land reduced through survey in 2021 compared to 2020, due to rates of COVID-19 infection among staff. This affected capacity and necessitated measures to ensure COVID-safe operations.¹⁷³

APOPO commenced survey and clearance in Zimbabwe in January 2021. During its first year of operations, APOPO cancelled 5,175,930m² through non-technical survey and reduced 24,999m² through technical survey. APOPO also completed technical survey of 18,157m² in Sango Border Sector 1; as this had not yet been added to the national database at the time of writing, it is not included in Table 5 below. APOPO reported that COVID-19 lockdown restrictions at times prevented survey and community liaison teams visiting communities. APOPO also experienced some logistical constraints, as many suppliers ceased operating due to the pandemic, making procurement of some items difficult.¹⁷⁴

The HALO Trust cancelled an area of 10,187m² through non-technical survey and reduced a total of 1,009,082m² through technical survey.¹⁷⁵ HALO was able to approximately double the amount of land reduced in 2021 compared to 2020, explaining that this increase is simply a matter of timing and not indicative of a broader trend or change. For 2022, HALO expected that the figure for clearance will reduce again as teams start on new tasks, which will likely continue throughout the year. HALO is nearing completion of all ploughshare tasks, hence it will soon be primarily focused on clearing the remaining cordon sanitaire minefields.¹⁷⁶ Cordon sanitaire minefields are tasks that normally require full clearance with no reduction possible as the polygons are usually very accurate and there is strong evidence of

contamination within fence-lines and roads. The HALO Trust is therefore not expecting reduction levels to remain as high as they have been. 177

Despite some continued disruption from COVID-19, HALO was able to conduct demining operations every calendar month, albeit with some redeployment and limiting the size of teams to support social distancing in camps. HALO also ended operations across the programme earlier than planned, in December 2021, due to a spike in infections and lost some time in operations on various occasions throughout the year due to waves of infection in the camps.¹⁷⁸

NPA conducted its final full non-technical survey in 2018, cancelling only a nominal area of 895m² by non-technical survey in 2020. As such, NPA defines all remaining minefields assigned to it in Zimbabwe as CHAs. NPA reduced a total of 2.32km² through technical survey in 2021.¹⁷⁹ This is an increase on the 1.9km² reduced though technical survey by NPA in 2020. This increase was made possible by the introduction of Targeted Technical Survey, whereby MDDs are directed to the areas (spots) most likely contaminated within the mine rows. This has been successful so far, increasing productivity by up to 25%.¹⁸⁰

Based on lessons learned in 2020, NPA prepared a COVID-19 contingency plan for 2021, including budgeting for the costs of associated consumables used to mitigate against the spread of the virus and of meeting COVID-19 rules and regulations. As such, NPA was able to sustain operations in 2021 without significant impact from the continued pandemic. That said, the suspension of intercity public transport did increase the cost of transporting operational staff to and from their homes and regular COVID-19 testing of staff proved quite costly.¹⁸¹

Table 4: Cancellation through non-technical survey in 2021¹⁸²

Агеа	Operator	Area cancelled (m²)
Sango border to Mwenezi river (Cordon Sanitaire)	APOP0	5,111,792
Musengezi to Mazowe (Mt Darwin and Rushinga districts)	HALO	61,352
Mazowe to Rwenya (Army Camp)	MAG	908
Masvingo (Mwenezi to Sango Border Post (Ploughshare)	NMCU	500,000
Total		5,674,052

¹⁷³ Emails from Peter Avenell, MAG, 17 May and 4 July 2022.

¹⁷⁴ Email from John Sorbo, APOPO, 20 June 2022.

¹⁷⁵ Email from Samuel Fricker, HALO Trust, 30 May 2022.

¹⁷⁶ Ibid.

¹⁷⁷ Emails from Samuel Fricker, HALO Trust, 13 April 2021 and 30 May 2022.

¹⁷⁸ Email from Samuel Fricker, HALO Trust, 30 May 2022.

¹⁷⁹ Email from Gemma Walsh, NPA, 2 June 2022.

¹⁸⁰ Ibid.

¹⁸¹ Ibid.

¹⁸² Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Article 7 Report (covering 2021), pp. 4-5.

Table 5: Reduction through technical survey in 2021¹⁸³

Area	Operator	Area reduced (m²)
Mashonaland Central-Musengezi to Mazowe (Mt Darwin and Rushinga districts)	HALO	1,043,149
Mashonaland East (Mazowe to Rwenya)	MAG	82,361
Manicaland (Sheba to Leacon Hill Stretch)	NPA	1,467,061
Manicaland (Rusitu to Muzite Stretch)	NPA	570,480
Sango border to Mwenezi river Cordon Sanitaire (Chikukutsi Sector 2)*	APOP0	4,065
Total		3,167,116

^{*} As at August 2022, APOPO had also completed Technical Survey of 18,157m² in Sango Border Sector 1. However, while completion of this task had been submitted to ZIMAC, it had not yet added to the national database so it is not included here. 184

CLEARANCE IN 2021

In 2021, a total of 2.44km² of mined area was released through clearance with 26,457 anti-personnel mines and 3 anti-vehicle mines found and destroyed. 185 This is a slight increase on the 2.41km² of mined area released through clearance in 2020, though a slightly higher number of 26,911 anti-personnel mines were found and destroyed in that year. 186

A total of 77 anti-personnel mines were recovered and destroyed during explosive ordnance disposal (EOD) spot tasks in 2021, as well as 83 items of unexploded ordnance and one improvised explosive device (IED).¹⁸⁷

In 2021, only one task of 19,749m², cleared by the NMCU, resulted in no anti-personnel mines being found and destroyed. This was in Masvingo province, at the Mwenezi to Sango Border Post, (a ploughshare minefield). The intention was to undertake clearance as part of a continuous stretch of minefield, previously inaccessible due to a swamp. ZIMAC have explained that clearance may have been previously undertaken or that it is possible no mines were ever laid, given its inaccessibility due to dense vegetation and location on a flood plain. 188

APOPO, having commenced operations in Zimbabwe in January 2021, cleared 0.27km² of mined area and destroyed 3,687 anti-personnel mines and 3 anti-vehicle mines during the year.

MAG cleared 153,252m² of mined area and destroyed 296 anti-personnel mines in 2021. MAG also removed and destroyed three anti-personnel mines on an EOD cattle recovery call-out in March 2021, (reported as EOD spot tasks and not included in Table 6 below). MAG reported a decrease of approximately 78% in both cleared and reduced land in 2021 compared to 2020. As noted above with regards to survey, this was due to the significant operational impact of COVID-19.

Sadly, one MAG colleague passed away due to COVID-19. Staff were advised not to report to work if they experienced flu-type symptoms and MAG reports that a considerable number of individual staff days were lost as well as a full 35 operational days, due to the pandemic in 2021.¹⁸⁹

The HALO Trust cleared 980,655m² of mined area and destroyed 20,231 anti-personnel mines in 2021. The amount of land cleared was comparable to that it cleared in 2020. HALO conducted 58 EOD spot tasks in 2021, which resulted in the destruction of a further 60 anti-personnel mines (not included in Table 6 below). HALO completed three tasks in 2021, across land totalling 31,053m², which proved to have no anti-personnel mine contamination. This consisted of one former military outpost and two other tasks, which were re-clearance of washaways in minefields previously cleared by a commercial operator, where communities believed the operator had 'skipped' the washaways. HALO also sampled a task bordering a protected village, which found no mine contamination. This is not included in Table 6 below.

NPA cleared 403,381m² of mined area and destroyed 784 anti-personnel mines in 2021,¹⁹¹ an overall decrease on the 938,268m² cleared by NPA in 2020. However, NPA notes that the clearance rate achieved per deminer remained comparable to previous years as it averages from 38m² to 42m² depending on ground conditions. In July 2021, due to lack of funding, NPA reduced its capacity from eight manual teams to five, resulting in a significant decrease in clearance thereafter. No anti-personnel mines were destroyed by NPA during EOD spot tasks.¹⁹²

¹⁸³ Ibid.

¹⁸⁴ Email from John Sorbo, APOPO, 16 August 2022.

¹⁸⁵ Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Article 7 Report (covering 2021), pp. 5-6.

¹⁸⁶ Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 5.

¹⁸⁷ Emails from Maj. Cainos Tamanikwa, ZIMAC, 12 and 15 August 2022.

¹⁸⁸ Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and interview in Geneva, 24 June 2022.

¹⁸⁹ Emails from Peter Avenell, MAG, 17 May and 4 July 2022.

¹⁹⁰ Email from Samuel Fricker, HALO Trust, 30 May 2022.

¹⁹¹ Email from Gemma Walsh, NPA, 2 June 2022.

¹⁹² Ibid.

Table 6: Mine clearance in 2021¹⁹³

Area	Operator	Area cleared (m²)	Areas cleared	AP mines destroyed	AV mines destroyed
Mashonaland Central-Musengezi to Mazowe (Mt Darwin and Rushinga districts)	HALO	1,219,532	129	21,278	0
Mashonaland East (Mazowe to Rwenya)	MAG	153,252	2	296	0
Manicaland (Sheba to Leacon Hill Stretch)	NPA	357,974	7	630	0
Manicaland (Rusitu to Muzite Stretch)	NPA	217,658	5	154	0
Masvingo Province Mwenezi to Sango Border Post (Ploughshare)	NMCU	19,749	1	0	0
Mwenezi to Sango Border Post (Cordon Sanitaire)	NMCU	85,143	1	536	0
Sango border to Mwenezi river (Cordon Sanitaire)	APOPO	387,117	2	3,563	3
Totals		2,440,425	147	26,457	3

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the eight-year extension granted in 2017), Zimbabwe is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. At the beginning of the extension period, land release activities were being undertaken in only four out of the seven major mined areas in the country. In 2021, all seven areas were being worked on.¹⁹⁴

Zimbabwe is just on track to meet its deadline, although progress in Article 5 implementation may be impacted by the COVID-19 pandemic, internal economic instability, and significant loss of funding, particularly from the UK FCDO (though this was to be confirmed at the time of writing), in 2021–22; all highlighted by Zimbabwe as major challenges.¹⁹⁵

The COVID-19 pandemic continued to affect operations in 2021, although it did not cause activity to be suspended, as it had done in April 2020, when government lockdown restrictions meant it took about three months for operators to return to full clearance capacity.¹⁹⁶ The first two months of 2021 also impacted demining operations as Zimbabwe was fighting the second wave of the pandemic.¹⁹⁷ Demining activities are suspended or slowed from November to March every year due to high rainfall and sporadic flooding in the summer months. As most of the contaminated areas are in low-lying areas which are prone to storms and flooding this may impact land release output going forward.¹⁹⁸

It is commendable that, despite the range of challenges outlined here, Zimbabwe exceeded its land release targets for 2021 and achieved a 7% increase in land release output from the previous year. As was the case in 2020, the amount of area reduced through technical survey going forward is likely to fall as the remaining polygons are narrow.¹⁹⁹

¹⁹³ Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June and 12 August 2022; and Article 7 Report (covering 2021), pp. 4-5.

¹⁹⁴ Article 5 Update to the APBMC Intersessional Meetings, Geneva, 20-22 June 2022, p. 1.

¹⁹⁵ Statement of Zimbabwe, APMBC 19th MSP, virtual meeting, 15–19 November 2021.

¹⁹⁶ Emails from Samuel Fricker, HALO Trust, 13 April 2021; and Chimwemwe Tembo, NPA, 16 April 2021.

¹⁹⁷ Article 7 Report (covering 2020), p. 35.

¹⁹⁸ Ibid.; and Article 7 Report (covering 2021), Appendix A, p. A-20.

¹⁹⁹ Article 7 Report (covering 2021), p. 19 and Appendix A, p. A-4.

Table 7: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km²)
2021	2.44
2020	2.41
2019	2.76
2018	2.11
2017	1.66
Total	11.38

Some redistribution of Areas of Operation (AOOs) has begun among operators to help keep the sector on track for national completion. In early 2022, ZIMAC had already worked with MAG, NPA, and The HALO Trust to redistribute some AOO in Mudzi district from MAG to HALO and NPA, due to capacity constraints in MAG.200 HALO commenced work on some of its re-assigned tasks in June 2022 and NPA is projected to do so once tasks in Manicaland province are complete.²⁰¹ The HALO Trust welcomes that ZIMAC has been proactive in re-allocating AOOs to enable operators to include this in annual planning and protect efforts to stay on track towards completion.²⁰²

There are many strengths of Zimbabwe's mine action programme, such as having a well organised and nationally-owned mine action centre, significant national clearance capacity, clarity on the remaining contamination challenge, a strong commitment to complete clearance, experienced operators working in the country, and a positive interaction with affected communities.203 Progress and

activities so far illustrate a collaborative working environment in which operators can guickly ramp up capacity and output, putting additional funds immediately to use towards an achievable goal. The GICHD, for example, commends ZIMAC for continuously encouraging information sharing, fostering effective co-ordination, showing openness to new ways of working and demonstrating strong national ownership.²⁰⁴

However, a lack of sufficient resources may seriously impede progress going forward. If Zimbabwe is to meet its Article 5 deadline, ZIMAC believes that overall demining capacity will need to be increased. In its latest Article 7 report ZIMAC estimated that it will require a total of over \$51 million to reach its target at a rate of about US\$14 million per year. While the government will continue to fund ZIMAC and the NMCU, the majority of funding is expected to come from the international community.205 ZIMAC remains optimistic that it can meet its Article 5 deadline and that this increased funding could be secured from both government and donors.²⁰⁶ It is evident that a strong updated national strategy and additional resources are key to keep Zimbabwe's ambitious but, so far, robust, mine action programme on track. As the 2025 deadline approaches, ZIMAC should launch the strategy review conducted in November 2021 in conjunction with urgent implementation of the resource mobilisation strategy.207 ZIMAC also acknowledges that "funding is the greatest obstacle for Zimbabwe to achieving its 2025 goal".208

In November 2021, Mount Darwin became the first district in Zimbabwe to be declared fully completed by humanitarian operators; a significant milestone on the path to national completion, and, as HALO describes, "proof for donors, beneficiaries, operators and government that this mission is achievable, and, with the right effort and cooperation can be achieved in line with the strategy".209

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

On the matter of potential "residual" contamination that might be found after completion of major clearance operations, ZIMAC has national capacity to deal with this and plans in place.²¹⁰ ZIMAC asserts that Zimbabwe's military forces began mine clearance long before international operators boosted efforts and, if well-equipped, the same army engineers are fully capable of dealing with residual contamination.²¹¹ It will fall to ZIMAC, the NMCU, and the army engineers, who are stationed in all provinces, to deal with any new explosive devices discovered.²¹² It is planned that, as the army will have responsibility for clearing any residual contamination, the NMCU will develop a strategy on the management of residual contamination as Zimbabwe's completion date approaches.213

- 200 Email from Samuel Fricker, HALO Trust, 30 May 2022; and Article 7 Report (covering 2021), Annex A, p. A-7.
- 201 Email from Samuel Fricker, HALO Trust, 14 August 2022.
- 202 Email from Samuel Fricker, HALO Trust, 30 May 2022.
- 203 Zimbabwe National Mine Action Strategy, 2018-2025, Reviewed Version, p. 36.
- 204 Email from Asa Massleberg, GICHD, 8 July 2022.
- 205 Article 7 Report (covering 2021), Appendix A, p. A-20.
- 206 Email from Mai, Cainos Tamanikwa, ZIMAC, 2 June 2022.
- 207 Emails from Peter Avenell, MAG, 17 May 2022; and John Sorbo, APOPO, 16 August 2022.
- 208 'Zimbabwe National Mine Action Strategy, 2018-2025, Reviewed Version, p. 19.
- 209 Emails from Samuel Fricker, HALO Trust, 30 May and 14 August 2022.
- 210 Article 7 Report (covering 2021), p. 3.
- 211 Email from Maj. Cainos Tamanikwa, ZIMAC, 23 August 2022.
- 212 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.
- 213 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Asa Massleberg, GICHD, 8 July 2022.