

PROGRAMME PERFORMANCE For 2015 For 2014 Problem understood 4 Target date for completion of mine clearance Targeted clearance **Efficient clearance** National funding of programme 3 3 Timely clearance Land release system in place 7 6 National mine action standards Reporting on progress Improving performance PERFORMANCE SCORE: AVERAGE BUT IMPROVING 5.3 5.7

PERFORMANCE COMMENTARY

South Sudan's mine action programme continued to improve in 2015 despite the challenges posed by ongoing armed conflict. According to the UN Mine Action Service (UNMAS), 2015 was one of the most productive years in over a decade of mine action in South Sudan, with the largest ever amount of mined area released through clearance and technical survey. However, despite increased clearance activities, new hazardous areas continued to be identified on a monthly basis.¹

RECOMMENDATIONS FOR ACTION

- South Sudan should make every effort minimise the risk to civilians from mines and unexploded ordnance (UXO).
- South Sudan should increase its financial support for operational mine action. Greater support should also be provided to the National Mine Action Authority (NMAA) to build its capacity to develop effective mine action plans and policies.
- Continued efforts should be made to ensure accurate reporting by operators of mine action data and recording according to International Mine Action Standards (IMAS) land-release terminology.
- South Sudan should develop a resource mobilisation strategy and initiate policy dialogue with development partners on long-term support for mine action.

CONTAMINATION

South Sudan is heavily contaminated by anti-personnel mines, anti-vehicle mines, and other explosive weapons which were used regularly during nearly 50 years of Sudanese civil war in 1955–72 and 1983–2005, prior to the signing of the Comprehensive Peace Agreement in January 2005, leading to the independence of South Sudan in July 2011. Following two years of independence and relative peace in South Sudan, heavy fighting erupted in the capital city, Juba, on 15 December 2013, commencing a new multi-dimensional conflict across the country.

As at the end of 2015, South Sudan had a total of 303 areas suspected to contain anti-personnel mines, covering a total area of nearly $98 \, \text{km}^2$, as set out in Table $1.^2$

Table 1: Mine and ERW contamination as at end 20153

Type of contamination	CHAs	Area (m²)	SHAs	Area (m²)
Anti-personnel mines	0	0	303	98,403,022
Anti-vehicle mines	0	0	81	1,925,118
Cluster munition remnants	0	0	116	6,539,394
Other UXO	0	0	403	3,425,974
Totals	0	0	903	110,293,508

CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

¹ United Nations Mine Action Service (UNMAS), "2016 Portfolio of Mine Action Projects: South Sudan", undated but 2016, at: http:// www.mineaction.org/taxonomy/term/1116.

² Email from Robert Thompson, Chief of Operations, UNMAS, 21 April 2016.

³ Ibid; and APMBC Article 7 Report (for 2015), Form C, p. 2.

All ten of South Sudan's states contain suspected mined areas, with Central Equatoria the most heavily contaminated, followed by East Equatoria and Jonglei (see Table 2).⁴

Table 2: Anti-personnel mine contamination by province as at end 2015⁵

Province	SHAs	Area (m²)
Central Equatoria	176	5,530,095
East Equatoria	61	6,138,069
Jonglei	33	30,671,671
Lakes	3	35,537
North Bahr El Ghazal	2	80,100
Unity	4	13,252,160
Upper Nile	8	39,173,412
West Bahr El Ghazal	3	2,827,433
West Equatoria	13	694,545
Totals	303	98,403,022

The full extent of South Sudan's mine and explosive remnants of war (ERW) contamination remains unknown. SHAs continue to be identified, while the existing threat is being compounded by the renewed heavy fighting since December 2013 which continues to result in new UXO contamination, particularly in Greater Equatoria, Jonglei, Unity, and Upper Nile states. Ongoing conflict in these states persisted in making access to certain areas extremely limited, severely impeding efforts to confirm or address contamination.

Despite the signature of the Agreement on the Resolution of the Conflict in the Republic of South Sudan in August 2015, UNMAS reported that sporadic fighting continued across the country in 2016, which it said "continues to litter vast swathes of land, roads and buildings with ... ERW".8 Even with an increase in clearance activities in 2015, UNMAS reported that up to 150 new hazardous areas were recorded in the Information Management System for Mine Action (IMSMA) database each month, including anti-personnel and anti-vehicle mine contamination from past conflicts in areas previously unsurveyed.9

Mine Action Review is not aware of any confirmed reports of the new use of anti-personnel mines in the renewed conflict, which began in 2013.10 In March 2015, however, a group of states monitoring the ceasefire in South Sudan reported that a government armed forces officer "stated clearly that anti-personnel mines had been deployed in the area around Nassir", in Upper Nile state, by government forces. The monitoring group, the Intergovernmental Authority on Development (IGAD) Monitoring and Verification Mechanism, consisting of seven East African states, reported that the officer made the statement on 12 March 2015, in a meeting between senior government armed forces officers, UN Mission in South Sudan (UNMISS) staff, and members of IGAD.11 According to a media report, in response to the IGAD report South Sudan's army information director, Malaak Ayuen, denied allegations that government forces had used mines.12

- 4 Response to questionnaire by Robert Thompson, UNMAS, 30 March
- 5 Email from Robert Thompson, UNMAS, 21 April 2016. UNMAS reported that during re-survey of some of the mined areas previously recorded in a landmine impact survey, 10 recorded hazardous areas were changed to and re-recorded as battle area or UXO spot tasks. Email from Robert Thompson, UNMAS, 14 October 2016.
- 6 Ibid., 14 October 2016.
- 7 UNMAS, "2016 Portfolio of Mine Action Projects: South Sudan", undated but 2016.
- 8 Ibid.
- 9 Ibid; and email from Robert Thompson, UNMAS, 14 October 2016.
- 10 According to the International Campaign to Ban Landmines (ICBL), there were no allegations of new anti-personnel mine use in the renewed fighting which began in 2013, nor in 2014; however in 2011 there were several incidents of apparent anti-personnel mine use. A fact-finding mission was sent to investigate the reports in Jonglei, Unity, Upper Nile, and Western Bahr El Ghazal states in June-July 2013, during which civil authorities and Sudan People's Liberation Army (SPLA) commanders denied involvement in new use of

- anti-personnel mines, though SPLA officials affirmed that mines had been laid by rebel forces in Unity and Jonglei states. See Landmine Monitor, "Country Profile: South Sudan, Mine Ban Policy", 30 October 2014, at: http://the-monitor.org/en-gb/reports/2015/south-sudan/mine-ban-policy.aspx.
- Intergovernmental Authority on Development Offices of the Special Envoys for South Sudan, "Summary of Latest Reports of Violations of the Cessation of Hostilities Agreement (COHA) Investigated and verified by the IGAD Monitoring and Verification Mechanism in South Sudan from 1–16 March 2015", at: http://southsudan.igad.int/attachments/article/284/Violations_Summary_V32-35_ENG.pdf. See also ICBL-Cluster Munition Coalition (ICBL-CMC), "Concern at Reported Use of Antipersonnel Mines in South Sudan", Press release, Geneva, 31 March 2015, at: http://www.icbl.org/en-gb/news-and-events/news/2015/ concern-at-reported-use-of-antipersonnel-mines-in-south-sudan.aspx; and I. Gridneff, "South Sudan Army's Landmine Use Escalates War, Monitors Say", Bloomberg Business, 30 March 2015, at: http://www.bloomberg.com/news/articles/2015-03-30/south-sudan-army-s-use-of-land-mines-escalates-war-monitors-say.
- 12 Gridneff, "South Sudan Army's Landmine Use Escalates War, Monitors Say".

In December 2015, South Sudan informed states parties to the Anti-Personnel Mine Ban Convention (APMBC) that it had not been feasible to carry out a verification mission to investigate the allegation due to lack of access from continuing armed conflict in the area. It stated that a committee would be established to investigate the allegation as soon as security conditions permitted and welcomed the participation of members of UNMAS and civil society on a verification mission.¹³

Civilians continued to be killed and injured by anti-personnel mines and ERW in 2015. A total of 75 victims of anti-personnel mines and ERW were recorded in 2015, of whom 18 were killed and 57 injured; this represented an alarming increase on the 38 victims recorded in 2014. As at 1 August 2016, a further 38 victims had been reported, of whom 10 were killed and 28 injured. According to UNMAS, since records began, more than 4,900 victims of mines and ERW have been identified.

In 2016, UNMAS claimed that the socio-economic cost of mines and ERW in South Sudan in terms of interrupted agricultural production, food insecurity, halted commerce, and the lack of freedom of movement was "incalculable". 16 UNMAS estimated that explosive hazards threatened more than 1.66 million internally displaced people (IDPs), local communities, peacekeepers, and humanitarian aid workers. 17

The legacy of protracted conflict means that nearly eight million people in South Sudan live in counties where the presence of mines and ERW threaten their safety. The contamination poses a physical threat to the population of South Sudan, precludes the delivery of vital humanitarian aid, prevents socio-economic development, and inhibits freedom of movement. The ongoing conflict has deepened the humanitarian crisis in South Sudan where, as at mid-2016, the number of people reportedly at risk of food insecurity rose to 4.8 million, increasing the demand on mine action services, which are a critical enabler for the provision of humanitarian assistance in conflict-affected areas across the country.¹⁸

PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA) — now named the National Mine Action Authority (NMAA) — was established in 2006 by presidential decree to act as the national agency for coordination, planning, and monitoring of mine action in South Sudan.¹⁹

Under UN Security Council Resolution 1996 (2011), UNMAS was given the responsibility to support South Sudan in demining while strengthening the capacity of the NMAA. Accordingly, UNMAS (with the NMAA) has been overseeing all mine action in South Sudan through its main office in Juba, and sub-offices in Bentiu, Bor, Malakal, and Wau. UNMAS is responsible for accrediting mine action organisations, developing national mine action standards, establishing a quality management system, managing the IMSMA database, and tasking operators.²⁰

While it is planned that eventually NMAA will assume full responsibility for all mine action activities, South Sudan's National Mine Action Strategic Plan 2012–2016 notes that the government did "not have the financial and technical capacity to support its mine action program. UN agencies, development partners, and international organizations will need to support the program in providing technical and financial assistance". ²¹ UN Security Council Resolution 1996 authorised UNMISS to support mine action through assessed peacekeeping funds. ²²

In May 2014, the UN Security Council adopted Resolution 2155 in response to the conflict that broke out in December 2013. This resolution, which marked a significant change from Resolution 1996, focuses on four areas: protecting civilians; creating the conditions for humanitarian access; reporting and investigating human rights violations; and supporting the Cessation of Hostilities agreements. Significantly, most capacity development for government institutions is no longer part of the mission's mandate.

¹³ Statement of South Sudan, APMBC 14th Meeting of States Parties, Geneva, 1 December 2015.

¹⁴ APMBC Article 7 Report (for 2014), Form J, p. 13; and UNMAS, "IMSMA Monthly Report—December 2014". UNMAS reported that the actual number of new victims in 2014 was likely higher due to underreporting resulting from lack of access to contaminated areas.

¹⁵ UNMAS, "IMSMA Monthly Report – July 2016".

¹⁶ UNMAS, "2016 Portfolio of Mine Action Projects: South Sudan", undated but 2016.

¹⁷ Ibid.; and UNMAS, "UNMAS in South Sudan", updated May 2016 at: http://www.mineaction.org/programmes/southsudan.

¹⁸ Email from Robert Thompson, UNMAS, 21 April 2016.

¹⁹ South Sudan, "South Sudan De-Mining Authority", undated, at: http://www.goss-online.org/ magnoliaPublic/en/Independant -Commissions-and-Chambers/De-Mining-Authority. html#publications.

²⁰ South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, February 2012, p. iv, at: http://www.apminebanconvention.org/fileadmin/pdf/ma_development/nma-strat/NMAS-SouthSudan-2012-2016.pdf.

²¹ South Sudan, "South Sudan National Mine Action Strategic Plan 2012-2016", Juba, February 2012, p. iii.

²² UNMISS, "United Nations Mine Action Coordination Centre [UNMACC]", undated, at: http://unmiss.unmissions.org/Default.aspx?tabid=4313&language=en-US.

Strategic Planning

UNMAS reported that there were no significant changes in 2015 to the current national mine action strategic plan for 2012–16, which was developed by the NMAA with assistance from the UN and the Geneva International Centre for Humanitarian Demining (GICHD).²³ The main objectives of the plan are to ensure that:

- South Sudan is in a position to comply with all international instruments related to mines and ERW and can conduct and manage the national mine action programme.
- The scope and location of the mine and ERW contamination are fully recorded, and all high-impact contaminated areas are identified, prioritised, cleared, and released.
- The national mine action programme contributes to poverty reduction and socio-economic development by being mainstreamed into development programmes.²⁴

In June 2016, UNMAS reported that a new national mine action strategic plan was under development and would be presented in January 2017 by the GICHD and the NMAA. 25

Operators

Four international demining non-governmental organisations (NGOs) operated in South Sudan in 2015: DanChurchAid (DCA), Danish Demining Group (DDG), Mines Advisory Group (MAG), and Norwegian People's Aid (NPA). Four commercial companies also conducted demining: G4S Ordnance Management (G4S), Mechem, Dynasafe MineTech Limited (DML) (formerly MineTech International, MTI), and The Development Initiative (TDI). No national demining organisations were involved in clearance in 2015.²⁶

NPA deployed three non-technical/technical survey teams integrated with eight mine detection dog (MDD) teams, along with two multi-tasking explosive ordnance disposal (EOD) teams.²⁷ MAG changed in mid-2015 from conducting primarily EOD spot clearance and community liaison to deploying multi-task teams (MTTs) on large-area tasks. It deployed one MineWolf 330 and one Bozena 4 machine along with a total of 57 demining personnel.²⁸ TDI reported deploying between two and four MTTs and two Route Assessment and Clearance Capacity (RACC) teams in 2015.²⁹ G4S had a capacity of two Integrated

Clearance Capacity (ICC) teams, four quick-response teams, and eight MTTs. MECHEM deployed two mine action teams and DML two ICC teams and six explosive dog detection teams.³⁰ DDG did not conduct mine clearance in 2015, but operated on a call-out basis for ERW spot tasks and employed 20 staff.³¹ UNMAS assigns mine action tasks to operators.

Standards

The National Technical Standards and Guidelines (NTSGs) for mine action in South Sudan were updated in October 2015.³² The new NTSGs are monitored by UNMAS and the NMAA.³³

Quality Management

A new quality management system was developed in 2014 and, following approval by the NMAA, was being implemented from October 2015. According to UNMAS, the new system involves a more rigid internal policy to be adopted by operators and a new system of monitoring and evaluation to be implemented by the NMAA and UNMAS.³⁴ As at the end of 2015, UNMAS stated that its quality assurance (QA)/quality control (QC) mechanisms were focused increasingly on "the command and control of implementing partners' management capacity".³⁵

UNMAS reported that all areas of mine action operations were sampled on a regular basis throughout the year. Each of its offices, including its Head Office in Juba and its four sub-offices were staffed with QA/QC officers, with a capacity to provide support for the establishment of temporary forward-operating bases to respond to urgent requirements in specific geographic areas, as needed.³⁶

MAG stated that as a result of the October 2015 update for QA procedures and the NTSGs, the previous requirements for internal QA have "increased drastically from 2015 to 2016, placing more emphasis on the internal QA carried out by the agency conducting the clearance", as opposed to that by UNMAS. MAG further reported that certain QA/QC activities that had to be completed once a month now had to be completed on a weekly basis, along with daily reports submitted to UNMAS.³⁷ MAG indicated that the NMAA attempted to conduct QA/QC visits during the year as far as it was able, but without any government funding, was entirely dependent on UNMAS for support, including for vehicles and fuel.³⁸

- 23 Email from Robert Thompson, UNMAS, 21 April 2016; and South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, 2012, p. iii.
- 24 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, 2012, p. v.
- 25 Email from Robert Thompson, UNMAS, 14 June 2016.
- 26 Email from Robert Thompson, UNMAS, 21 April 2016. MTI changed its name to DML on 3 August 2015. Dynasafe, "History of MineTech", at: http://www.minetech.co.uk/who-we-are/history-of-minetech/.
- 27 Email from Hilde Jørgensen, Desk Officer for Horn of Africa, NPA, 19 May 2016.
- 28 Email from Bill Marsden, Regional Director East and Southern Africa, MAG, 12 May 2016.
- 29 Email from Stephen Saffin, Chief Operating Officer, TDI, 30 May 2016.
- 30 Email from Robert Thompson, UNMAS, 14 June 2016.

- 31 Email from William Maina, Mine Action Operations Manager, DDG, 6 May 2016.
- 32 Emails from Hilde Jørgensen, NPA, 19 May 2016; Bill Marsden, MAG, 12 May 2016; and William Maina, DDG, 6 May 2016. The updated NTSG are available at: http://www.unmas.org/southsudan/wp-content/uploads/NTSG/NTSG2015.pdf.
- 33 Email from Hilde Jørgensen, NPA, 19 May 2016.
- 34 Email from Robert Thompson, UNMAS, 23 October 2015, and response to questionnaire, 30 March 2015.
- 35 Email from Robert Thompson, UNMAS, 21 April 2016.
- 36 Ibid.
- 37 Email from Bill Marsden, MAG, 12 May 2016.
- 38 Ibid.

Other operators confirmed that QA activities were regularly carried out. TDI confirmed that internal and external QA was carried out "extensively" in 2015 throughout its operations. 39 DDG stated it witnessed a significant reduction in the external QA visits from UNMAS in 2015 on all aspects of demining compared to 2014. 40

NPA reported that a quality management system was in place based on NPA's Standing Operating Procedures, and sampling and QA/QC were carried out on a regular basis.⁴¹

Information Management

UNMAS reported no significant changes to the information management system or the IMSMA database in 2015.⁴² IMSMA database clean-up is conducted on a weekly basis and that operators and programme implementers assist in data entry and fault-finding, and that as such the database is constantly evolving, it said.⁴³ NPA and DDG reported that in 2015 improvements continued to be made to the database, including a number of reporting form templates for data collection.⁴⁴

LAND RELEASE

UNMAS reported that 2015 was one of the most productive years for mine clearance in South Sudan since its inception in 2004, with the largest ever mechanical clearance output of $4.2 \, \text{km}^2$ and largest amount of land released through clearance of just under $5 \, \text{km}^2$. In total, nearly $14 \, \text{km}^2$ was released back to local communities, including $5.1 \, \text{km}^2$ released through clearance and technical survey, with the destruction of 1,715 anti-personnel mines, 473 anti-vehicle mines, and 27,395 items of UXO. As well, 3,008km of roads were opened through route assessment and verification.

In comparison, in 2014, UNMAS reported releasing a total of approx. 9.3km², including 2.7km² released through clearance and technical survey, with the destruction of 880 anti-personnel mines, 357 anti-vehicle mines, and 15,245 items of UXO, and a total of 407km of roads opened, which UNMAS said was due to better systems in place and improved cooperation between operators in country.⁴⁶

UNMAS has also reported that from 2004 to end 2015, a total of 11,449 hazards have been addressed, more than 1,148km 2 of land has been released, and nearly 26,300km of roads opened, with nearly 30,700 anti-personnel mines, 5,500 anti-vehicle mines, and 880,000 items of UXO destroyed. 47

Survey in 2015

As summarised in Table 3, in 2015 a total of 33 suspected mined areas covering just under 4.4km² were cancelled through NTS, and a further 144,905m² was reduced by technical survey. In addition, 145 areas covering nearly 3.5km² were confirmed as mined through technical survey, according to UNMAS records. 48 This compares to the cancellation of 55 suspected mined areas covering just over 1km² in 2014 through NTS and the release of 96,019m² by technical survey, along with the confirmation of 107 areas comprising nearly 1.6km². 49 UNMAS reported that the increase in survey output in 2015 was due to more survey teams being deployed and better management. 50

- 39 Email from Stephen Saffin, TDI, 30 May 2016.
- 40 Email from William Maina, DDG, 14 October 2016.
- 41 Emails from Hilde Jørgensen, NPA, 19 May 2016.
- 42 Email from Robert Thompson, UNMAS, 21 April 2016.
- 43 Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 44 Emails from Hilde Jørgensen, NPA, 19 May 2016; and William Maina, DDG, 6 May 2016. NPA reported that while there were no major changes to the information management system in 2015, the following had improved: a] survey/hazard area forms; b) internal/external QA reporting system; c) the quality management chapter of the NTSG; and d) the UNMAS monthly feedback reports for operators.
- 45 UNMAS, "IMSMA Monthly Report December 2015".
- 46 UNMAS, "IMSMA Monthly Report December 2014"; and "About UNMAS in South Sudan", updated March 2015, at: http://www.mineaction.org/programmes/southsudan.
- 47 UNMAS, "IMSMA Monthly Report December 2015".
- 48 Ibid.; and email from Robert Thompson, UNMAS, 21 April 2016.
- 49 Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015 and emails, 11 May and 27 October 2015; and UNMAS, "IMSMA Monthly Report – August 2015".
- 50 Email from Robert Thompson, UNMAS, 14 October 2016.

Table 3: Mined area survey in 2015⁵¹

Operator	SHAs cancelled	Area cancelled (m²)	SHAs confirmed as mined	Area confirmed (m²)	Area reduced by TS (m²)
G4S	9	1,750,065	29	717,397	32,445
DML	3	47,103	33	569,326	50,528
MAG	4	1,076,227	23	97,355	61,932
NPA	9	611,764	24	564,855	0
TDI	3	769,145	25	1,205,375	0
UNMAS	5	129,734	0	0	0
DCA	0	0	2	225,853	0
DDG	0	0	5	15,964	0
MECHEM	0	0	4	113,000	0
Totals	33	4,384,038	145	3,509,125	144,905

Clearance in 2015

A total of 110 mined areas covering more than 5.1km² were released by clearance and technical survey in 2015, including nearly 5km² through clearance and 0.1km² by technical survey, with the destruction of 1,715 anti-personnel mines and 473 anti-vehicle mines (see Table 4).⁵² The bulk of the clearance was conducted by two commercial operators – G4S and DML – using mechanical methods.⁵³ This is nearly double the output of 2014, when approx. 2.72km² was released through clearance and technical survey, including 2.62km² through clearance and nearly 0.1km² by technical survey, with 880 anti-personnel mines, 357 anti-vehicle mines, and 15,245 items of UXO destroyed.⁵⁴ MAG reported that a contributing factor to its significant increase in clearance output in 2015 was due to winning a mechanised contract from UNMAS with a MineWolf 330, with operations commencing in October 2014.⁵⁵

Table 4: Mine clearance in 2015⁵⁶

Operator	Areas cleared	Area cleared (m²)	AP mines destroyed	AV mines destroyed
DCA	0	0	23	0
DDG ⁵⁷	0	0	3	0
G4S	38	1,148,587	356	115
MECHEM	0	0	2	0
MAG	21	504,137	328	14
DML	29	2,534,940	658	195
NPA	2	273,453	187	123
TDI	20	519,893	158	26
Totals	110	4,981,010	1,715	473

AP = Anti-personnel AV = Anti-vehicle

⁵¹ Ibid., 21 April 2016; and APMBC Article 7 Report (for 2015), Form C. MAG reported confirming a slightly larger area of anti-personnel mine contamination with a size of 137,586m². It stated that its community liaison teams did not conduct full NTS activities in Central and Eastern Equatoria as tasking was directed by UNMAS. Cancelled land was a result of EOD assessments on large battle areas where teams were able to cancel areas where there was no evidence of contamination. NPA reported different figures for area confirmed through survey of a total of nine SHAs with a size of 259,558m². Emails from Bill Marsden, MAG, 12 May 2016; and Hilde Jørgensen, NPA, 19 May 2016.

⁵² UNMAS, "IMSMA Monthly Report – December 2015"; email from Robert Thompson, UNMAS, 21 April 2016; and APMBC Article 7 Report (for 2015), Form C.

⁵³ Ibid.

⁵⁴ Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015; and emails, 27 October 2015 and 14 October 2016.

⁵⁵ Email from Bill Marsden, MAG, 21 October 2016

⁵⁶ Email from Robert Thompson, UNMAS, 21 April 2016; ; APMBC Article 7 Report (for 2015), Form C; and email from Bill Marsden, MAG, 12 May 2016. MAG reported clearing 12 areas with a total size of 412,272m² and destroying a total of 328 anti-personnel mines. 57 DDG did not conduct minefield clearance in 2015. The anti-personnel mines destroyed were cleared as spot tasks. Email from William Maina, Mine Action Operations Manager, DDG, 19 May 2016.

⁵⁷ DDG did not conduct minefield clearance in 2015. The anti-personnel mines destroyed were cleared as spot tasks. Email from William Maina, Mine Action Operations Manager, DDG, 19 May 2016.

In 2015, NPA released an area of relatively densely contaminated minefield in Karpeto, Central Equatoria state through technical survey and clearance. In January 2016, UNMAS sent a report to inform NPA that a number of missed mines and UXO had been found in the task by DML, which at UNMAS's request had begun work on an adjacent task that required access through the area NPA had demined. An investigation was carried out by NPA, in collaboration with UNMAS and the NMAA, and with help from DML, which ultimately uncovered 3 anti-personnel mines, 23 anti-vehicle mines, and 11 items of UXO.⁵⁸

Following a rigorous internal investigation, NPA concluded that "the root cause of missing multiple mines and UXO on this task was a trial of errors starting with decisions made to rapidly scale down the programme due to a funding drought. The number of international and national staff was reduced by 70%. The composition of the toolbox was changed, and a transfer of managerial responsibility to local staff was done too quickly, resulting in low morale in the programme and weak management in the field".⁵⁹

NPA reported that of the 'toolbox' used to release the area, which included manual deminers, mine detection dogs, and a MineWolf 240 machine: "The dogs did not miss any mines and the MineWolf 240, when used, performed as predicted, but due to a lack of funds all machines had been withdrawn from the programme and were thus not used for final QC over all areas where mines had been found. This was not in accordance with the methodology ... in the approved implementation plan, which required that all areas where mines had been found would be processed with the MineWolf machine and raked as a final QC measure. In addition, the faulty QA/QC system also aggravated the problem and failed to identify that the drill was too weak".

NPA emphasised that the circumstances of the sudden funding gap and rapid scaling down of the programme, resulting in the change in composition of the toolbox, led to decisions to deviate from the implementation plan which were unique to operations on this particular task, and stated that it was "unlikely that the same mistakes have occurred on past tasks".⁶¹

The NMAA officially suspended NPA's operations on 8 January 2016. Based upon NPA's own recommendations, as well as those by the NMAA, a complete overhaul of the programme was made, all the way up to its senior management. The programme was strengthened

with additional international staff, and all teams went through a complete and successful retraining and reaccreditation package during the first quarter of 2016. NPA recommenced operations in May 2016.⁶²

Progress in 2016

South Sudan continued to make dramatic progress in land release in the first half of 2016. From January to 1 August 2016, some 27km² of mine and ERW contamination was released, including 16.9km² through NTS, 2.5km² through mine clearance and technical survey, and 7.5km² through BAC, with the destruction of a total of 563 anti-personnel mines, 192 anti-vehicle mines, and 9.877 items of UXO.63

Deminer Safety

No demining personnel were reported killed or injured as a result of demining accidents in 2015. However, on 12 April 2016, two members of DDG's EOD team were killed by gunmen when their vehicle was ambushed as they travelled from their base in Yei to the field. The remaining five team members escaped unharmed. ⁶⁴ The outbreak of violence across the Equatorial states in July 2016 affected many operators, including MAG, which experienced an ambush during evacuation to Nimule, on the Ugandan border, resulting in the death of one deminer and injuries to three other staff, who recovered after being transported to Uganda for treatment. ⁶⁵

ARTICLE 5 COMPLIANCE

In accordance with Article 5 of the APMBC, South Sudan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 9 July 2021. South Sudan is not on track to meet this deadline.

Under its existing national mine action strategic plan for 2012–16, South Sudan expects to have surveyed and recorded all SHAs by the end of 2016 to facilitate development of the next strategic mine action plan and to release 5km² of CHA per year through technical survey and/or clearance, corresponding to a total of 25km² for 2012–16.66

- 60 Ibid.
- 61 Ibid.
- 62 Ibid.
- 63 UNMAS, "IMSMA Monthly Report July 2016".

⁵⁸ Emails from Håvard Bach, Chief Technical Advisor, Operational Methods, Department for Humanitarian Disarmament, NPA, 18 October 2016; and Hilde Jørgensen, NPA, 18 October 2016.

⁵⁹ Emails from Håvard Bach, NPA, 18 October 2016; and Hilde Jørgensen, NPA, 18 October 2016.

⁶⁴ Danish Refugee Council, "Two national employees have lost their lives in South Sudan", 12 April 2016, at: http://reliefweb.int/report/south-sudan/two-national-employees-have-lost-their-lives-south-sudan

⁶⁵ Email from Bill Marsden, MAG, 21 October 2016.

⁶⁶ South Sudan, "South Sudan National Mine Action Strategic Plan 2012-2016", Juba, 2012, pp. 16-18.

UNMAS has highlighted the serious obstacles posed to mine action operations by ongoing fighting and insecurity, lack of access to contaminated areas, and new UXO contamination, along with continuing significant challenges from lack of infrastructure and access to vast areas of the country, and the unpredictable rainy seasons. ⁶⁷ Given the current security situation, it is not possible to know if South Sudan could still meet its July 2021 Article 5 deadline.

Table 5: Mine clearance in 2011-1568

Year	Area cleared or reduced (km²)	AP mines destroyed	AV mines destroyed
2015	5.1	1,715	473
2014	2.72	880	357
2013	4.33	845	215
2012	4.20	1,278	156
2011	2.62	3,509	699
Totals	18.97	8,227	1,900

AP = Anti-personnel AV = Anti-vehicle

South Sudan's National Mine Action Strategic Plan budget for 2012–16 is estimated at US\$204 million.⁶⁹ According to UNMAS, no national funding or in-kind support was provided by the Government of South Sudan for mine action activities in 2015, except for the salaries of NMAA staff.⁷⁰ MAG reported that UNMAS's assistance to the NMAA had been reduced to the provision of vehicles and some fuel.⁷¹

In April 2015, NMAA reported that South Sudan would develop a multi-year clearance plan for 2015–17, including projections for clearance targets based on levels of remaining contamination, available resources, and the operational and security environment across the country. It stated that the plan would be published in "subsequent Article 7 reports" and that updates would be provided to states parties. In its Article 7 report for 2015, NMAA stated that as funding for the national mine action programme is directed through UNMAS and NGOs, it could not forecast when clearance might be completed in South Sudan.

UNMAS expected 2016 to be a similarly productive year as 2015. 74 It did not foresee major changes in mine action capacity in South Sudan in 2016, and pledged to continue to support UNMISS's mandate. 75 NPA expected an

increase in funding during the year, which would enable it to add two NTS/technical survey teams. It planned to focus on releasing mine and ERW-contaminated land needed for settlement and agriculture in Greater and Eastern Equatoria states, noting that survey would be conducted in the northern regions once the security situation improved.⁷⁶

Due to ongoing conflict and security challenges in the northern states of South Sudan, MAG planned to concentrate operations in Central and Eastern Equatoria states in 2016, with the aim of these areas becoming free from ERW within five years. New donors would enable it to conduct more NTS in 2016, with five community liaison teams and five technical teams deployed to ensure all hazardous areas have been recorded.⁷⁷

Despite the heightened need for an urgent response to new explosive hazard contamination and the impacts of renewed conflict on the civilian population, many operators have expressed concern over decreased funding for mine action in South Sudan in 2015, with donors prioritising other humanitarian sectors or refusing to fund mine action activities while the conflict is ongoing.⁷⁸

⁶⁷ UNMAS, "About UNMAS in South Sudan", updated March 2015; and UNMAS "About UNMAS in South Sudan," updated May 2016.

⁶⁸ UNMAS, "IMSMA Monthly Report – December 2014"; and response to questionnaire by Robert Thompson, UNMAS, 30 March 2015; and email. 14 October 2016.

⁶⁹ South Sudan, "South Sudan National Mine Action Strategic Plan 2012-2016", Juba, February 2012, p. viii.

⁷⁰ Email from Robert Thompson, UNMAS, 21 April 2016.

⁷¹ Email from Bill Marsden, MAG, 12 May 2016.

⁷² APMBC Article 7 Report (for 2014), Form F.

⁷³ Ibid. (for 2015), Form J.

⁷⁴ UNMAS, "2016 Portfolio of Mine Action Projects: South Sudan", undated but 2016.

⁷⁵ Email from Robert Thompson, UNMAS, 21 April 2016.

⁷⁶ Emails from Hilde Jørgensen, NPA, 19 May 2016.

⁷⁷ Emails from Bill Marsden, MAG, 12 May 2016 and 21 October 2016. In October 2016, MAG reported it had continued to expand its number of teams in 2016 with support for a mechanised MTT funded by the US, an EOD team by Canada, and two additional mechanised MTTs funded by the UK, along with winning a UN contract for two manual MTTs in April 2016.

⁷⁸ Responses to questionnaire by Ismael Frioud, MAG, 9 April 2015; Augustino Seja, NPA, 2 June 2015; and Rickard Hartmann, DDG, 22 May 2015.