

MINE ACTION PROGRAMME PERFORMANCE	For 2016	For 2015
Problem understood	5	5
Target date for completion of mine clearance	4	4
Targeted clearance	6	6
Efficient clearance	6	5
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	7	6
Improving performance	7	6
PERFORMANCE SCORE: AVERAGE	6.2	5.9

PERFORMANCE COMMENTARY

In 2016, Israel's mine action programme achieved a slightly higher clearance output than the previous year, but no land was released by survey. In a positive development, the Israeli National Mine Action Authority (INMAA) began a survey of West Bank minefields in the Jordan Valley in 2017.

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 49km² of confirmed mined area and a further 48.8km² of suspected mined area, as at the end of 2016.¹ But the combined 91km² 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.

Table 1: Mine contamination (as at end-2016)2

Type of contamination	CHAs	Area (km²)	SHAs	Area (km²)
AP mines only	209	20.3	3	41
AV mines only	29	17	0	0
AP and AV mines	8	4.9	0	7.8
Totals	246	42.2	12	48.8

AP = Anti-personnel

AV = Anti-vehicle

CHAs = Confirmed hazardous areas

SHAs = Suspected hazardous areas

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.³

The 2016 estimate of 91km^2 for mined areas that are not considered essential for Israel's security is a small reduction on the 2015 estimate of 92km^2 .⁴ This is a result of 1km^2 of mine clearance in 2016.⁵

Mine contamination in Israel impacts progress in regional development, and poses a risk to local communities. 6

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." 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."

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

Strategic Planning

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.¹¹

In addition, INMAA continues to oversee HALO Trust clearance projects in Area C of the West Bank, funded by the Netherlands, New Zealand, the United Kingdom, and the United States. ¹² 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. 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 planned to invest around NIS 900,000 (approximately US\$250,000) in this project in 2017–19. ¹³ (See also the report on Palestine).

A number of development projects funded by local electricity, water, and infrastructure companies and authorities also pay for mine clearance.¹⁴

Clearance tasks are assigned according to a classification formula laid down by INMAA: 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. IS 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. IS

Legislation and Standards

The 2011 law on minefield clearance noted above is the main legislation governing mine action. 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." ¹⁷

Quality Management

Every mine clearance project in Israel has an INMAA supervisor, a QA/QC contractor, and a clearance operator. There were five QA/QC contractors were formally registered, as at July 2017. Of these, Zeev Levanon Projects and 4CI Security were contracted to conduct QA and QC of clearance operations in 2016.¹⁸

Operators

Commercial companies are contracted to conduct clearance as well as quality assurance (QA) and quality control (QC). In 2016, clearance was contracted to three national companies: the Israeli Mine Action Group (IMAG), NARSHA, and AMAN.¹⁹

Israel uses several kinds of machines in its mine clearance operations for ground preparation, survey, and clearance. They are said to include, as 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.²⁰

Throughout 2016, INMAA was supported by the Geneva International Centre for Humanitarian Demining (GICHD) in developing a mine detection dogs (MDD) capacity.²¹ A pilot project using MDDs was conducted in the first half of 2017,²² but as at July no results from the pilot project were publicly available.

In 2016, 130 explosive ordnance disposal (EOD) personnel, 30 mechanical operators, and 50 machines were deployed for clearance operations. 23 This marks a significant increase to the 92 EOD personnel, 21 mechanical operators, and 19 machines deployed in 2015, 24 and is due to an increase in funding. 25

The Israel Defense Forces (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. 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. ²⁷

In addition, 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 2019.²⁸ The HALO Trust works under the auspices of both the INMAA and the Palestine Mine Action Centre (PMAC), but is funded by international donors.²⁹ (See the report on Palestine).

LAND RELEASE

In 2016, almost 1km² was released by clearance, compared to 0.7km² in 2015. No mined area was released by survey in 2016.³⁰

Survey in 2016

No area was reported as having been reduced by technical survey or cancelled by non-technical survey in 2016.³¹

INMAA did, however, report that following 2016 operations in the Snir area of the Golan Heights, INMAA

changed nine areas previously designated confirmed hazardous areas to suspected hazardous areas, and identified them for technical survey. These areas will be surveyed as part of the Golan Heights programme in 2017-20.32

Clearance in 2016

More than 0.92km² of land was released by clearance in 2016 (excluding the West Bank), with the destruction of 4,313 anti-personnel mines, 361 anti-vehicle mines, and 25 items of unexploded ordnance (UXO).³³

Table 2: Mine clearance in 2016³⁴

Operator	Areas released	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed
IMAG	1	282,000	432	361	24
NARSHA	4	178,000	3,870	0	0
AMAN	1	464,000	11	0	1
Totals	6	924,000	4,313	361	25

In 2016, IMAG carried out clearance in the Snir (Golan Heights), NARSHA conducted clearance in Ein Yahav (Arava Plain), and AMAN cleared mined areas in the Dead Sea region.

IDF demining is implemented independently of INMAA, using military methods and techniques.³⁵ 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 2016, 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."³⁶

INMAA typically plans for mine clearance at a targeted rate of $1.5 \, \text{km}^2$ per year. The During 2016, however, INMAA decided to postpone operations in the Golan Heights until 2017, and because of this, the 2016 target was reduced to $1 \, \text{km}^2$, while the 2017 target was raised to $2 \, \text{km}^2$.

In addition, The HALO Trust continued its clearance of minefields in Area C of the West Bank in 2016, working under the auspices of both INMAA and PMAC, with international funding.³⁹ (See the report on Palestine).

ARTICLE 5 COMPLIANCE

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

In 2016, the annual mine action budget for Israel was NIS42.3 million (approx. US\$12 million), of which NIS27 million was from INMAA's budget and the NIS15.3 million from additional external funding by various infrastructure development companies and authorities. 40 This represents an increase in funding compared to 2015, when there was no additional funding through infrastructure projects. 41

Based on the clearance rates of the last few years, and INMAA's forecasted clearance rate of 1.5km² per year, it will take many years to clear remaining contamination. INMAA is seeking additional funding and assistance in order to speed up operations.⁴²

Table 3: Mine clearance in 2012-16⁴³

Year	Area cleared (km²)
2016	0.9
2015	0.7
2014	1.2
2013	2.2
2012	N/R
Total	5.0

N/R = Not reported

- Email from Michael Heiman, Director of Technology and Knowledge Management, INMAA, 23 July 2017.
- 2 Email from Michael Heiman, INMAA, 23 July 2017.
- 3 "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.
- 4 Email from Michael Heiman, INMAA, 13 April 2015.
- 5 Email from Michael Heiman, INMAA, 23 July 2017.
- 6 Email from Michael Heiman, INMAA, 19 September 2016.
- 7 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.
- 8 Minefield Clearance Law 2011 (MCL 5771-2011).
- 9 Email from Michael Heiman, INMAA, 23 July 2017.
- 10 CCW Amended Protocol II Article 13 Report (for 2016), Form A.
- 11 Email from Michael Heiman, INMAA, 23 July 2017.
- 12 Emails from Michael Heiman, INMAA, 19 September 2016; and Ronen Shimoni, Programme Manager, HALO Trust, 22 April 2017.
- 13 Emails from Michael Heiman, INMAA, 23 July and 10 August 2017.
- 14 Email from Michael Heiman, INMAA, 19 September 2016.
- 15 Email from Michael Heiman, INMAA, 23 July 2017.
- 16 Email from Michael Heiman, INMAA, 19 September 2016.
- 17 Emails from Michael Heiman, INMAA; and Eran Yuvan, Ministry of Foreign Affairs, 6 May 2012.
- 18 Email from Michael Heiman, INMAA, 23 July 2017.
- 19 Email from Michael Heiman, INMAA, 23 July 2017.
- 20 Ibid.; and CCW Amended Protocol II Article 13 Report (for 2016), Form C.

- 21 CCW Amended Protocol II Article 13 Report (for 2016), Form E.
- 22 Email from Michael Heiman, INMAA, 23 July 2017.
- 23 Ibid.
- 24 Email from Michael Heiman, INMAA, 19 September 2016.
- 25 Ibid.
- 26 Email from Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report (for 2016), Form B.
- 27 CCW Amended Protocol II Article 13 Report (for 2016), Form B.
- 28 Email from Michael Heiman, INMAA, 23 July 2017.
- 29 HALO Trust, "West Bank", accessed 25 July 2017.
- 30 Emails from Michael Heiman, INMAA, 19 September 2016 and 23 July 2017.
- 31 Email from Michael Heiman, INMAA, 23 July 2017.
- 32 Ibid.
- 33 Ibid.
- 34 Ibid. According to Israel's CCW Amended Protocol II Article 13 Report (for 2016), Form B, 1,024,000m² was cleared in 2016, with the destruction of 11,081 mines.
- 35 Emails from Michael Heiman, INMAA, 13 April 2015; and Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014.
- 36 CCW Amended Protocol II Article 13 Report (for 2016), Form B.
- 37 Email from Michael Heiman, INMAA, 23 July 2017.
- 38 Ibid.
- 39 Ibid.
- 40 Ibid.
- 41 Email from Michael Heiman, INMAA, 19 September 2016.
- 42 Email from Michael Heiman, INMAA, 23 July 2017.
- 43 See Landmine Monitor and Mine Action Review reports on clearance in Israel covering 2012–15.