

RECOMMENDATIONS FOR ACTION

- Israel should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Israel should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Israel should report transparently on its anti-personnel mined areas, including those considered essential to its security.

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of mine contamination in Israel is not known. Israel reported 41.58km² of confirmed mined area and a further 48.51km² of suspected mined area, as at the end of 2017,¹ but has not provided updated contamination data since. The combined 90km² as at end 2017, represents only the area affected by mines that are not deemed essential to Israel's security. The size of other mined areas is not made public.

The total figure includes 18.38km² of mined area in the Jordan Valley (11.84km² of anti-personnel mined area, 6.19km² of anti-vehicle mined area, and 0.35km² of mixed mined area) and in the West Bank.² Since the last updated contamination data (end of 2017) and through to the end of 2020, The HALO Trust cleared a total of 37,466m² of anti-personnel mined area in the Jordan Valley and the West Bank, according to data reported to Mine Action Review. (See the *Clearing the Mines* report on Palestine in this work for further information).

The head of the Israeli Mine Action Authorities (INMAA) told media in 2020 that INMAA estimates a total of 200km² of mined areas in Israel. Of this, some 100km² are deemed essential to Israel's national security while the remaining 100km² will be cleared in order of priority. The online media source had obtained a map from the Israeli Ministry

of Defence (MoD) that shows mines planted in a series of hotspots along Israel's eastern border. The minefields start from the north-eastern Israeli borders with Syria in the Golan Heights, with high concentration around the sea of Galilee (also known as the Tiberias lake). Mined areas stretch southwards along the Jordan valley (east) all the way to the southern region of Eliat bordering Egypt.³ It is not clear whether the map includes the minefields considered essential to Israel's security or only the ones that can be cleared.

Israel's mine problem dates back to the Second World War. Subsequently, Israel laid significant numbers of mines along its borders, near military camps and training areas, and near civilian infrastructure. In August 2011, Israel's military reported planting new mines to reinforce minefields and other defences along its de facto border with Syria in the Golan Heights.⁴

In the Golan Heights, the extent of mines laid by Syrian forces remains largely unknown although certain areas have been fenced off by the Israel Defense Forces (IDF). However, according to an online media report, fencing is not always properly maintained with warning signs, and civilians occasionally cross into minefields looking for edible plants.⁵

Table 1: Mined area (at end 2017)⁶

Type of contamination	CHAs	Area (km ²)	SHAs	Area (km ²)
AP mines only	201	19.93	5	39.54
AV mines only	29	17.00	8	1.17
AP and AV mines	2	4.65	9	7.80
Totals	232	41.58	22	48.51

AP = Anti-personnel AV = Anti-vehicle CHA = Confirmed hazardous area SHA = Suspected hazardous area

PROGRAMME MANAGEMENT

A March 2011 law on minefield clearance established the INMAA to undertake a “comprehensive programme of mine clearing projects inside Israel”.⁷ The law’s aim was “to create a normative infrastructure for the clearance of minefields that are not essential to national security, and to declare them as free from landmines with the highest degree of safety to civilians, in accordance with the international obligations of the State of Israel, and within the shortest period of time possible.”⁸

The law provides for the establishment of a professional Advisory Board, to be composed of representatives of relevant ministries and governmental and municipal authorities, as well as a representative for mine victims. It calls for the formulation of annual and multi-year plans; coordination and cooperation between INMAA and the IDF; employment of private contractors in mine clearance operations; earmarking of specific government budget for such activities; and the creation of a National Minefield Clearance Fund which will receive, manage, and allocate donations.⁹

In February 2019, the Director of INMAA reported that new legislation had been passed, in the form of a regional law, giving INMAA responsibility for clearing former military bases and for addressing abandoned explosive ordnance (AXO), unexploded ordnance (UXO), and anti-vehicle mines. Prior to this, the INMAA had only had responsibility for addressing anti-personnel mines, and mixed mined areas.¹⁰

INMAA was established within the MoD with ministry staff responsible for planning mine action.¹¹ INMAA is in charge of clearance operations and land release intended for civilian use.¹² It assumes responsibility to: establish a national policy for mine clearance, taking into consideration military procedures and international demining standards; liaise with operators to carry out demining activities; oversee mine clearance activities and contact relevant military commanders for the opening of closed military zones; coordinate activities with the IDF and other government authorities; execute public relations activities to increase awareness of existing minefields; and prepare annual and long-term demining plans.¹³

In 2017, the annual mine action budget for Israel was NIS41.7 million (approx. US\$11.5 million), of which NIS27 million was from the INMAA’s budget and the remaining NIS14.7 million from additional external funding by various infrastructure development companies and state authorities.¹⁴ The size of INMAA’s budget has not been made public since. The Geneva International Centre of Humanitarian Demining (GICHD) supported INMAA’s technical activities in 2020.¹⁵

INMAA provided funding to support mandatory quality assurance (QA) covering the last two months of HALO Trust clearance operations at the Arraba minefield in the West Bank. The clearance operation at the Baptism Site that started in March 2018 was funded by the Israeli MoD from July 2019 until its completion in April 2020.¹⁶ (See the *Clearing the Mines* report on Palestine for further information).

GENDER AND DIVERSITY

It is not clear whether or to what extent gender and diversity are mainstreamed in Israel’s mine action programme. Israel stated that its mine risk education (MRE) material are all produced in both Hebrew and Arabic.¹⁷

INFORMATION MANAGEMENT

According to Israel, in 2020, the IDF’s Engineering Corps continued its activities to promote an improved minefield GPS recording and GIS capacity “building an accurate archive of manually-emplaced minefields”.¹⁸ In addition, INMAA manages a “minefield information bank” that is open for public queries concerning demining plans and programmes.¹⁹ Israel reported in 2020 that the IDF continued its programme to preserve the minefields history, including in digital records, and that the Israeli Mapping Centre (IMC) produces “commercially available” land maps that contain clear markings of minefields.²⁰

PLANNING AND TASKING

INMAA is “tasked with forming a national demining plan, which will be consistent with Israel’s international obligations and based on IDF’s demining procedures and instructions, as compatible as possible with International Mine Action Standards”.²¹ According to Israel, INMAA defines clearance policies, sets the national priorities and implements them in coordination with the relevant governmental ministries, the IDF, and local authorities.²²

In 2020, INMAA approved annual and perennial mine clearance plans which are executed by “civilian local operators”.²³ INMAA’s multi-year clearance plan for 2017–20 focused on technical survey and clearance in the Golan Heights in the spring/summer/autumn, and in the Jordan Valley and Arava Plain in the winter.²⁴ Information on the priorities of the updated mine clearance plan were not made available but INMAA’s website contains tenders for mechanical and manual clearance in 2020 of nearly 0.17km² across three minefields in Ramat Gan (west) in addition to 0.19km² in Naama Bell in the Jordan valley.²⁵

Clearance tasks are assigned according to a classification formula laid down by INMAA. The criteria used for the formula are largely based on the risk level and development potential of the affected areas.²⁶ INMAA has been studying the social and economic impacts of land released over the last four years, as well as on the potential impact for future clearance sites.²⁷

LAND RELEASE SYSTEM

National mine action standards, which concern rules and regulations covering clearance methods, quality management, legislation, and insurance, are available on the INMAA website and updated "on occasion".²⁸ There are also IDF regulations and orders concerning marking, fencing, and monitoring, as well as demining and disposing of mines, booby-traps, and other devices.²⁹

OPERATORS AND OPERATIONAL TOOLS

Commercial companies are contracted to conduct clearance as well as QA and quality control (QC).

In 2017, 106 demining personnel and 36 machines were deployed for clearance operations.³⁰ In 2020, INMAA had seven approved mine clearance companies.³¹

The IDF also conduct mine clearance according to their own mine action plans "that are executed by their military methods and techniques". They have an annual programme that includes demining, monitoring, and maintenance of mined area protection.³² During the winter, the IDF give special attention to minefields that are close to farms, residential areas, or hiker routes, as mines may be carried into these areas by floods.³³ In 2020, Israel reported that the IDF conducted hundreds of inspections of the fencing and marking of minefields, made significant progress in re-surveying mine affected areas, and in examining the possibility of area cancellation following non-technical survey.³⁴

The HALO Trust works under the auspices of both INMAA and the Palestine Mine Action Centre (PMAC) in the West Bank (see the *Clearing the Mines* report on Palestine for further information). Every mine clearance project in

Israel has an INMAA supervisor, a QA/QC contractor, and a clearance operator.

Israel uses several types of machines in its mine clearance operations for ground preparation, survey, and clearance. They are said to include, as and where appropriate, screening and crushing systems, bucket loaders, excavators, sifters, and flails/tillers. All mine clearance machines are tested and approved by INMAA during the initial preparation period of an operation.³⁵ Some of these operations are conducted by Israel directly, while others are performed by contractors.³⁶

Throughout 2019, INMAA continued to be supported by GICHD in developing its animal detection system capacity.³⁷ A pilot project using mine detection dogs (MDDs) conducted in 2017³⁸ had concluded that dogs would not be a valuable tool.³⁹ However, after investigating and conducting further research into animal detection and behaviour, INMAA planned to conduct further trials.⁴⁰

According to its website, part of INMAA's plan for 2020 was to conduct mechanical and manual clearance of nearly 0.17km² across three minefields in Ramat Gan (west), and to 0.19km² in Naama Bell in the Jordan valley.⁴¹ As at March 2021, clearance in Naama Bell area was underway.⁴²

LAND RELEASE

LAND RELEASE OUTPUTS IN 2020

In reporting under Convention on Certain Conventional Weapons (CCW) Amended Protocol II, Israel stated that, in 2020, INMAA completed clearance of approximately 1.28km², destroying 1,200 mines and explosive remnants of war (ERW). In addition, funded by donor countries and carried out by The HALO Trust, INMAA cleared 216,930m² in the West Bank, destroying in the process 1,200 mines and ERW.⁴³ INMAA reported precisely the same number of anti-personnel mines (1,200) as destroyed in 2019.⁴⁴ There was no disaggregation on what proportion of the land release was of mined area (as opposed to battle area). The total cleared area in the West Bank includes 18,269m² of anti-personnel mined area cleared by HALO Trust in the West Bank in 2020, as reported by HALO Trust to Mine Action Review.⁴⁵

In addition, according to Israel, in 2020, the IDF's Engineering Corps cleared an area of 0.18km², destroying a combined total of 243 mines and ERW in the process.⁴⁶

The HALO Trust continued its clearance of minefields in Area C of the West Bank in 2020, working under the auspices of both INMAA and PMAC. In April 2020, HALO completed the clearance operation at the Baptism Site with international and Israeli funding (see the *Clearing the Mines* report on Palestine for further information).

Based on the clearance rates of the past few years, it will take many decades to clear remaining anti-personnel mine contamination in Israel, even only in areas deemed not essential to Israel's security today.

- 1 Email from Michael Heiman, formerly Director of Technology and Knowledge Management, Israeli National Mine Action Authority (INMAA), 26 May 2018.
- 2 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 3 "Below the surface: Israel's mine map is exposed", *N12*, 19 September 2020, (Hebrew), at: <https://bit.ly/3xfQ9KV>.
- 4 "Israel army plants new mines along Syria border", *Associated Press*, 13 August 2011.
- 5 "New Golan mine-clearing project to begin this summer", *Jerusalem Post*, 16 March 2017, at: <http://bit.ly/2MyEKBc>.
- 6 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 7 Minefield Clearance Law 5771-2011 of March 2011, unofficial translation at: <http://bit.ly/2GD0QgJ>; Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (covering 2010), Form A. Form A refers to details provided in Form D, but information in Form D has been deleted.
- 8 Minefield Clearance Law 2011 (MCL 5771-2011).
- 9 CCW Amended Protocol II Article 13 Report submitted in 2020 (covering 2019), Form D.
- 10 Interview with Marcel Aviv, Director, INMAA, in Geneva, 7 February 2019.
- 11 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 12 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.
- 13 Israel Ministry of Defence (IDF) website, "Israel National Mine Action Authority", accessed on 5 July 2021, at: <https://bit.ly/3hEpi4y>.
- 14 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 15 CCW Amended Protocol II Article 13 Report (covering 2020), Form E.
- 16 Emails from Ronen Shimoni, Programme Manager, HALO Trust, 20 April, 18 June 2020 and 23 April 2021.
- 17 CCW Amended Protocol II Article 13 Report (covering 2020), Form A.
- 18 CCW Amended Protocol II Article 13 Report (covering 2019), Form B.
- 19 CCW Amended Protocol II Article 13 Report (covering 2020), Forms A and B.
- 20 Ibid., Form A.
- 21 CCW Amended Protocol II Article 13 Report (covering 2019), Form D.
- 22 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.
- 23 Ibid.
- 24 Email from Michael Heiman, formerly of INMAA, 26 May 2018.
- 25 Israel's National Mine Action Authority (INMAA's) website, accessed on 6 July 2021 (Hebrew text), at: <https://bit.ly/3hhUyaA>, <https://bit.ly/2SOuIBB>, <https://bit.ly/3jKcGw>, and <https://bit.ly/36g5Eqm>.
- 26 Email from Michael Heiman, INMAA, 23 July 2017.
- 27 Email from Michael Heiman, INMAA, 19 September 2016.
- 28 CCW Amended Protocol II Article 13 Report (covering 2020), Form B; and INMAA's website, accessed on 6 July 2021, (Hebrew), at: <https://bit.ly/3ysdUj3j>.
- 29 CCW Amended Protocol II Article 13 Report (covering 2020), Form D.
- 30 Email from Michael Heiman, formerly of INMAA, 26 May 2018.
- 31 CCW Amended Protocol II Article 13 Report (covering 2020), Form G.
- 32 Email from Eran Yuwan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report (covering 2019), Form B.
- 33 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.
- 34 Ibid.
- 35 CCW Amended Protocol II Article 13 Report (covering 2020), Form C.
- 36 Email from Michael Heiman, INMAA, 23 July 2017.
- 37 CCW Amended Protocol II Article 13 Report (covering 2019), Form E.
- 38 Email from Michael Heiman, INMAA, 23 July 2017.
- 39 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 40 Interview with Marcel Aviv, INMAA, Geneva, 7 February 2019.
- 41 Israel's National Mine Action Authority (INMAA's) website, accessed on 6 July 2021.
- 42 "Watch: Minefield clearance near Jericho Israel today", *The Limited Times*, 30 March 2021, at: <https://bit.ly/3wu6Wc9>.
- 43 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.
- 44 Ibid.
- 45 Email from Ronen Shimoni, HALO Trust, 23 April 2021.
- 46 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.