YEMEN



KEY DATA

APMBC ARTICLE 5 DEADLINE: 1 MARCH 2028

Not on track to meet deadline

AP MINE CONTAMINATION:

Heavy (no credible estimate)

LAND RELEASE OUTPUTS

Release of AP mined area	Release in 2024* (km²)	Release in 2023*** (km²)
Clearance	1.44	0.18
Technical Survey	0.75	0.29
Non-Technical Survey	37.66	0
Destruction of AP mines during clearance, survey, and spot tasks	2024	2023
AP Mines destroyed	**545	561

^{*}Data from the internationally-recognised government (IRG / YEMAC South); and clearance and non-technical survey data from the De Facto Authorities (DFA / YEMAC North). **IRG data only. No YEMAC-DFA data was available on the number of AP mined destroyed in the 2024 calendar year. However, the DFA's Article 7 report for the year ending 31 March 2025 recorded the destruction of 143 AP mines and 158 IEDs (without specifying how many were victim-activated). ***Data from the IRG government only.

MAIN AP MINE SURVEY AND CLEARANCE OPERATORS IN 2024:

- Danish Refugee Council (DRC)
- Norwegian People's Aid (NPA)
- The HALO Trust (HALO)
- Project Masam
- Humanity & Inclusion (HI)

KEY DEVELOPMENTS

The Yemen Executive Mine Action Centre – Internationally Recognised Government, Aden (YEMAC-IRG, also known as YEMAC South) and the Yemen Mine Action Coordination Centre – IRG (YMACC-IRG, also known as YEMAC North) maintained essential coordination, planning, tasking and information management in the face of acute shortages of funding. The Yemen Executive Mine Action Centre – De Facto Authorities, Sana'a (YEMAC-DFA) signed memorandums of understanding with Humanity & Inclusion (HI) and Danish Refugee Council (DRC), providing for international NGO engagement in Houthi-controlled areas for the first time, although only HI was operational there at time of writing. Nearly two years after the emergency mine action programme managed by the United Nations Development Programme (UNDP) ended, the UN country team endorsed a roadmap for UN support to mine action in Yemen that foresees UNDP leading its support to the development of national mine action capacity.

RECOMMENDATIONS FOR ACTION

- All parties to the armed conflicts should halt use of mines and improvised explosive devices (IEDs).
- The United Nations, YEMAC-IRG, and YEMAC-DFA should engage constructively to develop a framework for mine action that can facilitate a resumption of international donor funding.
- YEMAC-DFA should separate its roles of regulator and operator.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2024)	Score (2023)	Performance Commentary
UNDERSTANDING OF AP MINE CONTAMINATION (20% of overall score)	4	4	Yemen is densely contaminated by explosive ordnance but remains without a credible estimate of AP mined contamination. YEMAC-IRG continued to implement a baseline survey but survey capacity is extremely limited and progress slow. YEMAC-DFA reports mined area covering nearly 1,200km² but the basis for this estimate is unclear.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	4	Mine action is split between the Aden-based IRG and the Sana'a-based DFA. Mine action is largely dependent on international donor funding. YEMAC-IRG and its coordination centre, YMACC, work closely with international demining organisations. The DFA has concluded Memorandums of Understanding with two international NGOs but only one of them, HI, was working in the north in 2024.
GENDER AND DIVERSITY (10% of overall score)	5	5	YEMAC-IRG supports inclusion of women as a priority and implementing partners employ some women, mainly for risk education, but lack of resources limits opportunities for female employment. YEMAC-DFA informed Mine Action Review that approximately 50% of its EORE personnel are women, and around 40% of administrative staff, but that there were no female deminers. It had plans to train more women in NTS in 2024, with support from HI, but no funding was available to implement them.
ENVIRONMENTAL POLICIES AND ACTION (10% of overall score)	4	4	Yemen has not brought into effect a national mine action standard (NMAS) for environmental management and protection in areas controlled by either the IRG or DFA. Operators face challenging environmental factors such as rising temperatures and flooding, but mostly operate according to their organisations' global standards.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	YEMAC-IRG and YMACC kept their Information Management System for Mine Action (IMSMA) database operating with support from the Geneva International Centre for Humanitarian Demining (GICHD). YEMAC-DFA works with a much older IMSMA New Generation database, and the quality of information it holds is unknown.
PLANNING AND TASKING (10% of overall score)	5	5	YEMAC-IRG's 2022 Article 5 deadline extension request identified priority areas of activity, but does not set out a detailed work plan. Tasking by YMACC continued but at a slower rate due to funding constraints.
LAND RELEASE SYSTEM (10% of overall score)	4	4	YEMAC-IRG is revising and updating NMAS and standard operating procedures. It has reported revising 31 chapters of the NMAS since 2021, including standards relating to land release, which it claimed were compliant with the International Mine Action Standards (IMAS). It was unclear whether the new standards had received government approval in 2024. YEMAC-DFA updated its standards in 2021 and they are aligned to standards applied in the south.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	4	YEMAC-IRG continued emergency response operations implemented mainly by the Saudi-backed Project Masam but land release through survey and clearance slumped after YEMAC-IRG lost donor funding at a point when international NGOs lacked capacity to scale up operations. YEMAC-DFA reported that it cleared 1.02km² across four governorates, but almost all of it in Hudaydah governorate.
Average Score	4.3	4.3	Overall Programme Performance: POOR

AP MINE SURVEY AND CLEARANCE CAPACITY

MANAGEMENT CAPACITY

- Yemen Executive Mine Action Centre Internationally Recognised Government, Aden (YEMAC-IRG, also known as YEMAC South)
- Yemen Mine Action Coordination Centre Internationally Recognised Government, Aden (YMACC-IRG)
- Yemen Executive Mine Action Centre De Facto Authorities, Sana'a (YEMAC-DFA, also known as YEMAC North)

NATIONAL OPERATORS

- YEMAC
- Yemen Army Engineers

INTERNATIONAL OPERATORS

- Danish Refugee Council (DRC)
- The HALO Trust (HALO)
- Humanity & Inclusion (HI)
- Norwegian People's Aid (NPA)
- Project Masam/SafeLane Global/Dynasafe

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

Yemen has heavy contamination by conventional and improvised anti-personnel (AP) mines and a wide array of other explosive ordnance. The extent of mine contamination is not known after a decade of civil war between the internationally recognised government in Aden (IRG) and Ansar Allah (Houthi) forces, the de facto authorities controlling the capital, Sana'a.

The governorates most affected by explosive ordnance resulting from the last decade of conflict are reported to include Al Bayda, Al Dhale, Hajjah, Hudaydah, Marib, Saada, Shabwa, and Taiz.¹ Contamination is especially high along Yemen's west coast, where mines were placed with the aim of stalling the advance of pro-government Yemeni and Saudi

coalition forces towards the strategic port of Hodeida, as well as around Marib, a focus of intense fighting in 2020 and 2021. In Hudaydah governorate alone, the UN Mission to Support the Hudaydah Agreement (UNMHA) recorded 61 mine and explosive ordnance incidents in 2024 that killed 42 civilians and injured 52 others.²

A Yemen-IRG "summary" of known contamination at the end of 2024 identified almost 8km² of confirmed and suspected hazardous areas in five governorates (see Table 1) but provided only a limited snapshot of the problem, reflecting lack of access due to insecurity to many mine-affected areas and the meagre survey capacity operational in 2024 due to lack of funding.³

Table 1: Contamination identified by the IRG Yemen Baseline Survey (at end 2024)4

Province/region	CHAs	Area (m²)	SHAs	Area (m²)	Total area(m²)
Abyan	21	3,761,426	10	1,785,122	5,546,548
Aden	1	114,084	10	30,740	144,824
Hudaydah	9	109,440	1	35,723	145,163
Lahj	1	34,796	1	84,421	119,217
Taiz	77	1,881,937	16	137,313	2,019,250
Totals	109	5,901,683	38	2,073,319	7,975,002

CHA = confirmed hazardous areas SHA = suspected hazardous areas

Table 2: Contaminated area in DFA-controlled governorates⁵

Governorate	No. of Districts	Area (km²)
Al Baida	8	211.36
Al Hudaydah	12	473.92
Al Jawf	3	211.81
Amran	1	10.26
Marib	2	3.00
Saada	7	83.56
Sana'a	2	205.63
Total	*35	1,199.54

*YEMAC-DFA's Article 7 report referred to 37 districts in the body of the text, but the number of districts listed in the contamination table totalled 35.

Before the 2015 outbreak of conflict, Yemen had AP mined area estimated to cover more than 200km². A Landmine Impact Survey in 2000 had recorded mines in 18 of Yemen's governorates, the result of conflicts in 1962–73 and 1970–83; the mining of the border between the North and South before they unified in 1990; a succession of conflicts after 1994; and mines laid by al-Qaeda in the Arabian Peninsula (AQAP). The last decade of conflict has massively increased the extent and complexity of explosive ordnance contamination but shifting lines of confrontation, recontamination of some cleared areas and movement restrictions facing operators have obstructed systematic survey.

YEMAC-DFA released a parallel Article 7 report to that of the IRG, which said it had identified 527 confirmed and suspected hazardous areas (CHAs/SHAs) affecting 1,199km² in 35 districts of seven governorates (see Table 2). It suggested this represented no more than 10% of total contamination,6 and the data looks to include all explosive ordnance (EO)

¹ See, e.g., UN Mine Action Service (UNMAS) website, at: http://bit.ly/3JN6JNm.

² UNMHA, Annual Mine Action Update 2024, 15 January 2025.

³ Yemen-IRG Article 7 Report (covering 2024), Form D.

⁴ Ibid., Form D.

⁵ Email from Ali Sofrah, YEMAC-DFA, 2 September 2025; and DFA Article 7 Report (covering year ended 31 March 2025), Form D.

⁶ Email from Ali Sofrah, Director, YEMAC-DFA, 2 September 2025; and DFA Article 7 Report (covering year ended 31 March 2025), Form D.

contamination and not solely mined area. The report has not been included on the UN-administered Anti-Personnel Mine Ban Convention (APMBC) Article 7 database. It said that non-technical survey (NTS) in the year to 31 March 2025 had identified 229km² across 159 SHAs/CHAs in 9 districts located in four governorates (Bayda, Hudaydah, Jawf, and Sana'a). Again, this likely includes all EO, and not only AP mined area. YEMAC-DFA was reported previously to have employed a landmine impact survey methodology³ that in other countries (and earlier in Yemen) has produced hugely inflated estimates of contamination.

A UN panel of experts reported in 2021 that the Houthis had made "widespread" use of mines in villages, schools, near water sources, on beaches, and on roads, posing a constant threat to civilians and provoking displacement.8 The UN has also reported that improvised sea mines pose a persistent threat to Red Sea shipping and coastal areas.9 Conflict Armament Research identified several types of conventional and improvised AP mine and sea mine.10 Project Masam has reported encountering an extensive range of IEDs, including devices activated by crush wires, passive infrared sensors, pressure plates, radio command (which means they are not mines), and tripwires, as well as an air-dropped IED with an impact fuze and vehicle-borne IEDs.11

OTHER EXPLOSIVE ORDNANCE CONTAMINATION

Many years of conflict have left Yemen massively contaminated by explosive remnants of war (ERW). This includes cluster munitions used by the Saudi-led coalition in strikes on the Houthi-controlled areas. The extent of contamination is also unknown but is concentrated in seven

northern governorates, particularly al-Jawf and Saada bordering Saudi Arabia. Contamination by other ERW is widespread. Yemen-IRG's 2024 Article 7 report records destruction of 7,276 anti-vehicle (AV) mines and 52,818 items of unexploded ordnance (UXO).¹²

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Management of mine action in Yemen is geographically divided along the lines of the conflict that erupted in March 2015 between the Houthi movement (the DFA) controlling the capital Sana'a as well as much of the north and west of the country, and the IRG, operationally based in Aden and the south. A Sana'a-based inter-ministerial National Mine Action Committee (NMAC), which was created to set national mine action policy, strategy, and priorities is no longer recognised by the IRG, which reported it had disbanded in 2019. The NMAC continues to be cited by the DFA as the institution leading mine action. It states it meets once or twice a year to discuss progress, challenges, and funding.¹³

YEMAC was established in Sana'a in January 1999 as a national mine action agency under the NMAC and functioning as both regulator and operator. It nominally maintained a national role, and in 2021, the United Nations Development Programme (UNDP) reported that, in total, YEMAC conducted clearance in 19 of Yemen's 21 governorates. If In practice, YEMAC had split into two operations, centred round Sana'a and Aden, respectively. YEMAC-IRG informed Mine Action Review there was no coordination between the two because YEMAC-North was under the control of Houthi militia. Is

YEMAC South (YEMAC-IRG), headquartered in Aden, operated through three branches serving Hadramaut, Marib, and Taiz. It identified Aden, Abyan, Dhale, Hudaydah, Lahj, and Taiz as high-priority districts for mine action interventions. ¹⁶ Yemen's Article 5 deadline extension request, submitted in March 2022, said that YEMAC was planning to open an office in Marib to support operations in Al-Bayda and Al-Jawf governorates, as well as the western Shabwah governorate. Operations included explosive ordnance disposal (EOD) spot tasks, NTS, and risk education. ¹⁷ Those plans are thought to have been halted by the cessation of donor funding at the end of June 2023. YEMAC reported that as a result it had been forced to suspend 66 demining teams and some departments. It said it continued discussions with the UN Resident Coordinator in 2024 but "no roadmap or solutions have been reached." ¹⁸

In April 2020, YEMAC South opened YMACC in Aden with a view to strengthening programme management in areas controlled by the IRG. The centre, which is intended to facilitate cooperation with international organisations, has responsibility for accrediting organisations and issuing task orders. It has departments for planning, information management, and quality assurance (QA)/quality control (QC)¹⁹ and had set up technical working groups focused on NTS and risk education.²⁰ Termination of the UNDP

- 7 Interview with Mukahhal Sulaiman, Information Management Adviser, GICHD, Geneva, 11 July 2023.
- 8 Letter from the Panel of Experts on Yemen to the President of the Security Council, UN doc. S/2021/79, 25 January 2021, pp. 3 and 44.
- 9 UNDP, Emergency Mine Action Project Phase II, Annual Report 2022, 15 February 2023, p. 6.
- 10 Conflict Armament Research, "Dispatch from the field: Mines and IEDs employed by Houthi forces on Yemen's West Coast", Report, September 2018.
- 11 Email from Retief Horn, Project/Deputy Programme Manager, Project MASAM, 19 July 2024.
- 12 Yemen-IRG Article 7 Report (covering 2024), Form D.
- 13 "Yemen National Mine Action Strategic Plan, 1 January 2025 to 31 December 2029", National Mine Action Committee (Sanaa), undated but 2025, p 12.
- 14 "UNDP Annual Report on Mine Action in Yemen 2020", February 2021, p. 9.
- 15 Email from Ameen Saleh Alaqili, Director, YEMAC, 26 December 2021.
- 16 Email from Ameen Saleh Alagili. YEMAC. 21 May 2023.
- 17 2022 Yemen Article 5 deadline Extension Request, pp. 26–27.
- 18 Statement by Yemen IRG to the APMBC 5th Review Conference, 24-29 November 2024 and to the APMBC Intersessional Meeting, Geneva, 18 June 2025.
- 19 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 12; and email from Ameen Saleh Alaqili, YEMAC, 26 December 2021.
- 20 UNDP Annual Report on Mine Action in Yemen 2020, p. 14.

emergency project in 2023 resulted in reduced staffing and left YMACC without funding for essential utilities, including electricity or fuel for vehicles, leading to delays in its activities. YEMAC and YMACC continued to function in 2024 with the help of technical support from implementing partners (IPs) and financial support, notably from Project Masam.²¹ Despite lack of funds, IPs said YMACC continued to convene regular meetings for project managers and supported operators on issues of accreditation, task orders, access, the import of equipment, and security.²²

YEMAC North (YEMAC-DFA) functions as both the coordinator of mine action in northern governorates controlled by Houthi forces and as operator involved in all aspects of mine action including survey and clearance, risk education, victim assistance, information management, and quality management (QM). This dual role is generally seen as creating a conflict of interest.²³ To address that issue, YEMAC North and the DFA's Supreme Council for the Management and Coordination of Humanitarian Affairs (SCMCHA) agreed in principle to set up a coordination centre similar to YMACC in the IRG-controlled areas, ²⁴ but as at June 2025 no further action had been taken to implement the proposal.

HI signed a Memorandum of Understanding (MoU) with YEMAC North in January 2024 for a range of activities, including NTS, EOD, and risk education while building YEMAC capacity building and providing support including transport, trauma kits, and personal protective equipment.²⁵ Danish Refugee Council (DRC) signed an MoU with the DFA in October 2024, but discussions on the activities it would be permitted to undertake were still ongoing at the time of writing, and thus, as at August 2025, it had yet to start operations. The HALO Trust, and Norwegian People's Aid (NPA) also visited Sana'a in February 2023 and negotiated an MoU with YEMAC North that would provide a basis for operating in DFA-controlled areas, but no agreements have yet been concluded.²⁶

The United Nations provided technical and administrative support to YEMAC through the Emergency Mine Action Project managed by UNDP from 2015 to 2023, channelling donor funding to YEMAC-IRG.²⁷ The programme ended in June

2023 after losing donor support and UN engagement with mine action came under the Resident Coordinator pending a review of mine action sector management structures and international support.²⁸ YEMAC has since received some technical and financial support to maintain essential functions from its main implementing partners.

Two UN staff deployed to Yemen in January 2024 under a six-month project funded by the European Civil Protection and Humanitarian Aid Operations (ECHO), "Strategic Coordination of Ways Forward for Humanitarian Mine Action interventions in Yemen", to make recommendations for the UN's future engagement with mine action in Yemen. Recommendations included strengthening national coordination structures, increasing international support for deployment of international NGOs in the North and the South of Yemen, and supporting reactivation of the National Mine Action Committee.

Under a roadmap endorsed by the UN country team in Yemen in May 2025, UNDP is to serve as the UN lead on mine action, acting as a strategic partner for national mine action authorities, including YMACC and both YEMAC IRG/DFA as well as co-chairing the Area of Responsibility. The roadmap states UNDP will not be involved in, or financially support, field operations but would seek to mainstream mine action into its broader national and sector development plans and programmes, such as agriculture, infrastructure, health, education, and water supply. UNICEF would lead victim assistance and risk education and the UN Office for Project Services (UNOPS) would be available to support mine action in the field by UN agencies, national and international NGOs, and national institutions. By September 2025, UNDP was in the process of recruiting a chief technical adviser.²⁹

UNMHA, which was created pursuant to UN Security Council Resolution 2452, opened a joint operations centre in Hodeida in October 2019 to oversee mine action in the governorate. Its mine action section includes a senior mine action adviser in Hodeida undertaking an advisory and advocacy role, supported by a mine action officer based in Aden and a staff member in Sana'a. The UN Security Council on 14 July 2025 renewed UNMHA's mandate until 28 January 2026.

FUNDING FOR AP MINE SURVEY AND CLEARANCE

From October 2024, UNOPS implemented a Netherlands-funded project, "Addressing Explosive Threats for the Protection of Civilians", providing for grants to international NGOs to support YMACC. This was expected to include funding of US\$160,000 over a period of eight months to support YMACC's coordination activities, including planning, tasking, monitoring/QA, completions and handovers, and information management.³² The UN reported that Yemen received funding in 2024 from the European Commission Humanitarian Office (ECHO), France, Germany, the Netherlands, Norway, Saudi Arabia, and Switzerland. The UN Humanitarian Needs & Response Plan for 2025 identified a requirement for US\$16.6 million for the Mine Action Area of Responsibility, but provided no details of donor commitments or how the funds would be used.³³

- 21 Interview with Ameen Saleh Alaqili, YEMAC, in Geneva, 20 June 2025.
- 22 Emails from Dua'a Almadi, Humanitarian Demining Programme Manager, DRC, 30 April 2025; Mara van der Kamp, Programme Manager, HALO, 6 May 2025; and Azza Sameer, Project Officer, NPA, 25 March 2025; interview with Ousama Algosaibi, Managing Director, Project Masam, in Geneva, 10 April 2025.
- 23 UNDP, "Emergency Mine Action Project Phase II, Annual Report for 2022", 15 February 2023, p. 21.
- 24 Ibid
- 25 Email from Reshma Azmi, Country Director, HI, 17 June 2025.
- 26 Emails from Dua'a Almadi, DRC, 30 April 2025; and Mara van der Kamp, HALO, 6 May 2025.
- 27 UNDP, "Emergency Mine Action Project Phase II, Annual Report for 2022", 15 February 2023, p. 24.
- 28 Interviews with Patrick Fruchet, UN Adviser, in Geneva, 21 June 2023; and Aleksandar Mihajlov, UNDP, in Geneva, 22 June 2023.
- 29 Emails from Steinar Essen, Global Mine Action and Development Adviser, UNDP, 25 June and 3 September 2025.
- 30 Email from Leon Louw, Mine Action Adviser, UNMHA, 25 June 2024.
- 31 UN Security Council Resolution 2786, adopted by unanimous vote in favour on 14 July 2025, operative para. 1.
- 32 Interview with Charles Frisby and Habibulhaq Javed, UNOPS, in Geneva, 10 April 2025; and email from Charles Frisby, 15 April 2025.
- 33 UNOCHA, Yemen Humanitarian Needs and Response Plan 2025, p. 64.

GENDER AND DIVERSITY

YEMAC-IRG (YEMAC South) has identified inclusion of women in mine action as a priority³⁴ and reaffirmed its commitment to advancing gender and diversity at the end of 2024.³⁵ Implementation remains challenging in the face of conservative cultural norms and restricted mobility for women, and at a time when donor funding cuts have severely curtailed mine action employment.

YEMAC South started training female staff for EOD, improvised explosive device disposal (IEDD), NTS, and risk education in 2020.³⁶ The 2022 Article 5 deadline extension request noted that YEMAC had employed women in NTS, risk education, information management and victim assistance. It stated that "there is no objection to including more women",³⁷ although YMACC was reportedly resistant to employing women in multitask teams.³⁸ Any plans for employing women were put on hold with the suspension of donor funding in 2023

YEMAC DFA (YEMAC North) affirmed that women made up half of their staff working on risk education, NTS and victim assistance, including female team leaders, and around 40% of their office administrators but no further details were available. YEMAC North said it had planned to train more

women to conduct NTS in 2024, with the support of HI, but the plan was suspended due to lack of funds. It added that no women conducted clearance or EOD.³⁹ Its strategic plan for 2025–29 omits any reference to gender.

Employment of women among international operators generally remained at a low level. DRC's NTS/risk education teams, however, are made up equally of men and women and in the last quarter of 2024 it started training a female technical field manager.⁴⁰ Of HALO's five international staff, three (60%) are women; among its 65 national staff, 12 (18%) are women, including four in field operations.⁴¹ Half of NPA's staff were women, whether in managerial or field positions, but 27 employees seconded from YEMAC South were all men.⁴² Project Masam, the biggest operator in Yemen, remains an almost entirely male organisation.⁴³

In the North, HI reported a balance of employment for women and people with disabilities in the risk education team enabling delivery of safety messages to all community groups, but not in the NTS and EOD teams due to policy and because it said there were no qualified females for these activities. HI said it planned with YEMAC to consider gender diversity in upcoming training of NTS and EOD staff.⁴⁴

Table 3: Gender composition of operators in 202445

rable of oction composition of operators in 2024						
Operator	Total staff	Women staff	Total managerial or supervisory staff	Women managerial or supervisory staff	Total operational staff	Women operational staff
DRC	52	10 (19%)	6	2 (33%)	34	6 (18%)
HALO	70	15 (21%)	11	3 (27%)	35	5 (14%)
HI South	33	11 (33%)	7	4 (57%)	20	7 (35%)
HI North	45	26 (58%)	19	4 (21%)	24	9 (38%)
NPA	49	10 (20%)	7	3 (43%)	4	2 (50%)
Project Masam	557	10 (2%)	32	0 (0%)	301	1 (<1%)
Totals	806	82 (10%)	82	16 (20%)	418	30 (7%)

ENVIRONMENTAL POLICIES AND ACTION

National mine action standards (NMAS) released by YMACC included a standard on environmental management, 46 but the emergency character of the response to mines and other explosive ordnance does not give prominence to

environmental issues in planning and tasking. International operators report complying with relevant international standards, but said no environmental issues were identified or discussed with YEMAC or YMACC in 2024.⁴⁷

- 34 Email from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021; and 2022 Article 5 deadline Extension Request, p. 21.
- 35 Statement of Yemen to the Fifth APMBC Review Conference, Siem Reap, 24-29 November 2024.
- 36 Email from Ameen Saleh Al-Aqili, YEMAC, 5 May 2021; and "UNDP Annual Report 2020", p. 15.
- 37 Article 5 deadline Extension Request, March 2022, p. 21.
- 38 Email from Marie-Josée Hamel, DRC, 30 March 2022.
- 39 Online interview with Ali Sofrah and Ahmed Yahya Alawi, Executive Officer, YEMAC-DFA, 13 October 2025.
- 40 Email from Dua'a Almadi, DRC, 30 April 2025.
- 41 Email from Mara van der Kamp, HALO, 6 May 2025.
- 42 Email from Azza Sameer, NPA, 5 May 2025.
- 43 Email from Retief Horn, Project Masam, 16 April 2025.
- 44 Email from Reshma Azmi, HI, 17 June 2025.
- 45 Emails from Dua'a Almadi, DRC, 30 April 2025; Mara van der Kamp, HALO, 6 May 2025; Reshma Azmi, HI, 17 June 2025; Azza Sameer, NPA, 5 May 2025; and Retief Horn, Project Masam, 16 April 2025.
- 46 Email from Mara van der Kamp, HALO, 6 May 2025.
- 47 Emails from Dua'a Almadi, DRC, 30 April 2025; and Retief Horn, Project Masam, 16 April 2025.

INFORMATION MANAGEMENT AND REPORTING

Information management in the YEMAC IRG (YEMAC South) area of operations is supported by an Information Management System for Mine Action (IMSMA) Core database installed in YMACC at the end of 2021 with support from UNDP and the Geneva International Centre for Humanitarian Demining (GICHD).⁴⁸ Since 2022 it has been populated with data on clearance, victims, and accidents as well as receiving results of the baseline survey. 49 Operator access is restricted to data relating to their own operations. They are able to request maps and other data to support operations and report that data received on tasks have proved reliable.50 Project Masam reported its operating results to YMACC, but the data were held separately from other operators' results.51 After closure of UNDP's programme, the GICHD continued to deploy an information management officer contracted bv DRC.52

In 2024, YMACC upgraded IMSMA reporting forms to Version 2 with support from the GICHD, and held meetings with implementing partners to update them on the reporting requirements of the new version.⁵³ NPA also facilitated IMSMA workshops for YEMAC and YMACC at its offices.⁵⁴

YEMAC DFA (YEMAC North)'s information management department has six staff working with an older IMSMA New Generation (Version 5.8) system. It said it had asked the GICHD for capacity building support and assistance in upgrading the system to IMSMA Core.⁵⁵ HI is coordinating with YEMAC North to support a system upgrade.⁵⁶ The DFA mine action strategy for 2025–29 makes no reference to information management.

PLANNING AND TASKING

Mine action in Yemen is conducted on an emergency basis in a context of continuing armed conflict, responding to immediate threats from all forms of explosive ordnance.⁵⁷ UNDP has previously observed that YEMAC needed to organise field operations to also address longer term impacts of contamination from ERW.⁵⁸ Yemen's CMR challenge, however, appears to be concentrated almost exclusively in northern governorates controlled by the DFA. In its Article 7 report, YEMAC DFA also asserted that 70-80% of contaminated areas and victims are located in the northern regions, according to the response plans and the needs of the UN and OCHA.⁵⁹

A work plan in Yemen IRG's 2022 APMBC Article 5 deadline extension request, submitted in March 2022, identified general areas of activity such as emergency response, survey, and risk education, but said it would be unrealistic to set out milestones for clearance. It said it would update its plans every year or two. 60

The DFA mine action strategic plan for 2025–29 sets out general plans for marking, survey, and clearance of explosive ordnance, including unexploded submunitions, expanding mine action teams, building capacity, and employing mine detection dogs (MDDs) and drones. The targets include marking 11.7km² and clearing 11km² of hazardous areas and "releasing a total of 1,456,941,500 square meters of SHA", but it does not set targets disaggregated by type of contamination. YEMAC-DFA put the cost of implementing the strategy at US\$152.7 million.

YEMAC DFA (YEMAC North) prioritised tasks on the basis of needs and demands for rapid interventions identified by YEMAC, local authorities, community committees, and community focal points. HI worked closely with YEMAC, meeting three times a week to plan field operations, workshops, and other activities. HI reported regular field visits by its Field Technical Manager and EOD Supervisor as well as by a YEMAC North QM unit.⁶²

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

YEMAC-IRG has been revising and updating National Mine Action Standards which were based on the International Mine Action Standards (IMAS) when they were drawn up in 2007 but which it had acknowledged as obsolete. ⁶³ By 2023, YEMAC-IRG

- 48 UNDP, "Emergency Mine Action Project Phase II, Annual Report for 2022", 15 February 2023, p. 9.
- 49 Interview with Mukahhal Sulaiman, GICHD, Geneva, 11 July 2023.
- 50 Emails from Christina Hendryx, DRC, 15 May 2023; and Matthew Smith, HALO, 11 July 2023.
- 51 Interview with Mukahhal Sulaiman, GICHD, Geneva, 11 July 2023.
- 52 Interview with Mukahhal Sulaiman, GICHD, Geneva, 27 June 2024; and email from Christina Hendryx, DRC, 17 July 2024.
- 53 Emails from Azza Sameer, NPA, 5 May 2025; and Mara van der Kamp, HALO, 6 May 2025.
- 54 Email from Azza Sameer, NPA, 5 May 2025.
- 55 Online interview with Ali Sofrah and Ahmed Yahya Alawi, YEMAC-DFA, 13 October 2025; and interview with Mukahhal Sulaiman, GICHD, Geneva, 27 June 2024.
- 56 Email from Reshma Azmi, HI, 17 June 2025.
- 57 Article 5 deadline Extension Request, March 2022, p. 26.
- 58 UNDP, "Emergency Mine Action Project Phase II, Annual Report for 2022", 15 February 2023, p. 23.
- 59 DFA Article 7 Report (covering year ended 31 March 2025), Form M.
- 60 Article 5 deadline Extension Request, March 2022, p. 27.
- 61 "Yemen National Mine Action Strategic Plan, 1 January 2025 to 31 December 2029", National Mine Action Committee (Sanaa), undated but 2025, pp. 5, 10, and 23–24.
- 62 Email from Reshma Azmi, HI, 17 June 2025.

reported it had revised 31 chapters of NMAS, which were undergoing a final review and were expected to be approved and adopted before the end of 2023.64 YEMAC-IRG reported it had finalised standards and SOPs for survey and clearance but did not clarify if they had been officially released or translated.65

YEMAC-DFA briefly mentions in its strategic plan for 2025–29 that it is responsible for maintaining the NMAS and implementing plans in accordance with them. ⁶⁶ It said it had updated its version of national standards in 2021, ensuring they were IMAS-compliant and aligned with the national standards applied in the south by YEMAC-IRG. ⁶⁷

YMACC held regular meetings with implementing partners for planning and tasking but funding cuts severely limited YEMAC-IRG operational QM capacity. International operators reported QM took place when implementing partners funded the costs. 68 HI said YEMAC-DFA had a technical unit that conducted regular field visits to monitor its NTS and EOD operations. 69

OPERATORS AND OPERATIONAL TOOLS

Until 2023, YEMAC was nominally the biggest operator, employing some 400 personnel under YEMAC-DFA in the north and 550 personnel under YEMAC-IRG in the south, but estimates of operational capacity in both areas were complicated by the reported presence of ghost deminers and by patchy reporting on the part of YEMAC team leaders. YEMAC-IRG has stated that the cut in donor funding since 2023 resulted in it standing down 66 demining teams and it has only deployed teams for emergency call-outs.

YEMAC-DFA reported that its total staff of 350 included 12 manual clearance teams with 234 personnel, three NTS teams/6 personnel, five TS teams/39 personnel, one mechanical team, and three MDD teams with 20 handlers and 19 dogs. In June 2024, it set up two emergency teams to respond to calls from local authorities and communities to deal with the movement of mines as a result of severe flooding in Hudaydah governorate and UXO left by air strikes conducted by international forces in the context of regional conflicts. YEMAC-DFA informed Mine Action Review that it conducts its operations with the support of HI and ICRC, which work in partnership with YEMAC-DFA, providing technical support and supervision to YEMAC-DFA EOD operations. 4

In 2024, Saudi-funded Project Masam provided the most operational capacity (see Table 3) conducting emergency clearance in nine governorates. In July 2025, Project Masam began training and deploying 10 more teams with a total of 95 personnel, including 60 deminers, supported by a four-man team doing follow-up clearance and verification and a PT-300 tracked demining machine, the programme's first mechanical asset. These are to work in IRG-controlled Midi district in the north western corner of Hajjah governorate bordering Saudi Arabia, a fiercely contested area occupied by Houthi forces for two years. Project Masam said it conducted NTS

and technical survey (TS) and submitted general threat assessments on all assigned tasks. It does not operate any mechanical assets and works mainly MinMod water disruptors for clearance of IEDs.⁷⁵

Among international demining NGOs, DRC worked in the west coast governorates of Taiz and Hodeida delivering EOD support, NTS (with nine personnel), and risk education, and undertaking clearance. It completed its first clearance task through its manual team of seven deminers and also fielded a 13-strong EOD team in 2024. DRC also hosted a GICHD information management staffer to support the YEMAC IMSMA database. In October 2024, DRC signed an MoU with the DFA, but as at June 2025 discussions were continuing with authorities on what would be its operating scope and priorities.⁷⁶

HALO's total staff of 70 included 26 clearance who conducted NTS, and EOD in Aden, Lahj and Taiz and also had mechanical assets conducting clearance in Aden and Taiz but faced significant downsizing in 2025 due to loss of funding from the but loss of funding from the US Office of Weapons Removal and Abatement (PM/WRA). NPA operated mainly in Aden (NTS and TS) and Abyan (NTS, TS, and clearance) and had a presence in Taiz delivering explosive ordnance risk education (EORE) but in 2025 had to cut back staffing and the number of rented vehicles after loss of PM/WRA funding.⁷⁷

HI had offices in Aden and Taiz governorates with a total staff of 33 in the south including two battle area clearance (BAC) teams but also worked in three DFA-controlled governorates, Sanaa, Hodeida, and Hajjah with three NTS teams and five EOD teams as well as nine teams delivering EORE. The DFA's mine action authorities had identified Al Jawf, Al Bayda, and Al Dhalee as priorities but HI reported Yemen's severe funding constraints limited prospects for responding to those needs.⁷⁸

- 63 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 17; and 2019 Article 5 deadline Extension Request, p. 16.
- 64 Email from Ameen Saleh Alaqili, YEMAC, 21 May 2023.
- 65 Yemen IRG Article 7 Report (covering 2024), Form D.
- 66 "Yemen National Mine Action Strategic Plan, 1 January 2025 to 31 December 2029", National Mine Action Committee (Sanaa), undated, p. 12.
- 67 Online interview with Ali Sofrah and Ahmed Yahya Alawi, YEMAC-DFA, 13 October 2025.
- 68 Emails from Mara van der Kamp, HALO, 6 May 2025; and Azza Sameer, NPA, 5 May 2025.
- 69 Email from Reshma Azmi, HI, 17 June 2025.
- 70 Interview with mine action stakeholders in Geneva, 23 June 2022.
- 71 Interview with Ameen Saleh Alaqili, YEMAC-IRG, in Geneva, 1 May 2024; and Yemen statement to the APMBC Intersessional Meeting, Geneva, 18 June 2025.
- 72 Email from Ali Sofrah, YEMAC-DFA, 2 September 2025.
- 73 Online interview with Ali Sofrah and Ahmed Yahya Alawi, YEMAC-DFA, 13 October 2025.
- Online interview with Ali Sofrah and Ahmed Yahya Alawi, Executive Officer, YEMAC-DFA, 13 October 2025.
- 75 Emails from Retief Horn, Project Masam, 16 April, 29 June, and 10 and 11 September 2025.
- 76 Emails from Dua'a Almadi, DRC, 30 April, 10 July, and 12 September 2025.
- 77 Emails from Mara van der Kamp, HALO, 6 May 2025; and Azza Sameer, NPA, 5 and 7 May 2025.
- 78 Email from Reshma Azmi, HI, 17 June 2025.

Table 4: International operator capacity 2024

Operator	Manual teams	Deminers	EOD/BAC	NTS/TS	Comments
DRC	1	7	13	9	
HALO	N/R	26	0	8	Also trained for NTS and EORE
HI-North	5	0	25	12	9 EORE teams with 45 personnel
HI-South	2	0	12	10	4 EORE teams with 16 personnel
NPA	2	8	0	8	Also four two-person MDD teams
Project Masam	32	264	0	0	Multi-task, also trained for NTS, TS
Totals	42	305	50	47	

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2024

Table 5: Summary of land release outputs in 202479

Release of AP mined area	Release in 2024 (km²)	Comments
Clearance	1.44	Includes 1.02km $^{\!2}$ in the DFA-controlled North and 0.43km $^{\!2}$ in the IRG-controlled South.
Technical Survey	0.75	Recorded by the IRG only.
Non-Technical Survey	37.66	Recorded by the DFA only.
Destruction of AP mines during clearance, survey, and spot tasks	2024	
AP mines destroyed	545	Mines destroyed in IRG-controlled areas only. Project Masam reported destroying 369 AP mines in clearance and spot tasks. It also reported destroying two pressure-plate IEDs. No YEMAC-DFA data was available on the number of AP mined destroyed in the 2024 calendar year. However, the DFA's Article 7 report for the year ending 31 March 2025 recorded the destruction of 143 AP mines and 158 IEDs (without specifying how many were victim-activated).

Yemen's official land release data are inconsistent with operator results and provide an incomplete view of mine action operations, preventing a clear determination of mine action outputs. The IRG Article 7 report distinguishes between results of international demining organisations recorded as land release in YEMAC's IMSMA database and Project Masam's emergency clearance results, which are held separately.

IRG official results show a total of 1.2km² released through survey and clearance in 2024 (see Table 4). This is triple the area released in 2023 when the IRG recorded reduction of 0.3km and clearance of 0.2km2 with destruction of 40 AP

mines.80 The IRG also reported destruction of 545 AP mines. It noted that Project Masam cleared 10.5km² and destroyed 246 AP mines and 3,257 AV mines but did not disaggregate the data by operator to show who destroyed the other AP mines.81

In the North, YEMAC-DFA reported to Mine Action Review clearing 1,018,853 m^2 in 2024 but it did not provide details of mines destroyed.82 In the year ending 31 March 2025, it reported clearing 1,343,052m2 in Hudaydah, Al Jawf, and Sana'a governorates and destroying 143 AP mines and 158 improvised devices, without specifying if the IEDs were victim-activated devices that qualified as AP mines.83

Yemen IRG Article 7 Report (covering 2024), Form D; email from Ahmed Yahya Alawi, YEMAC-DFA, 21 October 2025.

Yemen IRG Article 7 Reports (covering 2023 and 2024), Form D.

Yemen IRG Article 7 Report (covering 2024), Form D; email from Retief Horn, Project Masam, 16 April 2025.

⁸² Email from Ahmed Yahva Alawi, YEMAC-DFA, 21 October 2025.

⁸³ DFA Article 7 Report (covering year ended 31 March 2025), Forms J and K; and email from Ahmed Yahya Alawi, Executive Officer, YEMAC-DFA, 8 October 2026.

SURVEY IN 2024

YEMAC South has identified the Yemen Baseline Survey (YBLS) as a priority but in 2025 expressed concern at its weak performance as a result of the acute financial constraints on mine action in Yemen and obstacles to accessing affected areas due to insecurity.⁸⁴ YEMAC reported that the YBLS recorded nearly 8km² of confirmed and suspected hazardous areas in 2024 (see Table 1) but the cumulative total recorded by the YBLS since it started is unclear.

The IRG Article 7 report for 2024 does not show any area cancelled although operators reported 13.3km² cancelled through NTS, mostly by NPA in Abyan (9.2km²) and Aden (2.6km²). Operators also recorded a smaller area of 0.7km² reduced through technical survey (see Table 5).85

Table 6: Survey in Yemen-IRG by international operators 202486

Operator	Area confirmed (m²)	Area cancelled (m²)	Area reduced (m²)	NTS/TS
DRC	424,519	0	0	9
HALO	82,975	1,518,257	387,785	8
NPA	3,805,002	11,796,282	307,184	12
НІ	367,749	0	0	10
Totals	4,680,245	13,314,539	694,969	47

YEMAC-DFA reported that NTS with technical support from the International Committee of the Red Cross (ICRC) identified 24 SHAs in Al Bayda governorate covering 9.27km². It also reported cancelling 37.66km² in four governorates, 96% of it in Hudaydah (see Table 7).87 HI also reported undertaking NTS in DFA-controlled areas in 2024 and confirmed a total of $0.6 \text{km}^2 - 0.5 \text{km}^2$ in Hudaydah and 0.1km^2 in Sana'a governorate.88

Table 7: Yemen-DFA Cancellation through NTS in 202489

Governorate	Area cancelled (m²)
Hudaydah	36,008,426
Al Jawf	1,562,821
Amran	23,000
Sana'a	67,900
Total	37,662,147

CLEARANCE IN 2024

Land released through clearance in 2024 amounted to 425,315m² according to IRG official data, which showed that almost all (96%) was in Abyan governorate with the rest in Taiz, but it did not identify who conducted it. 90 International NGOs recorded clearance of 261,907m² – 135,286m² by HALO, 114,947m² by NPA, and 11,674m² by DRC but did not report destroying any AP mines in IRG-controlled areas of Yemen either through clearance or spot EOD operations. 91

HI did not conduct area clearance in 2024 but said its EOD operations in IRG-controlled Mokha governorate destroyed 58 improvised mines and 64 AV mines. In DFA-controlled Hudaydah, HI said its EOD operations destroyed 5 AP mines, 72 improvised mines, and 104 AV mines. 92

Project Masam reported clearance of 10.5 km² in 2024 but as operations conducted on an emergency basis the area cleared was not recorded as land released. Clearance in Shabwah governorate accounted for more than half the total area cleared (see Table 6) and led the number of AP mines destroyed but the project also reported encountering dense AV mines in Marib. The operation cleared slightly more area in 2024 than the previous year but said results were down because conflict prevented access to some densely mined areas. Project Masam destroyed 246 AP mines in clearance in 2024, down from 521 the previous year, but it also reported destroying 123 AP mines in spot tasks, including 113 in Taiz governorate. Project Masam also reported destroying 237 IEDs in 2024. It identified that two improvised devices were victim-activated by pressure plates and three by tripwires. Other devices included 13 activated by radio commands and a boat-borne device also remotely activated.93

⁸⁴ Statement of Ameen Saleh Alagili, YEMAC, at Yemen side-event, UN National Directors' Meeting, Geneva, 11 April 2025.

⁸⁵ Emails from Dua'a Almadi, DRC, 30 April 2025; Mara van der Kamp, HALO, 6 May 2025; Reshma Azmi, HI, 17 June 2025; and Azza Sameer, NPA, 5 May 2025.

⁸⁶ Ibid.

⁸⁷ Email from Ahmed Yahya Alawi, YEMAC-DFA, 8 October 2026.

⁸⁸ Email from Reshma Azmi, Country Director, HI, 17 June 2025.

⁸⁹ Email from Ahmed Yahya Alawi, YEMAC-DFA, 8 October 2026.

⁹⁰ IRG Article 7 Report (covering 2024), Form D.

⁹¹ Emails from Dua'a Almadi, DRC, 30 April 2025; Mara van der Kamp, HALO, 6 May 2025; Reshma Azmi, HI, 17 June 2025; and Azza Sameer, NPA, 5 May 2025.

⁹² Email from Reshma Azmi, Country Director, HI, 17 June 2025.

⁹³ Email from Retief Horn, Project Masam, 16 April 2025.

Table 8: Project Masam clearance in 202494

	Area cleared (m²)	AP mines destroyed	AV mines destroyed	Other IEDs destroyed
Aden	144,769	21	361	44
Al-Dhale	86,426	19	1	7
Hudaydah	617,977	11	102	46
Jawf	299,826	1	82	3
Lahj	203,347	0	35	0
Marib	2,107,919	29	2,253	45
Shabwah	5,858,618	87	152	15
Abyan	13,100	0	0	0
Taiz	1,179,945	78	272	77
Spot tasks		123	0	0
Totals	10,511,927	369	3,258	237

YEMAC-DFA said it conducted clearance in four governorates in 2024, releasing 1,018,853m², almost all of it (97%) in Hudaydah governorate (see Table 9) but it did not provide details of mines destroyed during clearance.95 The DFA's Article 7 report, however, reported that in the year ending 31 March 2025, a total of 143 AP mines, 1,409 AV mines, 2 cluster bombs, 1 rocket, 7 missiles, 2,501 mixed UXO, and 158 IEDs were destroyed.96 It did not specify how many of the IEDs were victim-activated.

Table 9: Yemen-DFA clearance in 202497

Governorate	Area cleared (m²)
Hudaydah	991,574
Al Jawf	21,179
Amran	2,000
Sana'a	4,100
Total	1,018,853

ARTICLE 5 DEADLINE AND COMPLIANCE



⁹⁴ Ibid.

⁹⁵ Email from Ahmed Yahya Alawi, YEMAC-DFA, 8 October 2026.

DFA Article 7 Report (covering year ended 31 March 2025), Form K.

⁹⁷ Email from Ahmed Yahya Alawi, YEMAC-DFA, 8 October 2026.

Under Article 5 of the APMBC (and in accordance with the fourth extension, for five years, granted by States Parties in 2022), Yemen is required to destroy all AP mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2028. Regional conflicts, local insecurity and acute lack of funding mean that it will need at least one further extension.

The third extension request submitted by the IRG in 2020 asked for three years as an interim measure designed to buy time for a baseline survey which would provide the basis for a follow-up request informed by up-to-date evidence of contamination. By 2022, the YBLS had barely started so Yemen requested a fourth five-year extension starting in March 2023 to achieve the same objective of establishing a baseline estimate of contamination and to develop capacity to address the more complex environment resulting from extensive use of a wide range of explosive ordnance.⁹⁸

Two years on, Yemen has barely advanced. Mine action in the IRG-controlled south continues to consist largely of emergency clearance while the scope and effectiveness of mine action in DFA-controlled areas is unknown. Yemen in particular awaits clarity on the support it will receive from donors as the UN completes its transition from the previous UNDP-managed Emergency Mine Action Programme that ended in 2023 to new arrangements outlined in the roadmap endorsed by the UN country teams in May 2025.

Table 10: Five-year summary of AP mine clearance 99

Year	Area cleared (km²)
2024	**0.4
2023	0.2
2022	*2.0
2021	*1.5
2020	*1.0
Total	5.1

*Mine Action Review estimates. **Includes 1.02km² in the DFA-controlled North.

^{98 2022} Article 5 deadline Extension Request, pp. 3-4.

⁹⁹ Data include only clearance uploaded to the YEMAC-IRG IMSMA database and not emergency clearance, with the exception of 2024 data, which also includes clearance data in DFA-controlled North.