

**ARTICLE 5 DEADLINE: 31 DECEMBER 2025**  
**NOT ON TRACK TO MEET DEADLINE**

## KEY DATA

**ANTI-PERSONNEL (AP) MINE CONTAMINATION: HEAVY**

MINE ACTION REVIEW ESTIMATE

**30km<sup>2</sup>**

AP MINE CLEARANCE IN 2022

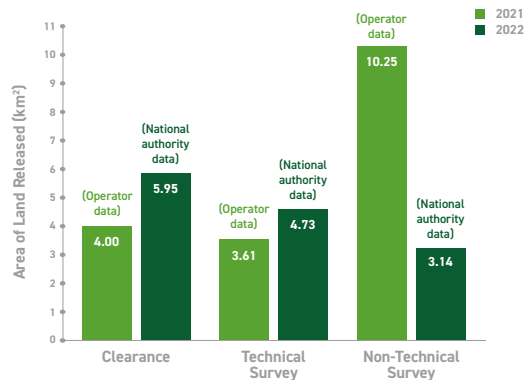
**5.95km<sup>2</sup>**

AP MINES DESTROYED IN 2022

**4,002**

(INCLUDING 225 DESTROYED DURING SPOT TASKS)

## LAND RELEASE OUTPUT



**CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): NONE**

## KEY DEVELOPMENTS

Angola has continued to strengthen and restructure its mine action programme. The transition from the National Intersectoral Commission on Demining and Humanitarian Assistance (CNIDAH) into the National Mine Action Agency (ANAM) was completed in 2021. In 2022, the Executive Commission for Demining (CED), together with all the public operators that had been working under it, was dissolved and replaced by the National Demining Centre (CND). This restructuring is intended to remedy the longstanding challenges Angola has faced in consolidating its oversight over its mine action data and operations. Some of the demining tasks conducted by the CND in support for the development projects were still being recorded outside of the Information Management System for Mine Action (IMSMA) database in 2022. But ANAM expected the CND to start working on releasing mined areas inside the IMSMA database in 2023, with a view to a full integration once its land release practices become fully compliant to the International Mine Action Standards (IMAS).

Angola released nearly 13.81km<sup>2</sup> of anti-personnel (AP) mined area in 2022,<sup>1</sup> falling 3.25km<sup>2</sup> short of the 2022 target for land release in Angola's 2020–25 Article 5 work plan. In addition, almost 4.4km<sup>2</sup> of AP mined area was added to the database in 2022, and it is likely that additional contamination will continue to be found as operators gain more access to remote areas. With the currently established contamination baseline, Angola will need to release at least 23km<sup>2</sup> per year over the next three years if it is to meet its current Article 5 deadline.

In July 2023, Norwegian People's Aid (NPA) published a new country strategy for Angola for 2023–25. The strategy foresaw the completion of all mapped contamination in the provinces of Bengo, Cuanza Norte, Uige, and Zaire by December 2025. NPA believes that country-wide clearance may not be feasible by Angola's Article 5 deadline of end-December 2025.

<sup>1</sup> There is a discrepancy between land release data reported by operators and data reported in Angola's Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report. According to the latter, Angola released 13.75km<sup>2</sup> of AP mined area in 2022, of which, 3.14km<sup>2</sup> was cancelled through non-technical survey (NTS), 4.73km<sup>2</sup> reduced through technical survey (TS), and 5.88km<sup>2</sup> cleared. According to operator data, a total of 16.04km<sup>2</sup> of AP mined area was released in 2022. Of this, 5.84km<sup>2</sup> was reported as cancelled through NTS, 4.73km<sup>2</sup> reduced through TS, and 5.47km<sup>2</sup> cleared.

## RECOMMENDATIONS FOR ACTION

- Angola should continue to impress upon all operators the importance of applying proper land release principles to reduce clearance of uncontaminated areas.
- Angola should continue the consolidation of its mine action structures and integrate all survey and clearance data, including those of the newly created public operator, CND, into the IMSMA database.
- Angola should replace its draft resource mobilisation strategy and increase its international advocacy to attract new and former donors.
- Angola should continue developing and applying its National Mine Action Standards (NMAS).
- Angola should declare as completed each province where land release of all mined areas has been achieved.
- Angola should finalise its national strategy on the management of residual contamination.

## ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2022)	Score (2021)	Performance Commentary
<b>UNDERSTANDING OF CONTAMINATION</b> (20% of overall score)	8	8	Angola has completed its nationwide re-survey of AP mine contamination and there is a high ratio of confirmed hazardous areas (CHAs) compared to suspected hazardous areas (SHAs). The discovery of new contamination is likely to continue over the coming years as operators gain more access into remote areas. A total of almost 4.4km <sup>2</sup> of AP mined area across 65 new CHAs was added to the database in 2022.
<b>NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT</b> (10% of overall score)	8	7	CNIDAH completed the transition of its legal status from a commission to a national agency, becoming ANAM. The CED was dissolved in 2022 and replaced by the CND. This transition is hoped to resolve the longstanding issues in coordination and information sharing between CNIDAH and the CED. The CED was expected to start working on release of mined areas registered in the IMSMA database in 2023. It is estimated that Angola has a funding shortfall of almost \$240 million through to the end of 2025. A resource mobilisation strategy was drafted in 2018, but was never finalised.
<b>GENDER AND DIVERSITY</b> (10% of overall score)	6	6	Gender and diversity are included as a cross-cutting issue in Angola's new National Mine Action Strategy but there are no outcomes or targets related to gender or diversity in the updated work plan. Of ANAM's 2022 workforce, 36% were women. Women held 48% of operational positions and 33% of managerial positions.
<b>INFORMATION MANAGEMENT AND REPORTING</b> (10% of overall score)	8	7	CND survey and clearance data continued to be excluded from the IMSMA database in 2022, but ANAM expected that this would change in 2023. ANAM has requested support from the Geneva International Centre for Humanitarian Demining (GICHD) for a transition to IMSMA Core. Angola has submitted timely Article 7 reports in recent years. Unlike in previous years, Angola's latest Article 7 report (covering 2022) has classified hazardous areas into SHAs and CHAs. Discrepancies in the reported land release figures between ANAM and international operators in 2022 seemed to be mostly a result of the tasks pending to be verified and entered into the database.
<b>PLANNING AND TASKING</b> (10% of overall score)	7	7	Angola has adopted an Article 5 implementation Work Plan 2022–2025, but its new National Mine Action Strategy 2020–2025 has yet to be formally approved by the Government. Angola should increase its annual land release targets if it is to meet its Article 5 deadline of 2025. A re-discussion of the prioritisation criteria is still underway, but the production of a master operator tasking plan through to 2025 did not materialise as was foreseen in 2022. NPA published a 2023–25 country strategy that aims to complete clearance in Bengo, Cuanza Norte, Uige, and Zaire by Angola's Article 5 deadline of December 2025.
<b>LAND RELEASE SYSTEM</b> (20% of overall score)	7	7	Three chapters of the National Mine Action Standards (NMAS) were drafted and still awaiting approval in 2022. Quality management (QM) continues to be a challenge for ANAM due to a lack of financial resources. NPA continued to provide capacity development support to ANAM targeting QM functions and covering direct costs for training and quality monitoring visits for ANAM teams.
<b>LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE</b> (20% of overall score)	8	9	Land release outputs decreased in 2022 compared to the previous year due to an increase in the proportion of land released through clearance. The decrease in land release through survey has been anticipated following the large land cancellation that happened in 2019. Angola fell short of its land release target for 2022 by 3.25km <sup>2</sup> . CNIDAH had estimated in early 2021 that completion of clearance could take ten years, far exceeding its current Article 5 deadline of end 2025, although this time could be substantially reduced with sound and strict land release principles.
<b>Average Score</b>	<b>7.5</b>	<b>7.5</b>	<b>Overall Programme Performance: GOOD</b>

## DEMINING CAPACITY

### MANAGEMENT CAPACITY

- National Mine Action Agency (Agência Nacional de Acção Contra as Minas, ANAM).

### NATIONAL OPERATORS

- The Association of Angolan Mine Professionals (Associação de Profissionais Angolanos de Acção Contra Minas, APACOMINAS) (NGO)
- The National Demining Centre (Centro Nacional de Desminagem, CND).

### INTERNATIONAL OPERATORS

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

### OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

## UNDERSTANDING OF AP MINE CONTAMINATION

As at the end of 2022, according to ANAM, a total of 1,070 AP mined areas with an estimated size of 68km<sup>2</sup> remained to be addressed in 16 of Angola's 18 provinces (see Table 1). Cuando Cubango and Moxico are believed to be the most heavily contaminated. Clearance in Huambo province has been completed since the end of 2021, and, as at May 2023, the declaration of completion in Huambo was reportedly imminent.<sup>2</sup> In Malange province, which was previously thought to only contain residual contamination, and at the request of ANAM, Norwegian People's Aid (NPA) conducted additional non-technical survey (NTS) identifying 173,395m<sup>2</sup> of AP mined area across nine CHAs.<sup>3</sup>

**Table 1: AP mined area by province (at end 2022)<sup>4</sup>**

Province	CHA	Area of CHA (m <sup>2</sup> )	SHA	Area of SHA (m <sup>2</sup> )	Total HA	Area of HA (m <sup>2</sup> )
Bengo	44	3,024,891	0	0	44	3,024,891
Benguela	19	960,959	0	0	19	960,959
Bié	135	5,160,762	0	0	135	5,160,762
Cabinda	27	1,188,151	0	0	27	1,188,151
Quando Cubango	262	16,805,804	0	0	262	16,805,804
Cuanza Norte	16	1,204,361	0	0	16	1,204,361
Cuanza Sul	104	8,664,509	1	35,000	105	8,699,509
Cunene	42	2,325,517	0	0	42	2,325,517
Huambo	0	0	0	0	0	0
Huíla	36	3,339,594	0	0	36	3,339,594
Luanda	9	1,121,211	0	0	9	1,121,211
Lunda Norte	48	1,672,480	10	143,913	58	1,816,393

2 Email from Mário Nunes (on behalf of ANAM), Capacity Development Advisor to ANAM, NPA, 10 May 2023.

3 Emails from Robert Iga Afedra, Country Director, NPA, 30 March and 12 August 2023.

4 Article 7 Report (covering 2022), Form C.

Table 1 Continued

Province	CHA	Area of CHA (m <sup>2</sup> )	SHA	Area of SHA (m <sup>2</sup> )	Total HA	Area of HA (m <sup>2</sup> )
Lunda Sul	48	7,430,262	21	1,009,799	69	8,440,061
Malange	0	0	0	0	0	0
Moxico	203	11,789,031	40	1,458,846	243	13,247,877
Namibe	3	155,100	0	0	3	155,100
Uige	1	206,350	0	0	1	206,350
Zaire	1	315,000	0	0	1	315,000
<b>Totals</b>	<b>998</b>	<b>65,363,982</b>	<b>72</b>	<b>2,647,558</b>	<b>1,070</b>	<b>68,011,540</b>

CHA = confirmed hazardous area SHA = suspected hazardous area HA= hazardous area

This is a 3.5km<sup>2</sup> reduction in the overall amount of AP mined area from the 71.5km<sup>2</sup> reported at the end of 2021.<sup>5</sup> In addition, a total of almost 4.4km<sup>2</sup> of AP mined area across 65 new CHAs was added to the database in 2022. Of this, NPA identified and recorded 14 new CHAs covering an estimated 484,097m<sup>2</sup>; Mines Advisory Group (MAG) identified six new areas in Moxico and one in Lunda Sul, totalling 867,623m<sup>2</sup>; and The HALO Trust (HALO) found 36 new mined areas totalling 1,798,420m<sup>2</sup> in Benguela, Bié, and Cuando Cubango provinces.<sup>6</sup>

Since the end of 2021, all known mined areas in Huambo have been released. Four additional provinces (Cuanza Norte, Namibe, Uige, and Zaire) were very close to completion. NPA reported that 10 remaining uncleared tasks in Cuanza Norte were expected to be completed by May 2024, while land release activities in Uige have not concluded as four additional tasks were identified by their NTS team in 2022. As at March 2023, Uige had five tasks yet to be completed, and NPA planned to release the remaining minefields in Uige by the end of 2024.<sup>7</sup> HALO received approval from ANAM on 21 July 2023 to begin work on the three remaining areas in Namibe. Clearance began in August 2023.<sup>8</sup> In Zaire, NPA met its target of releasing the last mined area in June 2023. An impact assessment was to be conducted by the end of 2023 to ensure that no previously unknown areas remain before declaration of completion.<sup>9</sup>

In 2019, NTS of all 18 provinces across the country was completed, ensuring that previously inflated mined areas have largely been redefined or cancelled. ANAM, together with the international operators, agree that Angola now has its most accurate baseline of AP mined area ever.<sup>10</sup> According

to ANAM, after several decades of demining in Angola, a national survey to establish a new baseline would be an unnecessary undertaking. Instead, ANAM's approach has been to keep residual contamination to a minimum, with the intention of conducting post-demining socio-economic impact assessments when conditions allow.<sup>11</sup> APOPO believes that additional survey/resurvey is still needed to cancel some hazardous areas from the national database.<sup>12</sup>

According to HALO, mine contamination in Angola is well documented, and new minefields are generally discovered on an ad-hoc basis often in close proximity to existing areas known to be contaminated with mines. That not all mined areas have yet been identified is understandable given the size and remoteness of some areas of the country.<sup>13</sup> MAG believes that all suspected mined areas should be confirmed using evidence-based surveys.<sup>14</sup> According to NPA, and based on the pattern of newly identified mined areas in last two years, contamination will continue to be discovered. A new country-wide assessment would not be an efficient use of resources, NPA believes.<sup>15</sup>

As several armed forces participated in Angola's armed conflict and the mines were laid in an atypical manner, many mined areas are not known to the communities and were not identified in the surveys that served as the baseline to determine the level of contamination in Angola. Taking this into consideration and the occurrence of sporadic accidents, the Government of Angola has determined that technical survey (TS) and clean-up must be systematically carried out in areas awarded for public and private investment projects to ensure safety in their implementation.<sup>16</sup>

5 Article 7 Report (covering 2021), Form C.

6 Emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, Country Director, MAG, 6 June 2023; and Chris Pym, Programme Manager, HALO, 14 June 2023.

7 Emails from Robert Iga Afedra, NPA, 30 March and 12 August 2023.

8 Email from Susanna Smale, Head of Region (South Africa), HALO, 29 August 2023.

9 Ibid.; and emails from Robert Iga Afedra, NPA, 30 March and 12 August 2023.

10 ANAM Updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 4; and emails from Robert Iga Afedra, NPA, on behalf of CNIDAH, 1 April 2020; Ralph Legg, Programme Manager, HALO, 30 March 2020; Jeanette Dijkstra, MAG, 20 May 2020; and 22 March 2022; Miroslav Pisarević, NPA, 28 March 2020 and 10 March 2022; Christelle Mestre, Programme Officer, Geneva International Centre for Humanitarian Demining (GICHD), 4 May 2022; Manuel João Agostinho, Programme Manager, APOPO, 14 March 2022; and Daniel Richards, HALO, 25 June 2022.

11 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

12 Email from Manuel João Agostinho, APOPO, 14 March 2022.

13 Email from Daniel Richards, HALO, 25 June 2022.

14 Email from Nelson Verissimo, MAG, 6 June 2023.

15 Email from Robert Iga Afedra, NPA, 30 March 2023.

16 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

In the updated Article 5 Implementation Work Plan 2020–2025, ANAM states that NTS will remain an integral component of all operations and will be conducted in areas that may need additional verification during the implementation period. In addition, ANAM acknowledged the gap in coordination and monitoring of the, now dissolved, CED operations at provincial level, and that areas cleared by the CED-coordinated entities may need further assessment and verification before they can be removed from the database.<sup>17</sup> It is also expected that, as people return to previously uninhabited areas, previously unrecorded mined areas will be added to the database and that new areas of contamination will be found as operators revisit more remote areas and address minefields where clearance has yet to begin.<sup>18</sup>

Besides the national re-survey with standardised reporting formats compatible with the IMSMA, data clean-up efforts also led to deletion of hazardous areas from the national database. This further contributed to the reliability of the national contamination baseline. Angola's Mine Action Strategy emphasises that ANAM and operators will continue with systematic analysis of existing survey reports to ensure that the classification of hazardous areas into SHAs and CHAs

has been done in accordance with the NMAS. According to the Geneva International Centre of Humanitarian Demining (GICHD), the accuracy of the data and information given in the strategy and the related work plan should be verified and updated.<sup>19</sup>

Angola's contamination is the result of more than 40 years of internal armed conflict that ended in 2002, during which a range of national and foreign armed movements and groups laid mines, often in a sporadic manner. Historically, the most affected provinces have been those with the fiercest and most prolonged fighting, such as Bié, Huambo, Cuando Cubango, and Moxico. In addition to its AP mine contamination, at the end of 2020 Angola had 1.02km<sup>2</sup> of anti-vehicle (AV) mine contamination.<sup>20</sup> Many minefields contain a mix of AP and AV mines. MAG found some earlier evidence of AP mines being laid and reinforced with other explosive ordnance to maximise damage.<sup>21</sup> HALO also confirmed the presence of improvised AP mines using mortars or grenades. These were found recently in Benguela province, and HALO estimates that more will be encountered in Benguela, Bié, and Cuando Cubango. HALO destroyed six AP mines of an improvised nature in 2022.<sup>22</sup>

## OTHER EXPLOSIVE ORDNANCE CONTAMINATION

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Angola also has a significant problem of explosive remnants of war (ERW), especially unexploded ordnance (UXO). In addition, evidence suggests that Angola contains a residual threat from cluster munition remnants (CMR) (see Mine Action Review's *Clearing Cluster Munition Remnants 2023* report on Angola for further information).

## NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Angola's mine action programme is managed by the recently established ANAM. ANAM is a government agency formerly known as CNIDAH; it received approval in April 2021 to change its legal status from a commission to a national agency.<sup>23</sup> This was endorsed by a presidential decree 171/21 on 7 July 2021. The aim of this transition was to define the legal framework of the regulatory body of mine action, and to improve the coordination between the bodies that intervene in the mine action sector.

The purpose of ANAM is to regulate and supervise mine action work by public and private institutions, as well as non-governmental organisations (NGOs). ANAM, which is under the Head of State through the Minister of State and Chief of Staff,<sup>24</sup> is mandated to ensure implementation of the national strategic mine action framework by all mine action actors in the country.<sup>25</sup> The transition to ANAM has strengthened Angola's oversight of mine action, which is now overseen and regulated solely by ANAM, and improved operational efficiency.<sup>26</sup>

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17 ANAM, updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 5; and telephone interview with Robert Iga Afedra, NPA, 22 February 2021.

18 Email from Ralph Legg, HALO, 30 March 2020.

19 Email from Christelle Mestre, GICHD, 4 May 2022; and National Mine Action Strategy 2020–2025, p. 19.

20 Comprising 934,525m<sup>2</sup> across 89 CHAs and 84,235m<sup>2</sup> across 21 SHAs. Article 7 Report (covering 2020), Form C.

21 Email from Robert Iga Afedra, NPA, 30 March 2023.

22 Email from Chris Pym, HALO, 14 June 2023.

23 Telephone interview with Robert Iga Afedra, NPA, 22 February 2021; and email, 28 April 2021.

24 Article 7 Report (covering 2021), Form A.

25 Email from Christelle Mestre, GICHD, 4 May 2022.

26 Emails from Christelle Mestre, GICHD, 4 May 2022, and Daniel Richards, HALO, 25 June 2022.

In previous years, there were tensions between CNIDAH and CED, the other national coordination body whose main role was to manage four national operators: the Demining Brigades of the Security Unit of the President of the Republic, the Angolan Armed Forces, the National Demining Institute (INAD), and the Brigades of the Angolan Border Guard Police. There were overlaps and ambiguities as to the exact division of labour and the related roles and responsibilities between the two entities with CED reporting to the Ministry of Social Action, Family, and Women's Promotion (MASFAMU).<sup>27</sup> This has made it difficult for Angola to describe in detail and with any degree of accuracy the extent of land release over the years as the CED operators were not accredited by CNIDAH, nor were their activities quality assured in line with the IMAS.<sup>28</sup>

In September 2022, the CED, together with all the operators that have been working under it, have been dissolved.<sup>29</sup> In 2022, a National Demining Centre (Centro Nacional de Desminagem, CND) was created by presidential decree. The CND is currently the only public operator in Angola. It is mandated to participate in clearance in support of socio-economic development projects, and to contribute to the fulfilment of Angola's obligations under Article 5 of the Anti-Personnel Mine Ban Convention (APMBC).<sup>30</sup>

Despite financial constraints, the Government of Angola has continued to allocate funding to support ANAM and CND. Government funds covered mostly overhead costs, but also some of ANAM's operational costs, particularly the monitoring and quality control (QC) teams. In addition, the Government continued to financially support HALO in clearing protected areas along the Okavango Delta in Cuando Cubango province. As to international funding, mine action in Angola continued to receive donations from the Governments of the United States, the United Kingdom (UK), Norway, Belgium, Sweden, Japan, and a number of private entities. These donations benefited the projects of HALO, MAG, NPA, and APOPO, as well as the national NGO Association of Angolan Experts of Action against Landmines (APACOMINAS).<sup>31</sup> As at February 2023, Angola believed to still needed a staggering figure of more than \$238.5 million to complete mine clearance.<sup>32</sup>

In 2018, a draft resource mobilisation strategy was developed, but as at July 2023, the strategy had not yet been finalised.<sup>33</sup> According to Objective 5 of the

National Mine Action Strategy 2020–2025, the resource mobilisation strategy should have been approved before the end of 2020 with CNIDAH taking the lead in its development.<sup>34</sup> In 2018, Angola participated in the APMBIC Individualised Approach following which donor support was increased with funding from Belgium, Japan, Norway, the UK, and USA, along with private sector funding from, among others, British Petroleum (BP).<sup>35</sup>

Operators continue to report generally smooth collaboration with the Angolan authorities. Two longstanding challenges, visas and tax exemptions, eased in 2022 as these responsibilities were transferred from MASFAMU to ANAM. Following this transition, ANAM has the authority to issue visa invitation letters, and to intervene on behalf of the operator with the Migration and Foreigners Services so that visas are granted expeditiously and within the legally prescribed duration. ANAM has also been an intermediary in the request of short-term visas for employees of mine action organisations who travel to the country on a work visit.<sup>36</sup> MAG and HALO, however, reported that the application for work visas remains lengthy as they must be applied for in the country of origin. Since 2021, however, international demining NGOs have reached an agreement with the Angolan Government that international staff can enter the country with a tourist or business visa, and apply for the relevant work visa once in Angola. This workaround, however, was said to be cumbersome as it requires monthly renewal of the visa and leaving the country every three months.<sup>37</sup>

In 2022, ANAM has engaged with the tax authorities and the Angolan Government to secure tax exemption status for all the mine action equipment on behalf of the entire sector. As at June 2023, the process was still ongoing and proving difficult.<sup>38</sup> For example, NPA's application for tax exemptions was not approved by the Angolan authorities. According to ANAM and NPA, tax exemptions are granted in accordance with the Government directives on imports and exports. These stipulate that core demining equipment such as detectors and personal protective equipment (PPE) are tax exempt, while vehicles are not.<sup>39</sup> Despite not being explicitly described in the law, ANAM has approached the tax administrations to advocate for some exceptions on the grounds of facilitating the humanitarian work.<sup>40</sup> ANAM has also acted in support of operators with importation processes, benefitting APOPO on two occasions in 2022.<sup>41</sup>

27 Angola National Mine Action Strategy 2020–2025, pp. 5–6.

28 Email from Robert Iga Afedra, NPA (on behalf of CNIDAH), 14 July 2020.

29 Email from Mário Nunes (on behalf of ANAM), NPA, 14 September 2022.

30 Article 7 Report (covering 2022), Form F; and emails from Mário Nunes, NPA, 14 September 2022 and 10 May 2023.

31 Article 7 Report (covering 2022), Form J, and email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

32 "Angola Needs U.S.\$ 238.5 Million to Complete Clearing Landmines", All Africa, 2 February 2023, at: <https://bit.ly/434EyOJ>.

33 Emails from Robert Iga Afedra (on behalf of CNIDAH), 1 April 2020; and Mário Nunes (on behalf of ANAM), NPA, 14 September 2022 and 10 May 2023.

34 Angola National Mine Action Strategy 2020–2025, pp. 29–31.

35 Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021.

36 Emails from Robert Iga Afedra, NPA, 30 March 2023, and Manuel João Agostinho, APOPO, 30 March 2023.

37 Email from Nelson Verissimo, MAG, 6 June 2023, and Susanna Smale, HALO, 29 August 2023.

38 Ibid.

39 Emails from Robert Iga Afedra, NPA, 30 March 2023, and Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

40 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

41 Email from Manuel João Agostinho, APOPO, 30 March 2023.

In 2022, multiple coordination and technical meetings were held between ANAM and operators.<sup>42</sup> Topics discussed included technical contributions for the update and compliance of the NMAS to IMAS, specially on animal detection procedures of mine detection dogs (MDDs) and mine detection rats (MDRs) when used for technical survey (TS); elaboration of the national mine action strategies and plans; operational coordination and updates; approach to donors and fundraising; as well as sectorial activities.<sup>43</sup> One meeting discussed technical procedures, equipment, challenges faced by operators, and their experience in overcoming them.<sup>44</sup> Another focused on reconciliation of 2021 and 2022 operational data.<sup>45</sup>

## ENVIRONMENTAL POLICIES AND ACTION

There are no formal policies related to environmental management that are specific to mine action in Angola,<sup>46</sup> but ANAM has been developing additional standards on occupational health, safety, and the environment. ANAM has also enforced some measures to mitigate the environmental impact, including the prohibition of vegetation burning, tree cutting, and control over the use of fuel and lubricants for demining machines.<sup>47</sup>

APOPO considers environmental protection as a cross-cutting issue, which is taken into consideration during planning and tasking. APOPO conducts an impact assessment prior to using machines for ground preparation in any area. Machine interventions are also communicated and agreed upon with the authorities based on the post-clearance use of the land.<sup>48</sup> APOPO has been stepping up its environmental efforts globally with a view to develop applications for scent detection animals and to implement programmes to protect wildlife species and facilitate environmental restoration, and to expand the HeroTREE<sup>49</sup> programme and contribute to carbon sequestration, clean water and air, increased biodiversity, and food security. APOPO established partnerships with two agriculture associations in Cuanza Sul, which will develop projects for post-clearance use of the land. These include the implementation of organic agriculture and further promotion of syntropic farming and planting of trees.<sup>50</sup>

HALO initiated a mine action and conservation project in 2022, alongside its existing programme, that aims to

understand and explore the linkages between mine action and environmental protection in coordination with local conservation partners.<sup>51</sup> HALO ensures that it meets Angolan environmental regulations and has launched several projects to reduce its' environmental impact, including the introduction of solar systems into field camps and the testing of clean cook stoves to reduce deforestation and pollution. Standard operating procedures (SOPs) and policies contain environmental guidance, rather than there being a stand-alone environmental policy.<sup>52</sup>

MAG clearance operations involve the use of manual and machine methods in an integrated fashion as needed and where suitable. MAG ensures all trees are left in place during operations to minimise the impact and footprint on the environment. When setting up camps, MAG makes every effort to recycle all building materials and reuse it in the next camp. MAG's houses, office, and camps use a hybrid system of generators for charging and solar panels for lights and backup. All teams, offices, and houses cook on gas bottles as much as possible. With every new grant, MAG makes an effort to increase the use of solar panels for lights and as these systems improve, MAG will be looking to fully integrate the system into its daily power consumption needs.<sup>53</sup>

NPA Angola does not have a country-specific environmental policy, but it follows environmental guidelines from head office. NPA Angola also participated in the environmental mapping exercise of the head office in 2022.<sup>54</sup>

## GENDER AND DIVERSITY

Gender and diversity are integrated into Angola's National Mine Action Strategy 2020–25 as a cross-cutting issue. The strategy recognises that mine action activities need to reflect the distinct needs of different ages, genders, and other

diverse groups through targeted design with the collection, analysis and reporting of data disaggregated by sex and age a key precursor for this. Disaggregated data collection requirements have been integrated into all relevant SOPs,

42 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

43 Email from Manuel João Agostinho, APOPO, 30 March 2023.

44 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

45 Email from Robert Iga Afedra, NPA, 30 March 2023.

46 Emails from Jeanette Dijkstra, MAG, 22 March 2022; Christelle Mestre, GICHD, 4 May 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO, 25 June 2022.

47 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

48 Email from Manuel João Agostinho, APOPO, 14 March 2022.

49 The HeroTree Programme, which APOPO implements in partnership with Agriculture Tanzania (SAT), promotes sustainable agricultural techniques and climate-smart farming practices to contribute to food security, poverty reduction, and socio-economic development. APOPO Annual Report 2022, p. 83.

50 Email from Manuel João Agostinho, APOPO, 30 March 2023.

51 Email from Daniel Richards, HALO, 25 June 2022.

52 Email from Robert Syfret, HALO, 14 September 2022.

53 Email from Nelson Verissimo, MAG, 6 June 2023.

54 Email from Robert Iga Afedra, NPA, 30 March 2023.



forms, and other data collection tools.<sup>55</sup> Although Angola has no gender and diversity implementation plan, the Angolan mine action sector has made significant strides with regards to gender balance. This is demonstrated in

the increased participation of women in mine action at all hierarchical levels. In 2022, 36% of ANAM's employees were women. Women held 48% of operational positions and 33% of managerial positions.<sup>56</sup>

**Table 2: Women participation in the mine action workforce 2022.**<sup>57</sup>

Operator	Female proportion of total employees	Proportion of operational positions held by women	Proportion of managerial positions held by women
ANAM	36%	48%	33%
APOPO	12%	11%	None
HALO	40%	60%	12%
MAG	26%	33%	17%
NPA	15%	18%	None

APOPO encourages women to apply for roles and include gender and diversity perspectives when planning and implementing its demining operations as one of its core values.<sup>58</sup> In 2022, 12% of APOPO's employees were women. Women held 11% of operational positions but no managerial positions.<sup>59</sup> HALO has been working towards achieving gender balance in its programme over the past five years, starting with its "100 Women in Demining" project launched in 2017. Since then, HALO has been prioritising women during recruitment and selection for promotional training in order to increase the proportion of women at all levels of the programme, including senior management. As a result, the proportion of women within HALO Angola's workforce increased from 3.6% in 2017 to 45% by the end of 2022. Gender balance was achieved amongst its operational staff in 2022 as 60% of its operational staff were women. HALO is also developing other initiatives to empower women in the workforce and provide better healthcare provisions for women. Women who work for HALO now also receive a childcare stipend to support returning to work after maternity leave and retention in the workforce by

supporting childcare burdens which commonly fall upon women in Angola.<sup>60</sup>

MAG keeps records of beneficiary data that are disaggregated by gender and age for each area cleared and conducts a post-clearance impact assessment to document the impact. All community members are consulted on an equal basis.<sup>61</sup> In 2022, 26% of MAG's employees were women. Women held 33% of operational positions and 17% of managerial positions.<sup>62</sup>

NPA organises gender sensitivity training for its staff and, whenever possible, gender equality is raised with the national and provincial authorities. NPA ensures that job opportunities are accessible to women and men equally, and do not contain requirements that unnecessarily discourage female applicants or preclude their employment.<sup>63</sup> NPA Angola appointed gender and diversity focal points within its programme and prepared an implementation plan for gender equality policy. All NPA data are disaggregated by gender.<sup>64</sup> In 2022, 15% of NPA's employees were women. Women held 18% of operational positions, but no managerial positions.<sup>65</sup>

## INFORMATION MANAGEMENT AND REPORTING

ANAM manages a national IMSMA database which is now considered to be a reliable source of information,<sup>66</sup> as it has been fully reconciled with operators' data, and the previous data backlog and inflated contamination figures have been cleared.<sup>67</sup> ANAM has requested IMSMA Core from the GICHD to improve its information management. This would allow operators to send the data directly to ANAM.<sup>68</sup>

55 Email from Robert Iga Afedra, NPA (on behalf of CNIDAH), 1 April 2020.

56 Article 7 report (covering 2021), Form J; and email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

57 Emails from Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; Chris Pym, HALO, 14 June 2023, and Susanna Smale, HALO, 29 August 2023.

58 Email from Manuel João Agostinho, APOPO, 22 March 2021.

59 Email from Manuel João Agostinho, APOPO, 30 March 2023.

60 Email from Susanna Smale, HALO, 29 August 2023.

61 Email from Jeanette Dijkstra, MAG, 22 March 2022.

62 Email from Nelson Verissimo, MAG, 6 June 2023.

63 Email from Miroslav Pisarević, NPA, 5 April 2021.

64 Email from Miroslav Pisarević, NPA, 10 March 2022.

65 Email from Robert Iga Afedra, NPA, 30 March 2023.

66 Emails from Jeanette Dijkstra, MAG, 22 March 2022; and Miroslav Pisarević, NPA, 10 March 2022.

67 Email from Robert Iga Afedra, NPA (on behalf of CNIDAH), 22 March 2021; Statement by Angola on Article 5 implementation, Fourth APMB Review Conference, Oslo, November 2019.

68 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.



In previous years, Angola's mine action programme suffered from significant problems with information management, in particular the poor quality of the CNIDAH national database. Since 2018, an NPA Capacity Development Adviser has been embedded in CNIDAH/ANAM, and focused on establishing an up-to-date and more accurate mine contamination database, with assistance from operators.<sup>69</sup> As part of the improvements to information management, a monthly data-sharing mechanism between CNIDAH/ANAM and operators has been in place since 2018.<sup>70</sup>

ANAM's information management system does not yet gather all mine action data across the country, but this issue has been discussed with the public operators and challenges to the verification and integration of historic data had yet to be mastered.<sup>71</sup> According to the 2023 plan, the CND, which is now the only public operator in Angola, will perform demining of mined areas registered in the IMSMA database, in addition to tasks assigned by provincial governments to support development.<sup>72</sup>

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## PLANNING AND TASKING

ANAM, in collaboration with operators, established a 2022 work plan to release 97 mined areas covering a little over 10km<sup>2</sup> by the end of 2022. Out of the total, 77 were cleared leaving 20 to be released.<sup>73</sup>

Angola's National Mine Action Strategy 2020–2025 was developed by CNIDAH, in 2019, with support from the GICHD. As at June 2023, the strategy had yet to be formally adopted by the Government of Angola.<sup>74</sup> There are five objectives within the proposed strategy, three of which relate to completion of Angola's Article 5 obligations and which contain specific outcomes and targets:

### STRATEGIC OBJECTIVE 1: LAND RELEASE

That appropriate land release activities result in the release of safe land and the facilitation of sustainable development. All hazardous areas are to be addressed by 31 December 2025 in line with the Article 5 extension request work plan. The programme's key strategic orientation for achieving its land release objective will focus on developing and fully implementing IMAS-compliant NMAS on land release, including by defining "all reasonable effort".

### STRATEGIC OBJECTIVE 4: MANAGEMENT OF RESIDUAL CONTAMINATION

A national strategy on the management of residual contamination will be developed by the end of 2020 under the lead of CNIDAH and the CED with the participation of all relevant actors. A national capacity to manage residual contamination was to be trained within the first quarter of 2021.<sup>75</sup> As at July 2023, the strategy for management of residual contamination had been drafted but not yet finalised. The draft strategy sees for the CND, in partnership with the

national police, to be the entities responsible for managing residual contamination. (See the section below Planning for residual risk after completion, for further information.)<sup>76</sup>

### STRATEGIC OBJECTIVE 5: ADVOCACY, COMMUNICATION, AND COORDINATION

Effective coordination and information sharing are stated to be pre-conditions for achieving all strategic objectives. In addition to the twice-yearly coordination meetings with relevant stakeholders that began in 2019, ANAM will take the lead in developing a communications plan on the completion process by the middle of 2021, to facilitate effective information sharing.<sup>77</sup> Although the development of a communication plan was still outstanding at July 2023, ANAM engages with operators and donors, and media has been invited to cover events with donors and other stakeholders. ANAM intends to hold awareness-raising events in provinces where clearance is completed and make representations to the provincial governments for the declaration of completion of demining of mined areas in Huambo province, and subsequently in the provinces of Cuanza Norte, Malange, Uige, and Zaire.<sup>78</sup>

In June 2021, Angola released an updated work plan which includes an updated list of all areas confirmed or suspected to contain explosive ordnance, annual clearance projections and milestones, and revised funding projections. The updated land release targets, set out in Table 3, are based on an estimate of outstanding AP mined area as at June 2021. In 2022, the majority of land release was planned to take place in Bié, Cuando Cubango, Cuanza Norte, Cuanza Sul, Lunda Sul, and Moxico, with a land release target of 17.1km<sup>2</sup>.<sup>79</sup>

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69 Email from Miroslav Pisarević, NPA, 10 March 2022; and Article 7 Report (covering 2021), Form J.

70 Emails from Robert Iga Afedra, NPA, 3 June 2019; Ralph Legg, HALO, 30 March 2020; and Jeanette Dijkstra, MAG, 20 May 2020.

71 Email from Christelle Mestre, GICHD, 4 May 2022.

72 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

73 Ibid.

74 Email from Christelle Mestre, GICHD, 4 May 2022.

75 Angola National Mine Action Strategy 2020–2025, pp. 27–29.

76 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

77 Angola National Mine Action Strategy 2020–2025, pp. 29–31.

78 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

79 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 10.

**Table 3: Annual targets for release of mined area in 2021–25<sup>80</sup>**

Year	Targets (m <sup>2</sup> )
2021	17,075,262
2022	17,075,262
2023	15,672,399
2024	14,288,955
2025	7,826,779
<b>Total</b>	<b>71,938,657</b>

Guidelines for a new tasking and prioritisation system were adopted in 2021.<sup>81</sup> A key feature of the new prioritisation

system is that provinces are assigned to operators giving them responsibility over that province.<sup>82</sup> ANAM stated that priority is given to the most contaminated areas and those close to the communities. The criterion is to prioritise the tasks in the provinces close to completion, so that resources are focused to the other provinces and geared towards completion.<sup>83</sup>

A workshop aiming to produce a master tasking plan was envisaged to take place in the last quarter of 2022, but did not take place as planned.<sup>84</sup>

In July 2023, NPA published a new country strategy for 2023–25. The strategy foresaw the completion of all identified contaminated areas in the provinces of Bengo, Cuanza Norte, Uige, and Zaire by Angola's Article 5 deadline of December 2025.<sup>85</sup>

## LAND RELEASE SYSTEM

### STANDARDS AND LAND RELEASE EFFICIENCY

Ten chapters of NMAS were completed and fully adopted in 2021.<sup>86</sup> Angola's NMAS are adequate and cover the main topics related to land release.<sup>87</sup>

Three additional standards on animal detection systems, EOD, and residual contamination management, have been drafted with support from the GICHD.<sup>88</sup> These standards have been translated into Portuguese, and presented to the mine action stakeholders in 2022. Both the animal detection and EOD standards were accepted by all. Finalisation of the residual contamination management standard depends on the completion of the residual contamination management strategy.<sup>89</sup> NPA expected government approval for these three additional standards in 2023.<sup>90</sup> ANAM is developing additional NMAS on occupational health, safety, and the environment, in addition to other covering PPE, minefield marking, medical support for mine clearance operations, and accident and incident investigation.<sup>91</sup>

### OPERATORS AND OPERATIONAL TOOLS

Four international NGOs conducted demining in Angola in 2022: APOPO, HALO, MAG, and NPA. Of the national operators, APACOMINAS was active in 2022. Since the dissolving of the CED and the organisations that work under its supervision, the CND has become the only public operator conducting demining activities in Angola.<sup>92</sup>

**Table 4: Operational clearance capacities deployed in 2022<sup>93</sup>**

Operator	Manual teams	Total deminers*	Animal detection capacity	Machines**	Comments
APOPO	2	18	7 handlers, 10 rats	2	Deminers and rat handlers are TS and clearance personnel. Rats are applied only for TS.
APACOMINAS	4	60			
CND	16	657	5 handlers, 2 dogs	38	

80 Ibid.

81 Email from Robert Iga Afedra, NPA, 4 July 2021.

82 Interview with Robert Iga Afedra, NPA, 22 February 2021.

83 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

84 Emails from Miroslav Pisarevic, NPA, 10 March and 14 September 2022; and CNDAH, Minefield Tasking, Planning, and Prioritisation Guideline, 2021.

85 Email from Robert Iga Afedra, NPA, 12 August 2023.

86 Article 7 Report (covering 2021), Form J.

87 Email from Christelle Mestre, GICHD, 4 May 2022.

88 Article 7 Report (covering 2021), Form J; and emails from Christelle Mestre, GICHD, 4 May 2022; and Miroslav Pisarević, NPA, 10 March 2022.

89 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

90 Email from Robert Iga Afedra, NPA, 30 March 2023.

91 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

92 Article 7 Report (covering 2022), Form J.

93 Emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023.

**Table 4 Continued**

Operator	Manual teams	Total deminers*	Animal detection capacity	Machines**	Comments
HALO	92	826	0	4	An additional 25 teams were hired and trained in 2022.
MAG	8	89	0	6	Six manual teams and two mechanical teams. TS personnel are allocated to the manual teams.
NPA	5	28	5 handlers, 5 dogs	4	The number of teams is an average across the year as the number of teams was reduced twice in 2022.
<b>Totals</b>	<b>127</b>	<b>1,678</b>	<b>17 handlers, 10 rats, and 7 dogs</b>	<b>54</b>	

\* Excluding team leaders, medics, and drivers. \*\* Excluding vegetation cutters and sifters

The national operator, APACOMINAS, deployed six personnel across two teams of NTS in 2022.<sup>94</sup>

APOPO almost maintained the same capacity it had in 2021 throughout 2022, with the exception of sending its MDD team to another programme in June. In 2022, APOPO deployed one team of two personnel for its NTS. For TS and clearance, APOPO deployed one team of 18 deminers, 1 mine detection rat (MDR) team of seven handlers and ten rats, and, until May 2022, one TS team of two handlers and two MDDs. APOPO expected to maintain the same structure in 2023.<sup>95</sup>

HALO increased its number of staff across all operational teams in 2022 to support the expansion of the programme as part of the contract with the Government of Angola. Alongside its clearance teams, HALO deployed 5 NTS teams totalling 20 personnel and 3 TS teams of 6 personnel each. In 2023, HALO expected to increase its survey capacity and planned to further upscale its clearance capacity to an expected additional 10 trained and deployed teams in 2023.<sup>96</sup> In 2022, HALO began trialling the Minelab GPZ 7000 detector as a primary search method in Mavinga, where minefields along the Cubia river have highly mineralised magnetic soil and contain No. 8 AV mines. This type of soil leads to a constant signal when using a standard Minelab F3 detector that is unable to discriminate between the soil and the potential presence of mines. The remoteness of the area prevents mechanical clearance, and until now, these minefields had to be cleared through full manual excavation, which is a slow and laborious process. The trials have proven the GPZ detector to be highly effective in detecting low-metal-content mines in mineralised soil, which could significantly increase clearance rates in these areas.<sup>97</sup>

HALO is using more Handheld Standoff Mine Detection System (HSTAMIDS) dual-sensor detectors, which employ ground penetrating radar technology alongside metal detection. HSTAMIDS enables a trained operator to

differentiate between scrap metal fragments, or clutter, and metal signals associated with larger mass. Metal signals identified as clutter can be rapidly excavated from the ground, reducing the amount of time deminers spend on carrying out time-consuming excavations and therefore potentially increasing clearance productivity rates.<sup>98</sup>

HALO also continued its drone trials in 2022, particularly the M-600 LIDAR scanner and the MAVIC-2, which is outfitted with a standard red, green, and blue (RGB) wavelengths camera. The MAVIC-2 is used to capture aerial photos of the surface of the ground, while the M-600 can penetrate through the vegetation, using pulses of light to record the heights of objects on the ground, generating accurate three-dimensional information about the area and its characteristics. Drones have helped the HALO programme to be more efficient in identifying evidence points and guiding clearance teams. However, one of the main challenges is the weather. Thunderstorms and strong wind gusts can be unpredictable, making it impossible to fly drones, especially during the rainy season.<sup>99</sup>

Alongside its clearance teams, MAG deployed 3 NTS teams with 12 personnel. MAG increased its number of teams in April 2022 as funding from Japan was renewed. In 2022, MAG mobilised additional two mine action teams, one community liaison team, and one rapid response team. However, these additional teams were discontinued in March 2023 MAG's grant from Japan ended.<sup>100</sup>

NPA decreased its manual teams due to funding constraints in 2022. In June 2022, the programme contracted from six to four manual teams. Then in December 2022, was further reduced from four manual to two manual teams due to same funding challenges. NPA's manual teams carry out clearance and TS. NPA also deployed one NTS team of two personnel. NPA expected to maintain the current number of teams in 2023.<sup>101</sup>

94 Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

95 Email from Manuel João Agostinho, APOPO, 30 March 2023.

96 Emails from Chris Pym, HALO, 14 June 2023; and Susanna Smale, HALO, 29 August 2023.

97 Ibid.

98 Ibid.

99 Ibid.

100 Email from Nelson Verissimo, MAG, 6 June 2023.

101 Email from Robert Iga Afedra, NPA, 30 March 2023.

NPA has also introduced drones into its operations since 2021 as an additional tool to support NTS and operational planning. In 2022, NPA used drones especially during the NTS as they provided good visualisation of hazardous areas, terrain, and evidence. Drones were also used during pre-implementation visits to new tasks before the deployments of teams as they assist in evidence-based planning of where to start from or to focus the activities.<sup>102</sup>

NPA also plans to test the information collection of the Vallon VMH-4 detectors including the global positioning system (GPS) that can track the daily productivity per deminer, among other data. Such data will be collected through daily operations reports, incorporated within the information management system, and further analysed to potentially improve operational results, programme efficiency, and safety.<sup>103</sup>

## DEMINER SAFETY

APOPO reported one accident during clearance operations in Cuanza Sul in June 2022. The deminer suffered minor injuries. ANAM carried out a prompt accident investigation sending two of its officers. Lessons learned were shared and immediate actions were taken.<sup>104</sup>

HALO reported five demining accidents in 2022, two in Bie province and three in Cuando Cubango province. Four of these accidents were caused by AP mines and led to deminers suffering injuries, some of which were serious. The fifth accident was caused by an AV mine and led to the death of one deminer. All accidents were investigated by HALO and ANAM, with lessons learned and recommendations shared and implemented within the HALO Angola programme. Key technical information on the accidents was presented to other operators during an ANAM-led technical workshop held in Huambo and organised by HALO.<sup>105</sup>

## LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

### LAND RELEASE OUTPUTS IN 2022

According to Mine Action Review's analysis, a total of more than 13.81km<sup>2</sup> of mined area was released in Angola in 2022: 5.95km<sup>2</sup> through clearance, 4.73km<sup>2</sup> through TS, and 3.14km<sup>2</sup> through NTS,<sup>106</sup> with the destruction of 4,002 AP mines.

Data reported by ANAM did not fully align with those reported by the operators, according to which a total of 16.04km<sup>2</sup> of mined area was released in 2022: 5.84km<sup>2</sup> cancelled through NTS, 4.73km<sup>2</sup> reduced through TS, and 5.47km<sup>2</sup> cleared.

A reported area of 5.16km<sup>2</sup> was also cleared in 2022 outside of the IMSMA database, during which a total of 454 AP mines, 7 AV mines, and 311 items of UXO have been destroyed in 12 provinces. To ensure data are not inflated, from the reported clearance that occurred outside areas recorded in the IMSMA

database, only 67,244m<sup>2</sup> in Huila has been included in the total 2022 clearance figure for Angola of 5.95km<sup>2</sup> reported by Mine Action Review. The 19 AP mines destroyed in other areas have been recorded as spot tasks. A further 21.62km<sup>2</sup> of TS and NTS by APACOMINAS and CND took place in 2022 outside the IMSMA system as part of development projects.<sup>107</sup> This TS and NTS have not been included in Mine Action Review's survey totals for 2022.

ANAM expected that, from 2023 onwards, the CND would actively participate in clearing minefields registered in the database, and all areas that are identified as mined will be registered in the national database.<sup>108</sup>

### SURVEY IN 2022

ANAM reported the release of nearly 7.87km<sup>2</sup> through survey in 2022: cancelling 3.14km<sup>2</sup> through NTS (see Table 5) and reducing 4.73km<sup>2</sup> through TS (see Table 6).<sup>109</sup> This represents a little over half of the 14km<sup>2</sup> released through survey in 2021.<sup>110</sup>

Survey continues to account for the majority of land released in Angola. This, however, varied largely from one area to another and across the operators. According to operator data, land released through survey accounted for approximately 97% the total released by each of APOPO and NPA, 69% of land released by HALO, and 7% of land released by MAG, who relied primarily on mechanical clearance in 2022. Land cancellation took place in seven provinces, while land reduction and clearance took place in nine provinces in 2022.<sup>111</sup>

<sup>102</sup> Ibid.

<sup>103</sup> Emails from Miroslav Pisarević, NPA, 10 March and 14 September 2022; and Robert Iga Afedra, NPA, 30 March 2023.

<sup>104</sup> Email from Manuel João Agostinho, APOPO, 30 March 2023.

<sup>105</sup> Email from Susanna Smale, HALO, 29 August 2023.

<sup>106</sup> Article 7 Report (covering 2022), Form F; and emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023.

<sup>107</sup> Article 7 Report (covering 2022), Form F; and email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

<sup>108</sup> Ibid.

<sup>109</sup> Ibid.; and emails from Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023.

<sup>110</sup> Emails from Mário Nunes (on behalf of ANAM), NPA, 14 September 2022; Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO, 25 June 2022.

<sup>111</sup> Article 7 Report (covering 2022), Form F.

Considering the national survey that has been completed in 2019, ANAM and operators believe that the remaining contamination should be released through a combined application of TS and clearance, with the expectation that the ratio of land cleared to that released through survey will increase over time.<sup>112</sup>

**Table 5: Release of mined area through NTS in 2022<sup>113</sup>**

Province	Operator	Area cancelled (m <sup>2</sup> )
Bengo	NPA	294,249
Benguela	HALO	84,444
Bié	HALO	64,000
Cuando Cubango	HALO	390,446
Cuanza Norte	NPA	1,122,592
Cuanza Sul	APACOMINAS	387,912
Cuanza Sul	APOPO	796,884
<b>Total</b>		<b>3,140,527</b>

**Table 6: Release of mined area through TS in 2022<sup>114</sup>**

Province	Operator	Area reduced (m <sup>2</sup> )
Benguela	HALO	532,073
Bié	HALO	340,259
Cuando Cubango	HALO	1,089,220
Cuanza Norte	NPA	336,440
Cuanza Sul	APACOMINAS	149,764
Cuanza Sul	APOPO	1,320,019
Lunda Sul	MAG	180,000
Moxico	MAG	11,000
Zaire	NPA	769,432
<b>Total</b>		<b>4,728,207</b>

As mentioned above, a total of 21.62km<sup>2</sup> of additional survey took place outside of the IMSMA by APACOMINAS and CND as part of development projects in 2022. Of this, 3.13km<sup>2</sup> was cancelled through NTS by APACOMINAS in the province of Cabinda (Table 7), and 18.82km<sup>2</sup> was reduced through TS by APACOMINAS and CND in eight provinces (Table 8). These development projects have not been included in Mine Action Review's survey data total for 2022.

**Table 7: Release of mined area outside IMSMA through NTS in 2022<sup>115</sup>**

Province	Operator	Area cancelled (m <sup>2</sup> )
Cabinda	APACOMINAS	3,129,594
<b>Total</b>		<b>3,129,594</b>

**Table 8: Release of mined area outside IMSMA through TS in 2022<sup>116</sup>**

Province	Operator	Area reduced (m <sup>2</sup> )
Benguela	CND	322,413
Bié	CND	10,000,000
Cabinda	APACOMINAS	1,233,582
Cuando Cubango	CND	114,000
Huambo	CND	198,230
Huila	CND	130,245
Lunda Norte	CND	2,800,474
Zaire	CND	4,017,194
<b>Total</b>		<b>18,816,138</b>

## CLEARANCE IN 2022

According to Mine Action Review's analysis, a total of 5.95km<sup>2</sup> of mined area was cleared in 2022 (see Tables 9 and 11), destroying in the process 4,002 AP mines. This is an almost 50% increase on the 4km<sup>2</sup> of mined area cleared in 2021.<sup>117</sup> Of the total number of AP mines destroyed in 2022, 3,342 were destroyed in mined areas in the IMSMA database; 435 were destroyed by the CND in Huila province in mined area not included in the database; and 225 were destroyed during spot tasks. Also destroyed during mine clearance in 2022 were 1,572 AV mines and 9,194 items of UXO.<sup>118</sup>

112 Emails from Mário Nunes on behalf of ANAM, NPA, 14 September 2022; Manuel João Agostinho, APOPO, 6 September 2022; Miroslav Pisarević, NPA, 14 September 2022; Jeanette Dijkstra, MAG, 6 September 2022; and Robert Syfret, HALO, 14 September 2022.

113 Article 7 Report (covering 2022), Form F; and emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023. HALO reported a total of 3,076,529m<sup>2</sup> of cancellation through NTS as follows: 179,180m<sup>2</sup> in Benguela, 141,231m<sup>2</sup> in Bié, 2,359,624m<sup>2</sup> in Cuando Cubango, 167,465m<sup>2</sup> in Huila, and 229,029m<sup>2</sup> in Cunene. Taking HALO's figures in consideration, the total area cancelled through NTS is 4,979,285m<sup>2</sup>.

114 Article 7 Report (covering 2022), Form F; and emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023. In response to the Mine Action Review questionnaire, HALO reported having reduced 1,077,587m<sup>2</sup> through TS in Cuando Cubango, and 740,717 in Benguela, and APOPO 1,330,314m<sup>2</sup> in Cuanza Sul. Taking operators' figures in consideration, total area reduced through TS is 4,785,749m<sup>2</sup>.

115 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

116 Ibid.

117 Article 7 Report (covering 2021), Form F; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO, 25 June 2022.

118 Article 7 Report (covering 2022), Form F; and emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023.

The increase in area cleared in 2022 is largely attributable to the additional number of HALO's manual clearance and survey teams and MAG's extensive use of mechanical assets and deployment in minefields with ground and vegetation that favoured mechanical clearance.<sup>119</sup> But the number of square metres cleared for every AP mine destroyed in 2022 has increased by almost 40% on 2021: from 1,081m<sup>2</sup> per mine in 2021 to 1,574m<sup>2</sup> per mine in 2022. It remained significantly lower than the 4,166m<sup>2</sup> per mine in 2020.

**Table 9: Mine clearance in 2022<sup>120</sup>**

Province	Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Benguela	HALO	495,467	142	0	11
Bié	HALO	484,348	87	19	58
Cuando Cubango	HALO	1,690,787	1,866	1,496	65
Cuanza Norte	NPA	62,734	120	0	6
Cuanza Sul	APACOMINAS	513,616	41	0	129
Cuanza Sul	APOPO	54,724	164	0	115
Moxico	MAG	918,571	440	6	219
Lunda Sul	MAG	1,642,696	463	1	331
Zaire	NPA	15,247	19	1	40
<b>Totals</b>		<b>5,878,190</b>	<b>3,342</b>	<b>1,523</b>	<b>974</b>

In addition, ANAM reported the destruction of 206 AP mines during spot tasks: 2 by APOPO, 13 by HALO,<sup>121</sup> 4 by NPA,<sup>122</sup> 48 by MAG, and 139 by CND.<sup>123</sup>

According to ANAM, a total of more than 13.81km<sup>2</sup> of mined area was released in 2022: 5.95km<sup>2</sup> through clearance, 4.73km<sup>2</sup> through TS, and 3.14km<sup>2</sup> through NTS.<sup>124</sup> Land release output decreased by almost 25% in 2022 compared to 2021, when a total of 17,86km<sup>2</sup> of land was released, of which 4km<sup>2</sup> was cleared, 3,61km<sup>2</sup> reduced through TS, and 10,25km<sup>2</sup> cancelled through NTS. Land cancellation and reduction accounted for nearly 60% of total land release in 2022. Clearance and TS outputs increased, while NTS output significantly decreased compared to 2021 (see Table 10).

**Table 10: Land release in 2022 compared to 2021<sup>125</sup>**

Land release	2021 (Operator data km <sup>2</sup> )	2022 (ANAM data km <sup>2</sup> )	2022 (Operator data km <sup>2</sup> )
Cancelled through NTS	10.25	3.14	5.68
Reduced through TS	3.61	4.73	4.94
Cleared	4.00	5.95	5.47
<b>Totals</b>	<b>17.86</b>	<b>13.82</b>	<b>16.09</b>

119 Emails from Manuel João Agostinho, APOPO, 30 March 2023; Chris Pym, HALO, 14 June 2023; and Nelson Verissimo, MAG, 6 June 2023.

120 Article 7 Report (covering 2022), Form F; and emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023. In Angola's Article 7 report, the clearance figures of Cuanza Norte and Zaire are reversed (15,247m<sup>2</sup> in Cuanza Norte and 62,734m<sup>2</sup> in Zaire). The clearance figures of these two provinces are provided as per the data provided by NPA. MAG reported having cleared 1,650,869m<sup>2</sup> in Luanda Sul destroying 64 AP mines, no AV mines, and 331 items of UXO; HALO reported clearance of 495,467m<sup>2</sup> in Benguela, destroying 368 AP mines and 68 items of UXO; 374,998m<sup>2</sup> in Bié, destroying 87 AP mines, 19 AV mines, and 316 items of UXO; and 1,382,052m<sup>2</sup> in Cuando Cubango, destroying 1,866 AP mines, 1,496 AV mines, and 51 items of UXO. NPA reported having destroyed 426 items of UXO in Cuanza Norte and 14 in Zaire. With this operator data taken into account, the total AP mines area cleared in Angola in 2022 would be 5,468,278m<sup>2</sup>, with the destruction of 3,169 AP mines, 1,522 AV mines, and 1,694 items of UXO.

121 HALO reported having destroyed 14 AP mines during spot tasks.

122 NPA did not report destruction of any AP mines in spot tasks.

123 Article 7 Report (covering 2022), Form F; and emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023.

124 Ibid.

125 Includes land release data of APOCOMINAS in Cuanza Sul province.

APOPO reduced TS but increased clearance in the tasks carried out during 2022. There were no specific technical reasons for the decrease in land cancellation.<sup>126</sup>

HALO reported a significant increase in the amount of land released in 2022 largely due to the increase in their number of manual clearance and survey teams as part of its contract with the Government of Angola. The number of manual clearance teams expanded by 25 to 92 teams in 2022 with a total of 848 deminers. This is an increase of 213 deminers compared to 2021. HALO expected 3 additional clearance teams to be trained and deployed in 2023.<sup>127</sup>

MAG saw a 42% increase in land released in 2022 compared to 2021 due to a combination of extensive use of mechanical assets and deployment in minefields with ground and vegetation that favoured mechanical clearance. The number of teams and deminers that MAG deployed also temporarily increased from April 2022 to March 2023 thanks to a grant from Japan.<sup>128</sup>

NPA adjusted its operations approach to focus more on efficiency of land release activities. A more targeted and systematic TS approach was employed, which increased reduction figures and reduced clearance efforts. However, the number of NPA clearance teams decreased from six at the beginning of 2022 to two by the end of the year. NPA expects to maintain its two teams in 2023.<sup>129</sup>

Of the international operators, APOPO, MAG, and NPA combined accounted to approximately 8–15% of the human demining capacity in Angola, but to 47% of the land release outputs of international operators. Both APOPO and NPA have released 97% of AP mined area through other than clearance, compared to 70% for HALO, and 7% for MAG, which mainly relied on mechanical clearance in 2022.

Since 2021, all known mined areas in Huambo had been released. As at May 2023, ANAM said that declaration of completion of land release in all known mined areas was imminent.<sup>130</sup> Four additional provinces (Uige, Cuanza Norte, Namibe, and Zaire) were very close to completion. Malange province, which was previously thought to only contain residual contamination, is now subject to additional survey following NTS conducted by NPA at the request of ANAM that discovered four new hazardous areas. NPA expected to verify all remaining reports in Malange by June 2023 to establish a new provincial baseline.<sup>131</sup>

In Cuanza Norte, NPA reported that there are ten remaining uncleared tasks that were expected to be completed by May 2024. In the province of Uige, land release activities have not been completed as four additional tasks were identified by NPA's NTS team in 2022.<sup>132</sup> As at August 2023, the five remaining tasks in Uige were expected to be completed in 2024.<sup>133</sup> HALO received approval from ANAM in July 2023 to begin work on the three remaining areas in Namibe. Clearance began in August 2023.<sup>134</sup> In Zaire, release of the last mined area was completed by NPA in June 2023. An impact assessment was planned by the end of 2023 to ensure no previously unknown areas remain before a declaration of completion is made.<sup>135</sup>

The CED cleared a total area of 5.16km<sup>2</sup> outside the IMSMA database as part of development projects, during which a total of 454 AP mines, 7 AV mines, and 311 items of UXO were destroyed in 12 provinces (see Table 11).<sup>136</sup> Only the 67,244m<sup>2</sup> of mined area cleared in Huila, during which 435 AP mines were destroyed, has been considered in Mine Action Review's total 2022 clearance figure for Angola (5.95km<sup>2</sup>). The remaining areas reported as cleared outside mined areas in IMSMA were not included, as they concerned large areas with little or no contamination. The AP mines destroyed in provinces other than Huila are reported as spot tasks.

**Table 11: Mine clearance by CND in 2022 (outside mined areas in IMSMA)<sup>137</sup>**

Province	Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Bengo	CND	459,483	0	0	77
Benguela	CND	383,917	2	0	6
Bié	CND	1,380,715	2	1	34
Cabinda	CND	188,550	0	0	0
Cuando Cubango	CND	36,000	2	6	165
Cuanza Norte	CND	28,212	0	0	0
Huambo	CND	126,900	0	0	0

126 Email from Manuel João Agostinho, APOPO, 30 March 2023.

127 Email from Chris Pym, HALO, 14 June 2023.

128 Email from Nelson Verissimo, MAG, 6 June 2023.

129 Email from Robert Iga Afedra, NPA, 30 March 2023.

130 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

131 Email from Robert Iga Afedra, Country Director, NPA, 30 March 2023.

132 Ibid.

133 Statement of Angola, APMBIC Intersessional Meetings 2023, Geneva, 19–21 June 2023; and email from Robert Iga Afedra, NPA, 12 August 2023.

134 Email from Susanna Smale, HALO, 29 August 2023.

135 Emails from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023; and Robert Iga Afedra, NPA, 30 March and 12 August 2023.

136 Article 7 Report (covering 2022), Form F; and email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

137 Ibid.

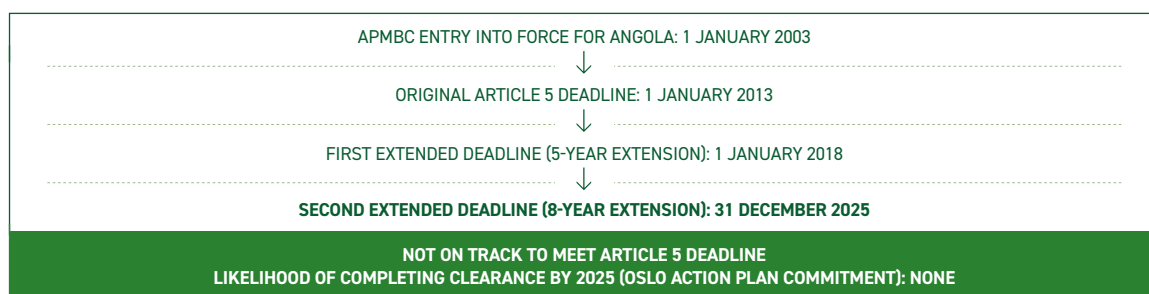


Table 11 Continued

Province	Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Huila*	CND	67,244	435	0	6
Lunda Norte	CND	1,159,886	10	0	1
Lunda Sul	CND	130,500	0	0	1
Moxico	CND	578,672	3	0	11
Zaire	CND	620,000	0	0	10
<b>Totals</b>		<b>5,160,079</b>	<b>454</b>	<b>7</b>	<b>311</b>

\* Only the area cleared and the number of AP mines destroyed in Huila are considered in Mine Action Review's 2022 clearance figure for Angola. The remaining areas were not considered as area clearance for the purpose of Mine Action Review's reporting as they concerned vast areas with little or no contamination. The AP mines destroyed in provinces other than Huila are reported as spot tasks.

## ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMB (and in accordance with the eight-year extension granted by States Parties in 2017), Angola is required to destroy all AP mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. Angola is unlikely to meet this deadline.

The year 2022 saw Angola fail to meet its Article 5 work plan land release target of 17.1km<sup>2</sup> by 3.25km<sup>2</sup>. This is a regression from 2021 where Angola has exceeded its 2021 land release target of 17.1km<sup>2</sup> by 2.77km<sup>2</sup>.<sup>138</sup> According to Angola's latest statement to the APMB Intersessional Meetings in June 2023, Angola will need to release 25.44km<sup>2</sup> in 2023, 20.76km<sup>2</sup> in 2024, and 20.29km<sup>2</sup> in 2025 to meet its Article 5 deadline.<sup>139</sup> These annual land release targets are higher than those set out in Angola's Updated Article 5 Implementation Work Plan 2020–2025, which foresaw the need to release 15.7km<sup>2</sup> in 2023, 14.3km<sup>2</sup> in 2024, and 7.8km<sup>2</sup> in 2025 to meet its Article 5 deadline.<sup>140</sup> ANAM had anticipated in 2020 that after the completion of NTS in all provinces and better definition of minefields sizes, there would be reduced cancellation on the remaining mined areas across the country.<sup>141</sup> There was

indeed an decrease in the ratio of land released through survey in 2022 compared to the previous year.

Despite the positive developments in Angola's mine action structures, and in light of the current rate of land release outputs, the continued and expected future discovery of previously unknown mined areas, Angola needs to accelerate the pace of its progress and continue to apply sound and rigorous land release techniques in order to meet its Article 5 deadline of 31 December 2025. However, with almost 23% of land released in 2022 resulting from cancellation, if indeed most of the remaining contamination is expected to be dealt with through clearance and TS activities, Angola will need to request a further extension to its Article 5 deadline. As stated in its recently published country strategy of 2023–25, NPA strongly believes that, although releasing all AP mined areas by the end of December 2025 might not be feasible, completion of clearance in Bengo, Cuanza Norte, Uige, and Zaire provinces is possible. NPA's strategy is hoped to demonstrate Angola's strong commitment to fulfilling its obligations to the Convention.<sup>142</sup>

138 CNIDAH, "Detailed work plan for the implementation of Article 5 of the Convention (2019–2025)", Annex 1; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO, 25 June 2022.

139 Statement of Angola, Intersessional Meetings 2023, Geneva, 19–21 June 2023.

140 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, p. 10.

141 Ibid., p. 5.

142 Email from Robert Iga Afedra, NPA, 12 August 2023.

**Table 12: Five-year summary of AP mine clearance**

Year	Area cleared (km <sup>2</sup> )
2022	5.9
2021	4.0
2020	1.8
2019	1.6
2018	1.0
<b>Total</b>	<b>14.3</b>

CNIDAH stated in early 2021 that it would take ten years for Angola to complete national clearance of AP mined areas. However, if capacity is increased and operators implement efficient and effective land release methodologies then this timeline could be significantly reduced.<sup>143</sup> Angola has indeed accelerated its land release by investing additional resources

and deploying sound land release methodology throughout 2021 and 2022, but it will need to further upscale this pace if it has any chance of meeting its 2025 Article 5 deadline. Despite continued funding support from multiple donors, Angola said in February 2023 that it still needed more than US\$238 million to complete its mine clearance.<sup>144</sup>

ANAM has reported that strict implementation of land release principles during clearance has improved operational efficiency of demining in Angola. Operational assets are being effectively used on clearance and TS with improved results. Effective implementation of NTS has ensured considerable cancellations, which has saved time and financial resources.<sup>145</sup> In 2022, APOPO cleared one area of 142,356m<sup>2</sup> with no mines found;<sup>146</sup> HALO worked on 10 areas, totalling 301,353m<sup>2</sup>, which proved to contain no mines;<sup>147</sup> MAG completed two clearance sites totalling 14,142m<sup>2</sup> without finding mines;<sup>148</sup> and NPA released two areas totalling 271,008m<sup>2</sup> which contained no AP mines, although these two areas were reduced through TS.<sup>149</sup>

## PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

In accordance with Strategic Objective 4 of the draft National Mine Action Strategy 2020–2025, CNIDAH and the CED, with the participation of all relevant actors, aimed to establish a national strategy on the management of residual contamination by the end of 2020. This was delayed due to movement restrictions imposed by COVID-19.<sup>150</sup> As at May 2023, Angola reported that a strategy for the management of residual contamination had not yet been finalised. The draft strategy identifies the CND, which is present in all 18 provinces with adequate human resources and technical capacity, as the appropriate entity to manage residual contamination in partnership with the defence and security forces, particularly the national police.<sup>151</sup>

A national standard on residual contamination management has also been developed by the GICHD for the transition phase. This includes process maps that outline the responsibilities of the currently involved stakeholders.<sup>152</sup> The finalisation of the residual contamination management standard depends on the finalisation of the residual contamination management strategy,<sup>153</sup> which is a work-in-progress.<sup>154</sup> Under its ongoing capacity development

project, NPA planned to train the Angolan military and police on management of residual contamination of explosive ordnance.<sup>155</sup>

ANAM recognises the importance of establishing a residual contamination strategy because Angola lacks procedures for the declaration of completion within provinces and there is no common understanding of residual risk. CNIDAH prioritised the provinces of Huambo, where clearance has been completed, Malange, and Namibe, which (or in the case of Malange, was thought to be) approaching completion, and in 2021, continued to hold sensitisation meetings with the provincial leadership in Cuanza Norte, Huambo, Malange, Namibe, and Uige provinces to prepare them for the potential declaration of their provinces clear of all known mined areas, and allay fears about job losses within the demining sector.<sup>156</sup> As at May 2023, however, none of these areas had been declared mine-free.<sup>157</sup> ANAM hoped that fulfilling Angola's Article 5 obligations is still possible following the planned deployment in 2023 of its newly created national operator, the CND, to mined areas registered in the IMSMA database, and expected this to significantly reinforce demining capacity.<sup>158</sup>

143 Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021.

144 "Angola Needs U.S.\$ 238.5 Million to Complete Clearing Landmines", All Africa, 2 February 2023.

145 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 6.

146 Email from Manuel João Agostinho, APOPO, 30 March 2023.

147 Email from Susanna Smale, HALO, 29 August 2023.

148 Email from Nelson Verissimo, MAG, 6 June 2023.

149 Email from Robert Iga Afedra, NPA, 30 March 2023.

150 Telephone interview with Robert Iga Afedra, NPA, 8 June 2021; and ANAM, Updated Article 5 Implementation Work Plan 2020–2025, p. 8.

151 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

152 Email from Christelle Mestre, GICHD, 4 May 2022.

153 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

154 Emails from Manuel João Agostinho, APOPO, 30 March 2023; Robert Iga Afedra, NPA, 30 March 2023; Nelson Verissimo, MAG, 6 June 2023; and Chris Pym, HALO, 14 June 2023.

155 Email from Miroslav Pisarević, NPA, 10 March 2022.

156 Article 7 Report (covering 2021), Form J.

157 Email from Mário Nunes (on behalf of ANAM), NPA, 10 May 2023.

158 Email from Mário Nunes (on behalf of ANAM), NPA, 14 September 2022.