

ISRAEL

PROGRAMME PERFORMANCE

	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	4	4
Targeted clearance	6	6
Efficient clearance	6	6
National funding of programme	6	6
Timely clearance	5	5
Land-release system in place	8	8
National mine action standards	8	8
Reporting on progress	8	7
Improving performance	7	7
PERFORMANCE SCORE: AVERAGE	6.3	6.2

PERFORMANCE COMMENTARY

In 2017, Israel's mine action programme continued to make progress in landmine clearance and also cancelled suspected mined area in the Arava region of the Jordan Valley, through non-technical survey.

RECOMMENDATIONS FOR ACTION

- Israel should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Israel should report the extent of mine contamination nationwide, not merely the areas considered not essential for Israel's security.

CONTAMINATION

The exact extent of mine contamination in Israel is not known. Israel has reported 41.58km² of confirmed mined area and a further 48.51km² of suspected mined area, as at the end of 2017.¹ The combined 90km² 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. It 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 anti-personnel and anti-vehicle mined area) and the West Bank² (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

Table 1: Mine contamination (at end-2017)³

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	7.8
Totals	232	41.58	22	48.51

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

Israel's mine problem dates back to World War II. 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

The 2017 estimate of 90km² for mined areas that are not considered essential for Israel's security is a small reduction on the 2016 estimate of 91km².⁵ The 0.66km² of mine clearance in Israel and over 0.52km² of cancellation through survey in Israel in 2017, was offset by the discovery of more than 1.17km² of new, previously unrecorded, mine contamination.⁶

Mine contamination in Israel impacts progress in regional development, and poses a risk to local communities.⁷ In the Golan Heights the mines laid by Syrian forces remain largely unknown and 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.⁸

PROGRAMME MANAGEMENT

A March 2011 law on minefield clearance established the Israeli National Mine Action Authority (INMAA) to undertake a "comprehensive programme of mine clearing projects inside Israel."⁹ 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."¹⁰

The INMAA, which has 10 staff, was established in the Ministry of Defence, with ministry staff responsible for planning mine action.¹¹ The INMAA manages a "minefield information bank" that is open for public queries concerning demining plans and programmes.¹²

Strategic Planning

The INMAA has a multi-year clearance plan for 2017–20 that plans to focus on technical survey and clearance in northern Israel (the Golan Heights) in the spring/summer/autumn, and in southern Israel (the Jordan Valley and Arava Plain) in the winter.¹³

In addition, the INMAA continues to oversee HALO Trust clearance projects in Area C of the West Bank, funded by the Netherlands, the United Kingdom, and the United States (via ITF Enhancing Human Security).¹⁴ Furthermore, at the start of 2017, the INMAA began survey of the Jordan Valley minefields in the West Bank, using national budget and operating through Israeli companies. The INMAA sees significant potential for

cancellation and reduction of land in the Jordan Valley, and is using various technologies and scientific tools to measure mine drift possibilities. The INMAA has planned to invest around NIS 900,000 (approximately US\$250,000) in this project in 2017–19¹⁵ (see Mine Action Review's *Clearing the Mines* report on Palestine for further information). A number of development projects funded by local electricity, water, and infrastructure companies and authorities also pay for mine clearance.¹⁶

The INMAA, “defines clearance policies, sets the national priorities and implements them in coordination with other relevant governmental ministries, the IDF, and local authorities.”¹⁷ Clearance tasks are assigned according to a classification formula laid down by the INMAA, and prioritisation is set nationally every three years. The criteria used for the formula are largely based on the risk level and development potential of the affected areas.¹⁸ The INMAA has been conducting a study of the social and economic impacts of land released over the last four years, as well as on the potential impact for future clearance sites.¹⁹

Legislation and Standards

The 2011 law on minefield clearance noted above is the main legislation governing mine action. The INMAA sets national standards “taking into consideration the procedures of the Israel Defense Forces that will be as compatible as possible with the International Mine Action Standards.”²⁰

Quality Management

Every mine clearance project in Israel has an INMAA supervisor, a quality assurance/quality control (QA/QC) contractor, and a clearance operator. Four QA/QC contractors were formally registered as at May 2018, namely: 4CI, Dexagon, Gaman, and Zeev Levanon. Of these four, 4CI and Gaman were contracted to conduct QA and QC of clearance operations in 2017.²¹

Information Management

The information management system for demining operations in Israel is not known.

Operators

Commercial companies are contracted to conduct clearance as well as QA and QC. In 2017, clearance was contracted to four national companies: 4M, the Israeli Mine Action Group (IMAG), Maavarim, and Safeland. In addition, Ecolog conducted geomorphological and hydrological surveys in 2017, together with the INMAA, to assist with cancellation of previously flooded SHAs that could potentially contain mines.²²

Israel uses several kinds 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. Some of these operations are conducted by Israel directly, while others are performed by contractors.²³

Throughout 2016 and 2017, the INMAA was supported by the Geneva International Centre for Humanitarian Demining (GICHD) in developing its animal detection system capacity.²⁴ A pilot project using mine detection dogs (MDDs) was conducted in 2017,²⁵ but was not successful.²⁶ However, after investigating and conducting further research into animal detection and behaviour, the INMAA plans to conduct another trial in 2019.²⁷

In 2017, 106 demining personnel and 36 machines were deployed for clearance operations.²⁸ This is a decrease on the 130 explosive ordnance disposal (EOD) personnel and 50 machines deployed in 2016.²⁹

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.³⁰ During wintertime, 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.³¹

In addition, the INMAA reported that it had secured the continuation of HALO Trust's clearance programme in Area C of the West Bank until the end of 2019.³² The HALO Trust works under the auspices of both the INMAA and the Palestine Mine Action Centre (PMAC), primarily with funding from international donors³³ (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

LAND RELEASE

In 2017, more than 0.66km² was released through clearance (excluding the West Bank),³⁴ compared to 0.92km² of cleared in 2016.³⁵

In addition, 0.52km² was cancelled by Ecolog through non-technical survey in Zofar, in the Middle Arava area in 2017. No mined area was released by survey in 2016.³⁶

For further information on survey and clearance in the West Bank, see Mine Action Review's *Clearing the Mines* report on Palestine.

Survey in 2017

In 2017, 0.52km² was reported to have been cancelled through secondary non-technical survey by Ecolog, in collaboration with the INMAA, in Zofar in the middle Arava area of Israel.³⁷

A further 0.85km² was also cancelled through non-technical survey by Ecolog in 2017, in collaboration with the INMAA, in the Jordan Valley in the West Bank³⁸ (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

Clearance in 2017

More than 0.66km² of land was released by clearance in 2017 (excluding the West Bank), with the destruction of 737 anti-personnel mines, 133 anti-vehicle mines, and 38 items of unexploded ordnance (UXO).³⁹

Table 2: Mine clearance in 2017 (excluding the West Bank)⁴⁰

Operator	Region	Location	Type of contamination	Areas released	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Maavarim	Eilat	Eilat	AP mines	4	201,709	49	0	1
		Timna	AP mines	3	154,210	51	0	1
Safeland	Middle Arava	Ein Yahav	AP mines	2	65,338	16	0	0
4M	Valley of Springs	Newn Ur	AP mines	1	20,377	9		5
IMAG	Golan Heights	Kela	AP/AV mines	3	222,053	612	133	31
Totals				13	663,687	737	133	38

The INMAA typically plans for mine clearance at a targeted rate of 1.5km² per year (including in the West Bank), based on its current budget.⁴¹

IDF demining is implemented independently of the INMAA, using military methods and techniques.⁴² The area cleared or otherwise released by the IDF is unknown. According to Israel's Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency report for 2017, the IDF has made significant progress in "re-surveying mine

affected areas, and in examining the possibility of area cancellation, following a completion of a fully detailed non-technical survey."⁴³

In addition, The HALO Trust continued its clearance of minefields in Area C of the West Bank in 2017, working under the auspices of both the INMAA and PMAC, primarily with international funding (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

ARTICLE 5 COMPLIANCE

Israel is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

In 2017, the annual mine action budget for Israel was NIS 41.7 million (approx. US\$11.5 million), of which NIS 27 million was from the INMAA's budget and NIS 14.7 million from additional external funding by various infrastructure development companies and state authorities.⁴⁴ This represents roughly the same funding compared to 2016,⁴⁵ with slightly less external funding, but with the state budget remaining the same.

Based on the clearance rates of the last few years and the INMAA's forecasted clearance rate of 1.5km² per year, it will take many years to clear remaining contamination. The INMAA is seeking additional funding and assistance to speed up operations.⁴⁶

Table 3: Mine clearance in 2013–17 (excluding the West Bank)⁴⁷

Year	Area cleared (km ²)
2017	0.7
2016	0.9
2015	0.7
2014	1.2
2013	2.2
Total	5.7

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- 1 Email from Michael Heiman, formerly Director of Technology and Knowledge Management, Israeli National Mine Action Authority (INMAA), 26 May 2018.
- 2 Ibid.
- 3 Ibid.
- 4 "Israel army plants new mines along Syria border", Associated Press, 13 August 2011, at: <http://news.yahoo.com/israel-army-plants-mines-along-syria-border-085636592.html>.
- 5 Email from Michael Heiman, then INMAA, 23 July 2017.
- 6 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 7 Email from Michael Heiman, then INMAA, 19 September 2016.
- 8 "New Golan mine-clearing project to begin this summer", The Jerusalem Post, 16 March 2017, at: <https://www.jpost.com/Israel-News/New-Golan-mine-clearing-project-to-begin-this-summer-484407>.
- 9 Minefield Clearance Law 5771-2011 of March 2011, unofficial translation at: <http://www.scribd.com/doc/133780125/Israel-s-Minefield-Clearance-Act-of-2011-English-Translation-byDhyan-Or>. See Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (for 2010), Form A. Form A refers to details provided in Form D, but information in Form D has been deleted.
- 10 Minefield Clearance Law 2011 (MCL 5771-2011).
- 11 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 12 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (for 2017), Form A.
- 13 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 14 Interview with Tim Porter, Regional Director, HALO Trust, Geneva, 15 February 2018.
- 15 Emails from Michael Heiman, then INMAA, 23 July and 10 August 2017.
- 16 Email from Michael Heiman, then INMAA, 19 September 2016.
- 17 CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 18 Email from Michael Heiman, then INMAA, 23 July 2017.
- 19 Email from Michael Heiman, then INMAA, 19 September 2016.
- 20 Emails from Michael Heiman, then INMAA; and Eran Yuwan, Ministry of Foreign Affairs, 6 May 2012.
- 21 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 22 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 23 Email from Michael Heiman, then INMAA, 23 July 2017; and CCW Amended Protocol II Article 13 Report (for 2017), Form C.
- 24 CCW Amended Protocol II Article 13 Reports (for 2016 and 2017), Form E.
- 25 Email from Michael Heiman, then INMAA, 23 July 2017.
- 26 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 27 Ibid.
- 28 Ibid.
- 29 Email from Michael Heiman, then INMAA, 23 July 2017.
- 30 Email from Eran Yuwan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 31 CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 32 Email from Michael Heiman, then INMAA, 23 July 2017.
- 33 HALO Trust, "West Bank", accessed 17 July 2018.
- 34 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 35 Email from Michael Heiman, then INMAA, 23 July 2017.
- 36 Emails from Michael Heiman, then INMAA, 19 September 2016 and 23 July 2017.
- 37 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 38 Ibid.
- 39 Ibid.
- 40 Ibid.
- 41 Ibid.
- 42 Ibid; and email from Eran Yuwan, Ministry of Foreign Affairs, 29 April 2014.
- 43 CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 44 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 45 Email from Michael Heiman, INMAA, 23 July 2017.
- 46 Ibid.
- 47 See Landmine Monitor and Mine Action Review reports on clearance in Israel covering 2013–16.