

PROGRAMME PERFORMANCE	2017	2016
Problem understood		6
Target date for completion of cluster munition clearance		5
Targeted clearance	8	8
Efficient clearance	6	6
National funding of programme	4	4
Timely clearance	5	5
Land-release system in place	7	7
National mine action standards	8	8
Reporting on progress	6	6
Improving performance	5	7
PERFORMANCE SCORE: AVERAGE	6.0	6.2

PERFORMANCE COMMENTARY

Land release of cluster munition remnant (CMR)-contaminated areas plummeted in South Sudan in 2017, from nearly 3.5km² in 2016 to just over 1km² in 2017. This was largely due to security concerns from the ongoing conflict which greatly affected all mine action operations during the year. As a result of the heightened insecurity, there was a shift away from large area clearance tasks to focus capacity on explosive ordnance disposal (EOD) spot tasks with smaller, more mobile teams, which significantly reduced the amount of area of surveyed and cleared CMR contamination.¹

RECOMMENDATIONS FOR ACTION

- → South Sudan should accede to the Convention on Cluster Munitions (CCM) in 2018 in line with the decision taken by the Council of Ministers to join the Convention announced in September 2017.
- → Operator and national reporting formats should disaggregate submunitions from other unexploded ordnance (UXO). Mine action data should be recorded and reported according to International Mine Action Standards (IMAS) land release terminology, and the national database should clearly reflect cluster munition survey and clearance disaggregated from other contamination.
- → South Sudan should develop a resource mobilisation strategy and initiate dialogue with development partners on long-term support for mine action, including a specific focus on CMR.
- → South Sudan should consider organising a resurvey of areas suspected to contain CMR with a view to more accurately determining the baseline of contamination.
- → South Sudan should increase its financial support for mine action operations. Greater assistance from the government and international partners should be provided to the National Mine Action Authority (NMAA) to strengthen its capacity to develop and implement effective policies to address explosive ordnance. The mandate of the United Nations Mission in South Sudan (UNMISS) should be changed to include support for the capacity development of government institutions and the national mine action programme.

CONTAMINATION

At the end of 2017, South Sudan had a total of 143 areas suspected and confirmed to contain CMR, with a total size estimated at just over 4.5km².² This is a small reduction on the total of 142 areas that remained at the end of 2016 over nearly 4.6km².3 Areas of CMR contamination from decades of pre-independence conflict continued to be identified in 2017, and the threat was compounded by ongoing fighting which broke out in December 2013.4 In March 2018, the United Nations Mine Action Service (UNMAS) informed Mine Action Review that the actual size of CMR contamination is likely to be greater than recorded estimates, as in many of the strike areas multiple cluster munition canisters are found with the consequence that the overall contaminated area extends well beyond an expected standard footprint.5

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 2017, which it said "continues to litter vast swathes of land, roads and buildings" with explosive ordnance. Ongoing insecurity, particularly in the Greater Upper Nile region (Jong lei, Unity, and Upper Nile states), persisted in preventing access to confirm or address CMR contamination.

Seven of South Sudan's former ten states have areas suspected to contain CMR (see Table 1), with Central, Eastern, and Western Equatoria remaining the most heavily contaminated.⁸ Clearance of the last known remaining CMR-contaminated area in Lakes state (with a size of 525m²) was completed in 2017.⁹

From 1995 to 2000, prior to South Sudan's independence, Sudanese government forces are believed to have air dropped cluster munitions sporadically in southern Sudan. Many types of submunitions have been found, including Spanishmanufactured HESPIN 21, US-manufactured M42 and Mk118 (Rockeyes), Chilean-made PM-1, and Sovietmanufactured PTAB-1.5 and AO-1SCh submunitions.¹⁰

In 2006–16, at least 746 sites containing CMR were identified across all 10 states in South Sudan, including new contamination as a result of renewed conflict since December 2013.¹¹ In 2017, an additional 14 CMR-contaminated areas were identified, of which five were cleared during the year.¹² CMR have been found in residential areas, farmland, pastures, rivers and streams, on hillsides, in desert areas, in and around former military barracks, on roads, in minefields, and in ammunition storage areas.¹³

In February 2014, evidence of new CMR contamination was discovered south of Bor, in Jonglei state. ¹⁴ Evidence indicated the cluster munitions had been used in previous weeks during the conflict between opposition forces supporting South Sudan's former Vice President Riek Machar and the Sudan People's Liberation Army (SPLA) government forces, which received air support from Uganda. In September 2014, South Sudan reported that a joint government-UNMAS team had investigated the allegations and established that cluster munitions had been used, but could not determine the user. ¹⁵

Table 1: CMR contamination by Sudanese state (as at end 2017)16

State	CHAs with CMR	Area (m²)	SHAs with CMR	Area (m²)
Central Equatoria	22	468,545	31	880,315
East Equatoria	25	1,867,197	41	595,611
Jonglei	2	29,760	3	10,000
Unity	1	59,000	1	40,000
Upper Nile	0	0	1	0
West Bahr El Ghazal	1	120,000	1	0
West Equatoria	9	213,772	5	249,482
Totals	60	2,758,274	83	1,775,408

CHA = Confirmed hazardous area SHA = Suspected hazardous area

CMR contamination in South Sudan continues to pose a physical threat to local populations, curtails freedom of movement, and significantly impedes development.¹⁷ In 2017, due to the ongoing violence, internally displaced populations remained particularly vulnerable to CMR and other explosive remnants of war (ERW) as they moved across unfamiliar territory. CMR contamination continued to limit access to agricultural land and increased food insecurity, at a time when nearly six million South Sudanese were nutritionally insecure. CMR and other ERW continued to prevent the delivery of food and other vital humanitarian aid.18

Mines Advisory Group (MAG), reported that in its areas of operations in Central Equatoria state, CMR contamination continued to have a humanitarian as well as socio-economic impact, but clearance in and around Tindalo, Terekeka, and Yei counties during the year allowed food aid to be delivered by agencies such as the World Food Programme and released land was used for growing crops and by cattle farmers.¹⁹

Other Explosive Remnants of War and Landmines

South Sudan has a significant problem with mines and ERW, resulting from large-scale use of explosive weapons during armed conflicts in 1955-72 and 1983–2005 (see Mine Action Review's Clearing the Mines report on South Sudan for further information).

At the start of 2018, almost six million people in South Sudan were living with the threat of ERW, including more than 1.8 million South Sudanese internally displaced since the outbreak of fighting in 2013. According to UNMAS, surveys of internally displaced persons identified a fear of ERW as among the most significant reasons for their inability to return home. 20 UNMAS has 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 is "incalculable". 21 In 2017, agricultural production in South Sudan dropped compared with the previous year, attributed in large part to the mass migration of populations and inability to access safe land to cultivate crops.²²

In 2017, a total of 56 persons were reported as mine and ERW casualties (48 injured and 8 killed). In 2016, a total of 45 mine and ERW casualties were recorded (32 injured and 13 killed).²³

PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA) – since named the NMAA – was established by presidential decree in 2006 to act as the national agency for planning, coordination, and monitoring of mine action in South Sudan.²⁴

In 2011, UN Security Council Resolution 1996 tasked UNMAS with supporting South Sudan in demining and strengthening the capacity of the NMAA. UNMAS (with the NMAA) has been overseeing mine action across the country through its main office in Juba, and sub-offices in Bentiu, Bor, Malakal, and Wau. UNMAS is responsible for accrediting mine action organisations, drafting national mine action standards, establishing a quality management system, managing the national database, and tasking operators.²⁵ The NMAA takes the lead on victim assistance and risk education.²⁶

While it is planned that eventually the NMAA will assume full responsibility for all mine action activities, according to UNMAS, the NMAA continued to face serious financial and technical limitations preventing it from managing mine action operations effectively in 2017. It requires substantial resources and capacity building assistance if it is to operate effectively.²⁷

UN Security Council Resolution 1996 authorised UNMISS to support mine action through assessed peacekeeping funds. ²⁸ In May 2014, UN Security Council Resolution 2155, adopted in response to the conflict that broke out in December 2013, effectively ended the mission's mandate to support capacity development of government institutions. In 2018, UNMAS reported that reversing this change in the mission mandate to support the capacity building of government institutions would greatly enhance UNMAS' ability to support the NMAA. ²⁹

Strategic Planning

In 2017, the NMAA, with support from the Geneva International Centre for Humanitarian Demining (GICHD) and funding from Japan, developed the South Sudan National Mine Action Strategy 2018–2022. As at March 2018, it had been finalised but not yet published.³⁰ According to UNMAS, the strategy, which does not contain significant provisions relating to CMR contamination, has three primary objectives and related targets:³¹

Strategic Goal 1: Advocacy and communication of South Sudan's mine/ERW problem continues through national and international awareness raising and adoption and implementation of international conventions to facilitate a mine/ERW-free South Sudan.

Strategic Goal 2: The size of the mine/ERW contamination area is clarified and confirmed and the problem is addressed through appropriate survey and clearance methods; ensuring safe land is handed back to affected communities for use.

Strategic Goal 3: Safe behaviour is promoted among women, girls, boys and men to reduce mine/ERW accidents and promote safe livelihoods activities.

The strategy includes a section on gender and diversity, focusing on how different gender and age groups are affected by mines and ERW and have specific and varying needs and priorities. Guidelines on mainstreaming gender considerations in mine action planning and operations in South Sudan were also incorporated in the strategy.³²

Legislation and Standards

According to UNMAS, the National Technical Standards and Guidelines (NTSGs) for mine action in South Sudan are organic documents subject to constant review. In 2017, the medical and quality management chapters were revised.³³ The NTSGs, which contain provisions specific to CMR survey and clearance, are monitored by UNMAS and the NMAA.³⁴

Quality Management

UNMAS reported that external quality assurance (QA) and quality control (QC) operations were carried out throughout 2017 on all mine action operators in South Sudan, with all teams subject to external inspections by UNMAS and the NMAA.³⁵

Due to constraints on the movement of UN staff due to increasing security concerns, at the end of 2016 UNMAS contracted a private company, Janus Global Operations, to conduct external QA/QC on behalf of UNMAS in South Sudan.³⁶ In 2017, external QA continued to be conducted by Janus as a subcontractor to UNMAS, though QA/QC procedures were updated towards the end of the year.³⁷ UNMAS stated that external quality management process was adjusted to focus more on mentoring field management.³⁸ Operators reported improvements in the QA system in 2017 and better collaboration between Janus/UNMAS and mine action operators.³⁹

Operators

Three international demining non-governmental organisations (NGOs) operated in South Sudan in 2017: DanChurchAid (DCA), Danish Demining Group (DDG), and MAG. Three commercial companies also conducted demining: G4S Ordnance Management (G4S), Mechem, and The Development Initiative (TDI). No national demining organisations were involved in clearance in 2017.40 As noted above, Janus was engaged in quality management for UNMAS.

According to UNMAS, almost 1,000 people were working in mine action operations in South Sudan in 2017. Mine action capacity deployed included two road assessment and clearance teams with four mine detection dogs (MDDs) each: five mechanical clearance teams with integrated manual deminer support (deploying two MineWolf 240, one MineWolf 330; one Bozena, and one PT300 demining machine); 16 eight-person multi-task teams (MTTs); eight nine-person quick reaction teams; four 15-person mine action teams; and 12 explosive ordnance disposal (EOD)/survey teams.

According to UNMAS, all teams are equipped to conduct CMR clearance, but teams are primarily tasked on a geographical basis, and as such, their deployment to clear cluster munition strikes is determined by local prioritisation.41

UNMAS reported that conflict and ongoing insecurity in 2017 undermined the ability of all operators to conduct sustained clearance operations in many parts of the country. This restricted the deployment of mine clearance teams leading to a reconfiguration of resources to field more mobile and smaller teams. Focus shifted to the prioritisation of reactive EOD spot tasks over area clearance and re-survey of previously suspected areas thought to have overstated estimates of contamination.42

UNMAS assigns CMR tasks to operators. In 2017, only three operators, MAG, G4S, and TDI, carried out CMR-related tasks, in contrast to 2016, when CMR survey and clearance activities were undertaken by eight operators (DCA, DDG, MAG, Norwegian People's Aid (NPA), G4S, Mechem, Dynasafe MineTech International (DML), and TDI).

LAND RELEASE

Less than 1.1km² of CMR-contaminated area was released in 2017, a huge decrease from the nearly $3.5 km^2 \, of \, CMR\text{-contaminated}$ area released in 2016. 43 This was due in large part to the shift in overall mine action activities from area clearance tasks to reactive EOD spot tasks due to security constraints. 44 In contrast, in 2016, the bulk of mine action capacity was redeployed to address CMR tasks in response to humanitarian priorities and UN-mission directed activities. 45

Survey in 2017

The UNMAS database indicates that one CMRcontaminated SHA of just under 61,000m² was cancelled by survey in 2017, while 14 SHAs with a total size of 0.7km² were confirmed as contaminated with CMR (see Table 2).46 This compares to 2016, when 55 SHAs of nearly 0.92km² of land were confirmed as contaminated with CMR.47

Table 2: CMR survey in 2017⁴⁸

Operator	SHAs cancelled	Area cancelled (m²)	SHAs confirmed	Area confirmed (m²)
G4S	1	60,958	7	54,760
MAG	0	0	6	475,994
TDI	0	0	1	10,128
Expansion of previously recorded CHAs	0	0	0	176,268
Totals	1	60,958	14	717,150

Clearance in 2017

Just over 1km² of CMR-contaminated area was cleared in 2017, with the destruction of 629 submunitions, as shown in Table 3.⁴⁹ As noted above, this is a significant decrease from 2016, when close to 3.5km² of CMR-contaminated area was cleared, with the destruction of more than 3,000 submunitions.⁵⁰

In addition, in 2017, five operators (DCA, DDG, MAG, G4S, and TDI) conducted battle area clearance (BAC) of just over 8.2km² and closed 1,295 spot tasks, and destroyed a total of 34,600 items of UXO.⁵¹ This is an increase compared to an output of almost 8km² of BAC and 1,947 EOD spot tasks carried out in 2016, and the destruction of close to 20,200 items of UXO.⁵²

Table 3: Clearance of CMR-contaminated areas in 2017⁵³

Operator	Areas cleared	Area cleared (m²)	Submunitions destroyed	AP mines destroyed	AV mines destroyed	Other UXO destroyed
G4S	6	343,057	76	0	0	113
MAG	7	695,742	553	20	3	34
Totals	13	1,038,799	629	20	3	147

AP (mine) = Anti-personnel mine AV (mine) = Anti-vehicle mine

Deminer Safety

Mine action operators continued to face serious threats to the security of their operations and personnel due to the ongoing conflict. In 2017, there was an ambush on a demining contractor in which four personnel were seriously injured. In June 2018, UNMAS reported that an investigation into the incident found it to have been ethnically motivated. There were also several instances of criminality in which teams were robbed by armed groups during the year.⁵⁴

ARTICLE 4 COMPLIANCE

South Sudan is not a state party to the CCM and therefore does not have a specific clearance deadline under Article 4. Nonetheless, South Sudan has obligations under international human rights law to clear CMR as soon as possible.

On 5 September 2017, at the Seventh Meeting of States Parties of the CCM, South Sudan announced its attention to accede to the Convention, stating that its Council of Ministers had taken a decision unanimously on 25 August 2017 to "fully accede" and comply with the terms of the Convention. 55 This is reinforced in South Sudan's new National Mine Action Strategic Plan 2018–2022, which includes a specific objective that South Sudan should accede to the CCM in 2018. 56

Due to the ongoing conflict, it is not possible to predict when South Sudan might complete clearance of CMR on its territory, nor estimate the true extent of contamination. The According to UNMAS, in 2018 the national mine action programme would prioritise re-survey of large SHAs which remained in the database, recorded as far back as 2003, for which there was little evidence to support the recording, in order to better define the extent of contamination. It expected that significant cancellation of previously recorded SHAs would occur as a result, with the effectiveness of the re-survey process dependant on access restrictions posed by ongoing fighting. The strength of the survey process dependent on access restrictions posed by ongoing fighting.

According to UNMAS, the Government of South Sudan is only able to provide minimal funding and support to all national institutions, including the NMAA. In 2017, all mine action activities were funded by the UN or international bilateral donors. 59 UNMAS anticipated that there would be a potential reduction in funding for mine action in 2018, and a corresponding reduction in capacity and limitation on the timeliness of responses. It raised serious concerns over resource mobilisation in the face of overwhelming donor fatigue and frustration due to the ongoing conflict, which continues to exacerbate the emergency humanitarian crisis. Mine action, which is a critical enabler for humanitarian assistance, is not prioritised by donors, who are increasingly unwilling to support Government institutions until a peace agreement is implemented. 60

MAG reported that it was concentrating operations in 2018 in Central Equatoria state with the aim of completing survey of the entire state. Reports of areas of CMR contamination would be prioritised for survey and clearance wherever possible, it said.⁶¹

The surge in fighting in July 2016 had a significant impact on demining activities across the country throughout 2017. The security situation dominated all land release operations in 2017, greatly impeding the ability of clearance operators to deploy personnel and move heavy equipment across the country. Escurity incidents on the majority of road networks severely curtailed transport while increasing support costs compared with previous years. Additionally, the political and ethnic elements of the conflict created a risk for the deployment of deminers based on their ethnicity in certain areas, further restricting areas of mine action operations.

- 1 Emails from Tim Lardner, Chief, Mine Action, United Nations Mine Action Service (UNMAS), 27 February and 1 March 2018.
- 2 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 3 Email from Robert Thompson, Chief of Operations, UNMAS, 19 April 2017.
- 4 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018; and Robert Thompson, UNMAS, 19 April 2017; and UNMAS, "2017 Portfolio of Mine Action Projects: South Sudan", January 2017, at: http://www.mineaction.org/sites/default/files/print/country_ portfolio6892-1530-44691.pdf.
- 5 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018. According to UNMAS, the number of cluster munition strikes recorded is thought to be accurate, however the size of the strike area is likely greater than currently recorded estimates.
- 6 UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan", at: http://www.mineaction.org/sites/default/files/print/country_ portfolio7362-951-78794.pdf.
- 7 Ibid
- 8 Email from Robert Thompson, UNMAS, 19 April 2017.
- 9 Ibid.
- 10 Cluster Munition Monitor, "Country Profile: South Sudan: Cluster Munition Ban Policy", updated 23 August 2014. See also UNMAS, "Reported use of Cluster Munitions South Sudan February 2014", 12 February 2014; and UNMISS, "Conflict in South Sudan: A Human Rights Report", 8 May 2014, p. 26.
- 11 Email from Robert Thompson, UNMAS, 12 May 2014.
- 12 Emails from Richard Boulter, UNMAS, 6 June 2018; and Robert Thompson, UNMAS, 19 April and 7 June 2017.
- 13 UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan"; and South Sudan, "National Mine Action Strategic Plan 2012–2016", Juba, 2012, pp. 4–6, 9.
- 14 UNMAS, "Reported use of Cluster Munitions South Sudan February 2014", 12 February 2014. See also UNMISS, "Conflict in South Sudan: A Human Rights Report", 8 May 2014, p. 26.
- 15 Statement by South Sudan, CCM Fifth Meeting of States Parties, San José, 3 September 2014.
- 16 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 17 Ibid.; and emails from Robert Thompson, UNMAS, 21 April 2016; and Hilde Jørgensen, Desk Officer for Horn of Africa, Norwegian People's Aid (NPA), 19 May 2016.
- 18 UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan".
- 19 Email from Katie Shaw, Programme Officer, MAG, 10 May 2018.
- 20 UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan".
- 21 Ibid.
- 22 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 23 UNMAS, "IMSMA Monthly Report", January 2018.
- 24 "South Sudan De-Mining Authority", undated, at: http://www.goss-online.org/.
- 25 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, 2012, p. iv.
- 26 Response to questionnaire by Robert Thompson, UNMAS, 24 May 2013.
- 27 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 28 UNMISS, "United Nations Mine Action Coordination Centre [UNMACC]", undated, at: http://unmiss.unmissions.org/Default.aspx?tabid=4313&language=en-US.

- 29 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 30 Ibid
- 31 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018; and Richard Boulter, UNMAS, 6 June 2018.
- 32 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 33 Ibid
- 34 Email from Robert Thompson, UNMAS, 21 April 2016; and responses to questionnaires by Robert Thompson, UNMAS, 30 March 2015; and Augustino Seja, NPA, 11 May 2015.
- 35 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 36 Emails from William Maina, Mine Action Operations Manager, DDG, 2 May 2017; and Bill Marsden, Regional Director East and Southern Africa, MAG, 10 May 2017.
- 37 Emails from Katie Shaw, MAG, 10 May 2018; and William Maina, DDG, 6 February 2018.
- 38 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 39 Emails from Katie Shaw, MAG, 10 May 2018; and William Maina, DDG, 6 February 2018.
- 40 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018. NPA and Dynasafe MineTech Limited (DML) ceased operations in South Sudan in 2016.
- 41 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 42 Ibid.; and email from Richard Boulter, UNMAS, 6 June 2018.
- 43 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018; and Robert Thompson, UNMAS, 19 April 2017 and 21 April 2016.
- $\,$ 44 $\,$ Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 45 Email from Robert Thompson, UNMAS, 7 June 2017.
- 46 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 47 Ibid.; and email from Robert Thompson, UNMAS, 19 April 2017.
- 48 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 49 Ibid.; and emails from Mohammad Kabir Rahimi, UNMAS, 18 June 2018; and Katie Shaw, MAG, 18 June 2018.
- 50 Email from Robert Thompson, UNMAS, 19 April 2017.
- 51 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 52 UNMAS, "IMSMA Monthly Report", December 2016.
- Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018; Mohammad Kabir Rahimi, UNMAS, 18 June 2018; and Katie Shaw, MAG, 18 June 2018.
- 54 Emails from Richard Boulter, UNMAS, 6 June 2018; and Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 55 Statement of South Sudan, CCM 7th Meeting of States Parties, Geneva, 5 September 2017.
- 56 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 57 Ibid.; and response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 58 Emails from Richard Boulter, UNMAS, 6 June 2018; and Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 59 Ibid.; and UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan".
- 60 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- Email from Katie Shaw, MAG, 10 May 2018.
- 62 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 63 Email from William Maina, DDG, 6 February 2018.