

# SOUTH SUDAN



## CLEARING THE MINES 2024

ARTICLE 5 DEADLINE: 9 JULY 2026  
NOT ON TRACK TO MEET DEADLINE

### KEY DATA

ANTI-PERSONNEL (AP)  
MINE CONTAMINATION: MEDIUM

NATIONAL ESTIMATE

**5.32** KM<sup>2</sup>

AP MINE  
CLEARANCE IN 2023

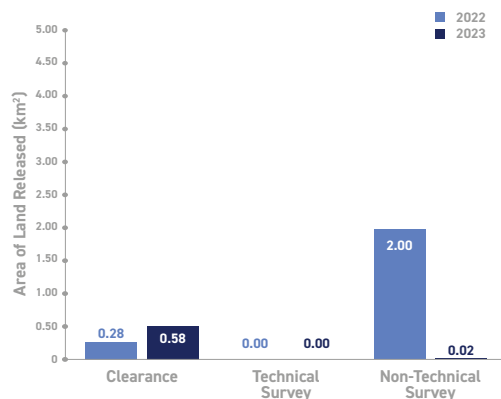
**0.58** KM<sup>2</sup>

AP MINES  
DESTROYED IN 2023

**100**

(INCLUDING 14 DESTROYED  
DURING SPOT TASKS)

### LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **NONE**

## KEY DEVELOPMENTS

South Sudan adopted the Mine Action Authority Act in July 2023 and launched a new five-year mine action strategy through to 2028 in April 2024. South Sudan also acceded to the Convention on Cluster Munitions (CCM) in May 2023. Clearance of cluster munition remnants (CMR) and other unexploded ordnance (UXO) continued to be prioritised over mine clearance in 2023 due to the far higher number of victims they caused. Release of anti-personnel (AP) mined area decreased in 2023 to just under 0.6km<sup>2</sup> from

2.28km<sup>2</sup>, though the 2022 release figure was primarily due to cancellation of a large polygon covering 1.98km<sup>2</sup>. Moreover, AP mine clearance increased to 0.58km<sup>2</sup> in 2023 from 0.28km<sup>2</sup> the previous year. South Sudan acknowledged it will not clear all AP mined areas by its first Anti-Personnel Mine Ban Convention (APMBC) Article 5 extended deadline of 9 July 2026, and expects completion of clearance to be delayed until June 2027.

## FIVE-YEAR OVERVIEW

Over the past five years, the area recorded as contaminated with AP mines in South Sudan has dropped dramatically from a Mine Action Review estimate of 15km<sup>2</sup> at the end of 2018 (when the United Nations Mine Action Service, UNMAS, estimated it at just under 30km<sup>2</sup>)<sup>1</sup> to a national estimate of 5.32km<sup>2</sup> at the end of 2023.<sup>2</sup> Clearance rates have also generally fallen, from a high of 2.08km<sup>2</sup> in 2018 as attention turned to explosive remnants of war (ERW), and clearance

was hindered by insecurity, seasonal rains, flooding, and COVID-19 restrictions.

In recent years, South Sudan has undertaken targeted re-survey and reviewed database records to better estimate the size of suspected hazardous areas (SHAs), and improved its national technical standards and guidelines (NTSGs), information management system, and clearance methods. It has developed its mine action architecture, adopting mine

1 Email from Richard Boulter, Senior Programme Manager, UNMAS, 22 July 2019; and Article 7 Report (for 2018), Form C; and email from Tim Lardner, Chief, Mine Action, UNMAS, 27 February 2018.

2 Email from Deborah Asikeit, Senior Programme Officer, United Nations Mission in South Sudan (UNMISS), on behalf of UNMAS and the NMAA, 30 April 2024; and Updated Work Plan for January 2024 to June 2028, 31 March 2024, p. 5.

action legislation in 2023, and launching a new national mine action strategy in 2024. However, the NMAA continues to require capacity-building support and to lack funding for its work, while funding for the mine action sector is on a downward trend more generally. In 2023, there was an uptick

in clearance to 0.58km<sup>2</sup> mainly due to increased clearance capacity. South Sudan will not, though, meet its first APMBC extension deadline of 9 July 2026 and is likely to request an extension of at least a further year.

## RECOMMENDATIONS FOR ACTION

- South Sudan should increase its financial support for mine action operations as well as to the NMAA.
- South Sudan should develop a resource mobilisation strategy to attract new and former donors, as called for in the new National Mine Action Strategy.
- South Sudan and its mine action partners should continue to support the NMAA to take on greater responsibilities, which is also an objective in the new National Mine Action Strategy.
- South Sudan should ensure that the information management system is nationally owned and can be sustainably managed post-completion.
- South Sudan should continue to strengthen gender mainstreaming across its mine action programme, also an aim of the new National Mine Action Strategy.

## ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2023)	Score (2022)	Performance Commentary
<b>UNDERSTANDING OF CONTAMINATION</b> (20% of overall score)	8	8	Targeted re-survey to better define the estimated size of SHAs continues although access to certain areas depends on improvements in security and is restricted by seasonal rains and flooding. A baseline survey is planned in the future.
<b>NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT</b> (10% of overall score)	5	4	The NMAA continues to face serious financial and technical limitations, preventing it from managing mine action operations effectively, with UNMAS still assuming that function. The government does not fund mine survey or clearance. Strengthening national ownership is a key objective in the new five-year mine action strategy, and the passing of the NMAA Act in 2023 also indicates progress towards increased national ownership.
<b>GENDER AND DIVERSITY</b> (10% of overall score)	6	6	Pursuant to the 2024–28 Strategy, a Gender Equality Policy was due to be finalised in 2024. Existing NTSGs cover gender issues. There is a focus on ensuring gender-balanced survey teams and gender- and age-sensitive data collection and community outreach. Ethnic identity is said to be taken into account to a limited extent within both survey and clearance teams. Commercial firms and international NGOs have sought to improve gender balance in their staff but redressing the gender imbalance remains a long-term challenge.
<b>ENVIRONMENTAL POLICIES AND ACTION*</b> (10% of overall score)	7	Not Scored	UNMAS has incorporated environmental considerations into mine action operations to some extent, providing guidance in the NTSGs, which operators use to develop their own standard operating procedures. Environmental assessments are conducted for operational planning purposes. UNMAS and international NGOs are working to improve their environmental policies and action.
<b>INFORMATION MANAGEMENT AND REPORTING</b> (10% of overall score)	7	7	South Sudan's Article 7 report for 2022 included no mine contamination or land release data but this was rectified in its report for 2023. UNMAS and the NMAA believe that contamination data are "reasonably accurate and certainly evidence-based".
<b>PLANNING AND TASKING</b> (10% of overall score)	7	6	South Sudan launched its new five-year national mine action strategy in April 2024, setting out clear objectives and measurable outcomes. UNMAS and the NMAA have elaborated a supporting work plan through to June 2028.
<b>LAND RELEASE SYSTEM**</b> (10% of overall score)	8	8	A number of NTSGs were strengthened following the 2023 annual review. For example, a number of revisions were made to improve quality control procedures with NTSGs for mechanised vegetation removal introduced and a minimum requirement of explosive ordnance disposal (EOD) Level 2 instituted for clearance team leaders. In 2023, the minimum number of deminers required in clearance teams was increased to 15, providing greater flexibility as teams can split and work independently.

Criterion	Score (2023)	Score (2022)	Performance Commentary
<b>LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE</b> (20% of overall score)	6	6	Mines continue not to be prioritised for clearance over other explosive ordnance that pose a greater threat to life. Clearance increased in 2023, though, compared to the previous year. An updated work plan indicates that South Sudan will not meet its Article 5 July 2026 deadline and will likely request an extension until at least June 2027, although this seems ambitious given that South Sudan has only cleared 2.82km <sup>2</sup> of mined area in the last 5 years.
<b>Average Score</b>	<b>6.8</b>	<b>6.7</b>	<b>Overall Programme Performance: AVERAGE</b>

\* New criterion introduced in 2024 to assess performance.

\*\* The weighting of this criterion was previously 20% of overall performance score, but is now given a 10% weighting.

## DEMINING CAPACITY

### MANAGEMENT CAPACITY

- National Mine Action Authority (NMAA)

### NATIONAL OPERATORS

- None

### INTERNATIONAL OPERATORS

- DanChurchAid (DCA)

- Danish Refugee Council (DRC)
- G4S Ordnance Management (G4S)
- Mines Advisory Group (MAG)
- The Development Initiative (TDI)
- SafeLane Global (SLG)

### OTHER ACTORS

- UN Mine Action Service (UNMAS)

## UNDERSTANDING OF AP MINE CONTAMINATION

As at the end of 2023, South Sudan reported a total of 114 AP mined areas, of which 69 were confirmed hazardous areas (CHAs) and 45 were SHAs, covering a combined total area of just under 5.32km<sup>2</sup> (see Table 1).<sup>3</sup> This is a slight decrease from 5.42km<sup>2</sup> in 2022, with a slight increase in the overall number of contaminated areas from 112 (65 CHAs and 47 SHAs).<sup>4</sup> Resurvey led to an increase in the extent of a number of legacy hazardous areas, which means the contamination figure at the end of 2023 is not commensurate with the amount of land released.<sup>5</sup>

Since a comprehensive database review of all contamination data in 2018 and targeted re-survey, South Sudan has released significant AP mined area.<sup>6</sup> There was an increase in the area cleared of AP mines in 2023 to 0.58km<sup>2</sup> from 0.28km<sup>2</sup> in 2022. The main reason for this was an increase in the number of teams using mechanical assets from two teams in 2022 to four in 2023, and increased deployment of manual clearance teams.<sup>7</sup>

Table 1: AP mined area by state (at end 2023)<sup>8</sup>

State	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )	Total SHA/CHA	Total area (m <sup>2</sup> )
Central Equatoria	41	1,667,755	27	209,945	68	1,877,700
Eastern Equatoria	17	691,973	4	20,183	21	712,156
Jonglei	3	208,802	8	1,656,580	11	1,865,382
North Bahr El Ghazal	2	88,540	0	0	2	88,540
Upper Nile	4	87,791	0	0	4	87,791
Warrap	0	0	1	40,000	1	40,000
West Bahr El Ghazal	1	144,314	0	0	1	144,314

3 Email from Deborah Asikeit, UNMISS, 30 April 2024.

4 Email from Matt Williams, Senior Programme Officer, UNMAS South Sudan, 23 March 2023.

5 Email from Jakob Donatz, Programme Officer, UNMAS UNMISS, 16 July 2024.

6 Revised 2020 Article 5 extension request, p. 11.

7 Email from Deborah Asikeit, UNMISS, 30 April 2024.

8 Ibid. In its Article 7 report for 2023, South Sudan provides the same contamination data at pp. 8–9, but at p. 36, it states that, at 31 December 2023, CHAs with AP mines covered 2,657,070m<sup>2</sup> and SHAs 1,886,708m<sup>2</sup>; this may be an error arising from data transfer.

Table 1 Continued

State	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )	Total SHA/CHA	Total area (m <sup>2</sup> )
Western Equatoria	1	99,398	5	399,824	6	499,222
<b>Totals</b>	<b>69</b>	<b>2,988,573</b>	<b>45</b>	<b>2,326,532</b>	<b>114</b>	<b>5,315,105</b>

UNMAS and the NMAA reported that, at the end of 2023, South Sudan also had 76 suspected and confirmed anti-vehicle (AV) mined areas, covering just under 4.7km<sup>2</sup> (see Table 2).<sup>9</sup> This is a slight increase from the 72 areas covering just over 4.6km<sup>2</sup> reported for the end of 2022.<sup>10</sup>

Table 2: AV mined area only (at end 2023)<sup>11</sup>

CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )	Total SHA/CHA	Total area (m <sup>2</sup> )
50	2,492,839	26	2,489,806	76	4,664,207

Mines were used during five decades of Sudanese civil war in 1955–72 and 1983–2005. The signing of the Comprehensive Peace Agreement in January 2005 led to the secession and independence of South Sudan in July 2011. Following two years of independence and relative peace in South Sudan, heavy fighting erupted in the capital, Juba, in December 2013, initiating new armed conflict across the country. With the signing of the Revitalized Agreement on the Resolution of the Conflict in the Republic of South Sudan (R-ARCSS) in September 2018, the security situation across the country improved, and access was possible to many areas that security issues previously rendered inaccessible.<sup>12</sup> However, the security situation remains fluid, and in 2021 widespread intercommunal violence, banditry, and politically motivated violence affected survey and clearance operations.<sup>13</sup> Security improved in 2022 when there were fewer security-related access issues, but seasonal rains continued to hinder access.<sup>14</sup> The security situation and flooding were less severe in 2023, allowing for access to AP minefields in Jonglei and Upper Nile states.<sup>15</sup>

The only comprehensive, countrywide mine survey to be conducted in South Sudan was a Landmine Impact Survey between 2003 and 2006.<sup>16</sup> In 2017, UNMAS initiated a review of the national Information Management System for Mine Action

(IM SMA) database, which concluded that the extent of much of the AP mine contamination had been over-estimated. UNMAS consequently initiated a process of targeted re-survey aimed at better defining the size of SHAs and re-survey is ongoing.<sup>17</sup> In 2023, 179,311m<sup>2</sup> of previously unrecorded AP contamination was identified (10,000m<sup>2</sup> in Upper Nile, 140,502m<sup>2</sup> in Central Equatoria, and 28,809m<sup>2</sup> in Eastern Equatoria) and added to the database.<sup>18</sup> In 2023, UNMAS conducted a small pilot baseline survey in Unity state, which has very little hazardous area, none of which was contaminated with mines. No new mined areas were identified.<sup>19</sup>

UNMAS and the NMAA believe that contamination data are “reasonably accurate and certainly evidence-based”.<sup>20</sup> However, the picture is not complete as there is suspected AP contamination in inaccessible areas. The National Mine Action Strategy 2024–2028 states that “South Sudan will continue its efforts to better define the boundaries of the AP and CMR contamination to gain clarity on the remaining contamination. This will be achieved through continued analysis of historical land release data, ongoing database clean-up, continuous survey and clearance activities and the implementation of a baseline survey (BLS) in line with South Sudan’s Technical Note.”<sup>21</sup> UNMAS has confirmed the plan to conduct a national baseline survey in the future.<sup>22</sup>

### ABYEI (REGION WHOSE SOVEREIGNTY IS CONTESTED WITH SUDAN)

Since 2011, the status of Abyei has been a contentious issue between South Sudan and Sudan.<sup>23</sup> In the disputed area (known as the “Abyei Box”) and the Safe Demilitarized Border Zone (SDBZ) between Sudan and South Sudan, the extent of mine and ERW

9 Email from Deborah Asikeit, UNMISS, 30 April 2024.

10 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

11 Email from Deborah Asikeit, UNMISS, 30 April 2024.

12 Revised 2020 Article 5 deadline Extension Request, p. 52.

13 Article 7 Report (covering 2020), p. 4; and email from Goran Tomasevic, UNMAS Deputy Chief of Operations (UNMISS), 10 July 2022.

14 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

15 Email from Deborah Asikeit, UNMISS, 30 April 2024.

16 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

17 Email from Fran O’Grady, Chief of Mine Action, UNMISS, 9 March 2022.

18 Email from Deborah Asikeit, UNMISS, 30 April 2024; and Article 7 Report (covering 2023), p. 9.

19 Remarks by Goran Tomasevic, Deputy Chief of Operations, UNMAS, at a meeting with UNMAS, Juba, 30 May 2023; and email from Jakob Donatz, UNMAS UNMISS, 16 July 2024.

20 Email from Deborah Asikeit, UNMISS, 30 April 2024.

21 “South Sudan National Mine Action Strategy 2024–2028”, NMAA, April 2024, p. 19.

22 Email from Deborah Asikeit, UNMISS, 26 April 2024.

23 United Nations Interim Security Force for Abyei (UNISFA), “Abyei”, at: <https://bit.ly/3VGdLai>.

contamination is unknown as a result of security and political issues.<sup>24</sup> In 2023, 599,957m<sup>2</sup> of AP mined area was reportedly cleared in Abyei while 436,474m<sup>2</sup> was added to the database – SHA defined from previous data on the presence of AP mines.<sup>25</sup>

## OTHER EXPLOSIVE ORDNANCE CONTAMINATION

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South Sudan is also contaminated by ERW, including CMR.<sup>26</sup> See Mine Action Review's *Clearing Cluster Munition Remnants 2024* for further information on CMR.

### ABYEI

In 2023, inter-tribal fighting and the involvement of the armed forces within the Abyei Box led to increased ERW contamination (mostly of unexploded rocket-propelled and hand grenades) around central and southern Abyei.<sup>27</sup>

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## NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The NMAA, established by presidential decree in 2006 as the South Sudan Demining Authority (SSDA), is the national agency for planning, coordination, and monitoring of mine action in South Sudan.<sup>28</sup> On 12 June 2023, the National Mine Action Authority Bill was passed by parliament.<sup>29</sup> The legislation guides the implementation of demining and provides for oversight of the NMAA, international and national NGOs, and companies.<sup>30</sup>

In 2011, UN Security Council Resolution 1996 tasked UNMAS with supporting South Sudan in demining and strengthening the capacity of the NMAA, and UNMAS derives its current responsibilities from the United Nations Mission in South Sudan (UNMISS) mandate.<sup>31</sup> Together, UNMAS and the NMAA oversee mine action across the country. The NMAA and UNMAS both have offices in Juba, UNMAS has sub-offices in Bentiu, Bor, Malakal, and Wau, while the NMAA also has offices in Wau and Yei (although the office in Yei was not operational as at April 2024, having closed in 2021 for security reasons).<sup>32</sup>

The NMAA continues to expand its responsibilities gradually. However, it still faces serious financial and technical limitations preventing it from managing mine action operations effectively and UNMAS and international NGOs continue to support the authority.<sup>33</sup> The NMAA does, though, play a significant role in facilitating mine action operations.<sup>34</sup> It chairs monthly coordination meetings with all operators,

while UNMAS has monthly operations meetings with its commercial contractors.<sup>35</sup> The national mine action strategy sets the target of holding one mine action donor coordination meeting per year in 2024–28.<sup>36</sup>

There is generally an enabling environment for mine action operations in South Sudan and the authorities support the necessary administrative processes for granting visas to international staff and importing equipment, and approve memoranda of understanding.<sup>37</sup> The Ministry of Labour sometimes rejects work permit applications for international mine action staff if they deem there to be national workers with the required skills, and in 2023 Mines Advisory Group (MAG) reported facing more persistent delays in receiving work permits and tax exemptions.<sup>38</sup> Delays are often encountered when importing demining equipment as multiple approvals are required from different government offices, which has reduced productivity.<sup>39</sup> In April 2024, the South Sudan National Mine Action Strategy 2024–2028 was launched. The strategy was developed by the NMAA with the support of the Geneva International Centre for Humanitarian Demining (GICHD).<sup>40</sup> (For details see the section below, Planning and Tasking.)

International NGOs reported close collaboration between demining operators, UNMAS, and the NMAA, including in identifying and prioritising areas for AP mine clearance at monthly coordination meetings. The meetings also provided

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24 UNMAS, "2019 Portfolio of Mine Action Projects, Sudan".

25 Email from Jes Lockett, Chief of Mine Action, UNMAS UNISFA, 25 April 2024.

26 On 4 August 2023, South Sudan acceded to the CCM becoming a State Party on 1 February 2024. South Sudan's Article 4 deadline to clear and destroy CMR is 1 February 2034.

27 Email from Jes Lockett, UNMAS UNISFA, 25 April 2024.

28 "South Sudan De-Mining Authority", undated, at: <http://bit.ly/2Y5Eb4o>.

29 South Sudan Parliament passes Mine Authority Act", *No. 1 Citizen Daily Newspaper*, 13 June 2023, at <https://bit.ly/45u4NPM>.

30 South Sudan Parliament passes Mine Authority Act", *No. 1 Citizen Daily Newspaper*, 13 June 2023.

31 Remarks by Fran O'Grady, UNMAS, at a meeting with UNMAS, Juba, 30 May 2023.

32 Emails from Matt Williams, UNMAS South Sudan, 23 March 2023; and Deborah Asikeit, UNMISS, 26 April 2024.

33 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

34 Remarks by Fran O'Grady, UNMAS at a meeting with UNMAS, Juba, 30 May 2023.

35 "South Sudan National Mine Action Strategy 2024–2028", NMAA, April 2024, p. 8.

36 *Ibid.*, p. 16.

37 Email from Lisa Müller-Dormann, Humanitarian Disarmament and Peacebuilding Programme Manager, Danish Refugee Council (DRC), 27 March 2023.

38 Emails from Eric Okoth, Country Director, MAG, 20 March 2023; and from Leah Grace, Programme Officer, MAG, 9 April 2024.

39 Email from John Sorbo, Humanitarian Disarmament and Peacebuilding Programme Manager, DRC, 30 April 2024.

40 Email from Deborah Asikeit, UNMISS, 26 April 2024.

the opportunity to review NTSGs and give feedback on the new national mine action strategy.<sup>41</sup> In 2023, UNMAS and Danish Refugee Council (DRC) were the co-coordinators of the Mine Action Sub-Cluster, with MAG replacing DRC in the final quarter of the year.<sup>42</sup>

UNMAS provided a range of capacity-building support to the NMAA in 2023. MAG continued to accept NMAA staff on MAG training courses but support previously provided by DRC and DanChurchAid (DCA) to national NGOs was scaled down due to lack of funding. The Japan International Cooperation Agency (JIAC) funded and facilitated an NMAA exchange visit to Cambodia in 2023.<sup>43</sup>

Overall, the mine action sector in South Sudan has seen a drop in funding in recent years. The Government of South Sudan provides little financial support to the NMAA. In 2023, it budgeted for support of US\$131,400 but the full amount was not released and, despite the efforts of the NMAA, no funding was provided for survey or clearance.<sup>44</sup> Civil servants did not receive their salaries for many months in 2023.<sup>45</sup> There was no resource mobilisation plan for South Sudan in 2023, but one was due to be developed in 2024 in line with the mine action strategy.<sup>46</sup>

International demining NGOs do not currently have UNMAS contracts. They have indicated that UNMAS requirements make it difficult for them to tender,<sup>47</sup> so they largely rely on

bilateral donor support. While MAG increased its funding in 2023–24,<sup>48</sup> DCA had to close its mine action unit in July 2023 for lack of funding and DRC had to stand down two multi-task teams (MTTs) that month, leaving only a single explosive ordnance disposal (EOD) team. Both MTTs were, though, recalled in August 2023 when other funding was identified.<sup>49</sup> This left two international NGOs (MAG and DRC) funded by donors at the end of 2023.<sup>50</sup>

### ABYEI

The United Nations Interim Support for Abyei (UNISFA) does not have a formal mandate to conduct mine clearance, but UNMAS has continued its UN Security Council-mandated role in Abyei, which includes identification and clearance of mines and route assessment in the Safe Demilitarized Buffer Zone (SDBZ) between Sudan, South Sudan, and Abyei. It operates through an implementing partner, The Development Initiative (TDI),<sup>51</sup> and acts in support of peacekeeping operations, the delivery of humanitarian aid, the safe return of community members, and the safe migration of nomadic herdsmen.<sup>52</sup> In 2023, UNMAS UNISFA discovered and added a total of 436,474m<sup>2</sup> AP mined area to the database.<sup>53</sup> UNMAS received funding of \$9.86 million for its activities in Abyei from 1 July 2022 to 30 June 2023,<sup>54</sup> a reduction on the \$10.54 million that UNMAS received from 1 July 2021 to 30 June 2022.<sup>55</sup>

## GENDER AND DIVERSITY

The National Mine Action Strategy 2024–2028 outlines how South Sudan will ensure that gender and diversity are considered in mine action.<sup>56</sup> The NMAA Act stipulates that at least 35% of the NMAA positions (Board and Management) must be filled by women.<sup>57</sup> A Gender Equality Policy, developed by the GICHD in partnership with UNMAS and NGOs, was being finalised at the time of writing.<sup>58</sup> UNMAS has reported that, in theory, employment opportunities for qualified men and women in survey and clearance teams across the organisations operating in South Sudan are equal. However, redressing the gender balance is a long-term challenge and a work in progress.<sup>59</sup>

41 Emails from Leah Grace, MAG, 9 April 2024; John Sorbo, DRC, 30 April 2024; and Ida Marie Højgaard Jørgensen, Programme Manager – Humanitarian Response and Mine Action, DCA, 8 May 2024.

42 Email from Deborah Asikeit, UNMISS, 26 April 2024.

43 Ibid.

44 Ibid; and Article 7 Report (covering 2023), p. 23.

45 Article 7 Report (covering 2023), p. 23.

46 Email from Deborah Asikeit, UNMISS, 26 April 2024.

47 Interviews with Andrew Steele, Logistics Manager, MAG, 20 May 2023; Lisa Müller-Dormann, DRC, 21 May 2023; and Janardhan Rao, Country Director, DCA, 26 May 2023.

48 Email from Leah Grace, MAG, 9 April 2024.

49 Email from John Sorbo, DRC, 24 May 2024.

50 Email from Jakob Donatz, UNMAS UNMISS, 23 May 2024.

51 Email from Jes Lockett, UNMAS UNISFA, 9 May 2024.

52 UNMAS, "Where we work: Abyei", accessed 23 June 2024, at: <https://bit.ly/3waA8Fr>.

53 Email from Jes Lockett, UNMAS UNISFA, 9 May 2024.

54 Email from Jes Lockett, UNMAS UNISFA, 25 April 2024.

55 UNMAS, "Where we work: Abyei", accessed 30 June 2023.

56 "South Sudan National Mine Action Strategy 2024–2028", NMAA, April 2024, p. 10.

57 Ibid.

58 Email from Deborah Asikeit, UNMISS, 26 April 2024.

59 Email from Ayaka Amano, UNMAS, 2 May 2019.

Ethnic identity is taken into account within survey and clearance teams to ensure safe access and acceptance by local communities.<sup>60</sup> However, UNMAS has indicated that the participation of different ethnic minority groups in survey and clearance continues to be limited.<sup>61</sup> Community liaison staff are said to capture the needs of different groups including vulnerable and minority groups such as internally displaced persons (IDPs) and refugees, which feeds into operational priorities.<sup>62</sup> UNMAS has, though, acknowledged that task prioritisation is predominantly dependent on security and that resources are concentrated on tasks within limited geographical areas.<sup>63</sup>

Among UNMAS-contracted companies, an increased focus on gender and diversity in procurement reportedly led to a greater number of women in technical and managerial functions in 2022, and indicated an “increase of female personnel across the sector”.<sup>64</sup> Data provided for the end of 2023, however, indicated little change had been achieved with the overall proportion of female staff remaining low.

**Table 3: Gender composition of operators (at end 2023)<sup>65</sup>**

Organisation	Total staff	Women staff	Managerial and supervisory staff	Women in managerial or supervisory positions	Total operational staff	Women in operational positions
UNMAS	50	14 (28%)	13	5 (38%)	9	3 (33%)
G4S	397	63 (16%)	57	3 (5%)	84	11 (13%)
SLG	172	43 (25%)	19	3 (16%)	139	40 (29%)
TDI	126	21 (17%)	11	1 (9%)	121	14 (12%)
MAG	157	55 (35%)	33	5 (15%)	121	45 (37%)
DRC*	64	16 (25%)	7	1 (14%)	43	11 (26%)
DCA**	25	6 (24%)	6	1 (17%)	21	3 (14%)
<b>Totals</b>	<b>991</b>	<b>218 (22%)</b>	<b>146</b>	<b>19 (13%)</b>	<b>538</b>	<b>127 (24%)</b>

\* DRC figures at April 2024. \*\* DCA figures until August 2023, when the demining programme closed, DCA also had three women in its risk education team.<sup>66</sup>

As regards international NGO operators, the proportion of female staff has generally been slightly higher. During the reporting period, initiatives included strengthening gender equality in mine action by holding women-only demining training, and developing gender action plans.<sup>67</sup> Focus on female representation increased, with a woman deminer workshop held in February 2024 in collaboration with UNMAS to kick-start the process.<sup>68</sup> Discussions on capacity strengthening of female staff to support their access to more senior positions were said to be “ongoing”, but this requires additional funding, according to one NGO.<sup>69</sup>

MAG’s Global Gender Advisor conducted a week-long needs assessment in October 2023 to improve its understanding of the barriers that female staff face in progressing to

managerial and supervisory roles and an action plan is to be launched in 2024.<sup>70</sup> The advisor is working with the country team to ensure gender and diversity are included in programme design and implementation and to support gender mainstreaming across the organisation in South Sudan.<sup>71</sup> MAG continues to ring-fence spaces on all trainings for female staff and encourages women to apply for new positions. DRC has allocated a budget to send at least one female deminer to attend EOD Level 3 training in Denmark in 2024 and has provided land rights and livelihood training for female beneficiaries in clearance areas.<sup>72</sup>

MAG and DCA aim to include representatives from different ethnic and minority groups with equal opportunity for all qualified individuals to apply and be considered for

60 Email from Richard Boulter, UNMAS, 8 July 2020.

61 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

62 Ibid.

63 Emails from Ayaka Amano, UNMAS, 2 May 2019; and Matt Williams, UNMAS South Sudan, 23 March 2023.

64 Email from Matt Williams, UNMAS South Sudan, 3 May 2023; and Article 7 Report (covering 2023), p. 23.

65 Emails from Deborah Asikeit, UNMISS, 26 April and 30 July 2024; and Jakob Donatz, UNMAS UNMISS, 16 July 2024.

66 Email Ida Marie Højgaard Jørgensen, DCA, 16 May 2024.

67 Email from Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

68 Email from Jakob Donatz, UNMAS UNMISS, 16 July 2024.

69 Email from Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

70 Email from Leah Grace, MAG, 9 April 2024.

71 Ibid.

72 Email from John Sorbo, DRC, 30 April 2024.

employment, but indicate that recruitment is purely based on qualification and skills.<sup>73</sup> MAG and DCA employ casual labourers and cooks from the local community on a rotating basis in accordance with guidance from local chiefs to spread the benefits of employment among communities.<sup>74</sup> DRC is pursuing a localisation approach, recruiting survey and liaison teams from different ethnic groups in its project locations, while clearance teams are composed of different ethnic groups and are roving unless there are security concerns.<sup>75</sup> DCA teams always employ a local person to assist in their work and to translate to local languages where such skills are lacking among their existing staff.<sup>76</sup>

DCA staff are trained on protection and safeguarding, and women are offered different items in their field kits to men (more soap and hygiene products) based on consultations with female staff.<sup>77</sup> In addition, DCA is proposing training risk education and community liaison teams on protection issues so teams can facilitate referrals if they identify any protection cases during their community visits.<sup>78</sup> DCA mainly operates in agricultural areas (as part of the integration of mine action and food security and livelihoods under the theme "from Hazard to Harvest"), which means that operations

often affect women disproportionately because women do the majority of farming work. As a result, all operations are coordinated with women in relation to harvest times, but also with their daily lives i.e. the mechanical asset is stopped at certain times so people can pass by.<sup>79</sup>

#### ABYEI

In Abyei, UNMAS UNISFA implemented its Gender and Diversity Work Plan 2019–2023. The work plan focuses on the following strategic objectives: UNMAS field programmes are staffed by a diverse workforce whose retention is supported through professional development and an enabling environment; women and men, including under-represented groups, are equally represented in UNMAS field programme leadership roles; and the diversity of UNMAS field personnel is improved. Relevant mine action data are disaggregated by gender and age and UNMAS is an active participant in UNISFA's Gender and Diversity Working Group.<sup>80</sup> In practice, however, only 9% of all operator staff are women as are 10% of managerial or supervisory staff, and there are no women in operational positions.

**Table 4: Gender composition of operators in Abyei (at May 2024)<sup>81</sup>**

Organisation	Total staff	Women staff	Managerial and supervisory staff	Women in managerial or supervisory positions	Total operational staff	Women in operational positions
UNMAS UNISFA	15	6 (40%)	3	0 (0%)	3	0 (0%)
TDI	140	8 (6%)	17	2 (11%)	109	0 (0%)
<b>Totals</b>	<b>155</b>	<b>14 (9%)</b>	<b>20</b>	<b>2 (10%)</b>	<b>112</b>	<b>0 (0%)</b>

## ENVIRONMENTAL POLICIES AND ACTION

The National Mine Action Strategy 2024–2028 highlights that South Sudan ranks as the second most vulnerable country to natural hazards globally, though there is little explicit focus on the environment in the strategy.<sup>82</sup> UNMAS has incorporated environmental considerations into mine action operations, in collaboration with the NMAA, providing guidance in the NTSGs.<sup>83</sup> The NTSG on Health and Safety, Social and Environment (HSSE), introduced in 2018, is said to be in line with IMAS 07.13 on Environmental Management in Mine Action.<sup>84</sup> This is updated annually, and amendments were made to the NTSG in 2023 on conducting

environmentally compliant disposal and the subsequent treatment of the "Free From Explosives" metal scrap.<sup>85</sup> Environmental assessments are conducted for planning to determine the impact of different demining assets in line with the National Environment Policy.<sup>86</sup> Since 2023, all demining teams follow the Waste Management Policy in accordance with the HSSE guidelines during operations, at camp sites and during travel times. The use of incinerators is a requirement in the disposal of small arms ammunition, while camp sites are adopting the use of solar panels for energy.<sup>87</sup>

73 Emails from Leah Grace, MAG, 9 April 2024; and Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

74 Emails from Leah Grace, MAG, 9 April 2024; and Ida Marie Højgaard Jørgensen, DCA, 8 and 16 May 2024.

75 Email from Lisa Müller-Dormann, DRC, 27 March 2023; and John Sorbo, DRC, 30 April 2024.

76 Email from Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

77 Ibid.

78 Ibid.

79 Ibid.

80 Email from Jes Luckett, UNMAS UNISFA, 9 May 2024.

81 Ibid.

82 "South Sudan National Mine Action Strategy 2024–2028", NMAA, April 2024, p. 4.

83 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

84 Voluntary CCM Article 7 Report (covering 2020), Form I.

85 Emails from Matt Williams, UNMAS South Sudan, 23 March 2023; and Deborah Asikeit, UNMISS, 26 April 2024.

86 Email from Deborah Asikeit, UNMISS, 26 April 2024.

87 Ibid.

South Sudan's Article 7 report covering 2023 highlights that over the last five years South Sudan has experienced adverse effects of climate change on operations in several ways, including limited access due to extreme flooding; extended periods of flooding; longer rainy seasons which shorten the window for mine action operations; and seasons becoming more irregular and less predictable, posing challenges to planning. The report also notes that there has been no assessment of the potential impact of leakages of explosive material into the ground, of the risk of wildfires due to unplanned explosions, or of the killing or injuring of livestock and wildlife due to demining activities. South Sudan highlights the need for a study of the impact of AP mine demolitions on soil.<sup>88</sup>

Implementing partners in South Sudan establish their own standard operating procedures (SOPs) and policies based on the relevant NTSG, which are accredited by UNMAS/the NMAA to ensure alignment with the NTSGs.<sup>89</sup> When survey and clearance are completed, an area should be restored in accordance with the wishes of the local community. At a minimum, restoration should include the removal of large items of scrap metal, the filling in of any pits or craters due to EOD, and the fencing off of any areas where there may be residual non-explosives hazardous materials left in the ground.<sup>90</sup> To minimise the impact of mine action activities on the environment, UNMAS has continued to sensitise mine action operators in South Sudan on environmental considerations in planning demolitions as well as in post-demolition procedures, during mechanical operations, and when conducting vegetation clearance.<sup>91</sup>

The international NGOs have embedded environmental considerations in their operations. DRC conducts environmental assessments of hazardous areas with the support of community leaders and key community members.<sup>92</sup> In 2023, DRC began reviewing its implementation measures to minimise environmental harm during demining operations resulting in some key changes: using vegetation trimmers that are more environmentally friendly; enhancing waste management protocols; improving energy efficiency at demining camps including by using solar power; and optimizing route planning to minimize fuel consumption.<sup>93</sup> In addition, DRC integrates climate risk assessments into its planning.<sup>94</sup> DCA considers environmental impact during

clearance operations and climate-related risks, and plans accordingly, especially when using its mechanical asset. Following an organisation-wide environmental assessment in South Sudan in 2023,<sup>95</sup> DCA's SOP was updated from March 2024 with an assessment tool, best practices, avoidance and mitigation measures, and guidance on how to develop environmental protection capacity.<sup>96</sup>

MAG has begun to incorporate environmental considerations into survey and clearance planning, and this approach will be fully formulated in 2024.<sup>97</sup> In 2023, MAG introduced solar-powered security lights on its demining camps, it continues to conduct site remediation when leaving its camps, and there has been a merging of camps to ensure optimal use of diesel generators. MAG combines vehicle movements to reduce fuel consumption and ensures only necessary travel.<sup>98</sup> On MAG's worksites and temporary accommodation facilities, there are robust sanitary and waste management systems and environmental considerations are integrated into daily operations and programming. Mechanical assets are only used when necessary. MAG's community liaison teams maintain contact with community leaders and provide an opportunity for feedback, including on possible environmental damage.<sup>99</sup> MAG factors into its work plan potential disruptions to operations from flooding, high daytime temperatures, and other climate "events", and has mitigation measures in place to ensure staff safety.<sup>100</sup>

#### ABYEI

UNMAS complies with UNISFA's environmental management policy, which is tailored to mine action in the UNISFA Mine Action Technical Standards and Guidelines (Chapter 16 Environmental, Health and Safety) and with IMAS 07.13 (on environmental management in mine action). UNMAS, in collaboration with the UNISFA Facilities and Environmental Management Unit, conducts environmental assessments to support the planning and delivery of survey and clearance tasks. Climate-related risks are taken into account when planning demining tasks, and are a daily consideration during the extreme heat of the dry season, which can cause exhaustion among personnel, and during the rainy season, which can cause the migration of mines.<sup>101</sup>

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88 Article 7 Report (covering 2023), pp. 5–6.

89 Email from Jakob Donatz, UNMAS UNMISS, 16 July 2024.

90 APMBC Article 7 Report (covering 2021), Form B.

91 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

92 Email from John Sorbo, DRC, 30 April 2024.

93 Ibid.

94 Ibid.

95 Interview with Janardhan Rao, DCA, 26 May 2023.

96 Email from Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

97 Email from Leah Grace, MAG, 9 April 2024.

98 Ibid.

99 Email from Eric Okoth, MAG, 20 March 2023.

100 Email from Leah Grace, MAG, 9 April 2024.

101 Email from Jes Luckett, UNMAS UNISFA, 9 May 2024.

## INFORMATION MANAGEMENT AND REPORTING

A comprehensive review of all data in South Sudan's IMSMA database began in 2018, along with re-survey of recorded SHAs and CHAs whose size was thought to be exaggerated or location misrecorded. The database review found that past efforts to upgrade the IMSMA software package had led to serious data loss, which inhibited efforts to present an accurate record of the history of mine action in South Sudan. The review resulted in significant gains in the understanding of mine and ERW contamination. In 2021, South Sudan upgraded its database to IMSMA Core<sup>102</sup> and in 2022 the major transition of IMSMA information to Survey123 was completed.<sup>103</sup>

South Sudan has submitted an Article 7 report every year since 2012. Its Article 7 report covering 2022 did not contain any data on AP mine contamination or the release of mined area,<sup>104</sup> though this data was provided in its most report for 2023.<sup>105</sup>

### ABYEI

UNMAS UNISFA uses IMSMA Core, and employs an information management officer to monitor, verify, and evaluate the data entered on the database.<sup>106</sup>

## PLANNING AND TASKING

In April 2024, the South Sudan National Mine Action Strategy 2024–2028 was formally endorsed by the Office of the President, effectively making it a formal government document.<sup>107</sup> Developed with the support of the GICHD,<sup>108</sup> the new strategy lists clear outcomes under three headings: National Ownership, Land Release, and EORE and Victim Assistance, with corresponding indicators, baselines, and targets.<sup>109</sup>

South Sudan has updated its work plan for all EO clearance, and submitted it to the APMBC Implementation Support Unit (ISU) for review.<sup>110</sup> In the work plan, South Sudan acknowledges that it will not meet its Article 5 deadline of 9 July 2026 and is working towards a completion date of June 2027 for AP mine clearance.<sup>111</sup> However, this is subject to funding and seems ambitious given that South Sudan has only cleared 2.82km<sup>2</sup> of mined area in the last five years. The NMAA has reiterated that logistical and security challenges continue to hinder clearance.<sup>112</sup> It also states that following its ratification of the Convention on Cluster Munitions in August 2023, adjustments to the APMBC work plan were “imperative to include the necessary timeframe, capabilities, and financial implications for cluster munition threats”, to tailor strategies

to the “evolving security and environmental conditions”, and so that an “Article 5 extension aligns with the National Mine Action Strategy 2024–2028”.<sup>113</sup> Clearance rates, however, had already shown that South Sudan would not meet its July 2026 deadline. Under the old work plan (January 2022–June 2026) South Sudan, for a second consecutive year, should have cleared 2.73km<sup>2</sup> of AP mined area in 2023,<sup>114</sup> but as indicated above, only cleared 0.58km<sup>2</sup>,<sup>115</sup> while in 2022, it only cleared 0.28km<sup>2</sup>.<sup>116</sup>

Of the 114 remaining AP mine hazardous areas (5,315,105m<sup>2</sup>), South Sudan states that 34 (2,057,993m<sup>2</sup>) need further survey; 39 (1,009,645m<sup>2</sup>) will be manually cleared; and the other 41 (2,247,467m<sup>2</sup>) will be mechanically cleared.<sup>117</sup> The work plan estimates an (ambitious) average annual requirement of clearing 1.46km<sup>2</sup> of AP mined area per year (through manual and mechanical clearance). Assuming UNMISS funding is approved, the aim is to clear all AP mined area by 2027.<sup>118</sup> South Sudan has stated that it would define its APMBC completion processes during the 2025 mid-term strategy review, to ensure these processes are “clarified, standardised and transparent”.<sup>119</sup>

102 Emails from Fran O'Grady, UNMISS, 9 March 2022; and Sasha Logie, GICHD, 21 April 2022.

103 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

104 Article 7 Report (covering 2022).

105 Article 7 Report (covering 2023).

106 Email from Johan Maree, Chief of Operations, UNMAS UNISFA, 27 July 2023.

107 Email from Deborah Asikeit, UNMISS, 26 April 2024.

108 “South Sudan National Mine Action Strategy 2024–2028”, NMAA, April 2024, p. 13.

109 *Ibid.*, pp. 16–24.

110 Email from Deborah Asikeit, UNMISS, 26 April 2024.

111 Updated Work Plan for January 2024 to June 2026, 31 March 2024, p. 5.

112 Article 7 Report (covering 2023), p. 10.

113 Updated Work Plan for January 2024 to June 2026, 31 March 2024, p. 5.

114 Updated Work Plan for January 2022 to June 2026, dated 31 April 2022, p. 5.

115 Email from Deborah Asikeit, UNMISS, 30 April 2024.

116 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

117 Updated Work Plan for January 2024 to June 2026, 31 March 2024, p. 8.

118 *Ibid.*, p. 9; alternative figures are provided at pp. 13–15 focusing on manual and mechanical clearance separately.

119 *Ibid.*, p. 19.

The work plan sets out the clearance capacity required to clear AP mines, and disaggregates contamination, clearance method, and time required, by region.<sup>120</sup> It estimates that to complete all EO clearance by 2028, a total of US\$109 million will be needed (US\$29.45 million in 2024, US\$30.4 million in 2025; US\$17.3 million in 2026; US\$17.3 million in 2027, and US\$6.25 million in 2028).<sup>121</sup>

Particular challenges are raised by areas of the country that remain underwater following widespread flooding in recent years. It is estimated that 1.7km<sup>2</sup> of known AP mine threats remain underwater in Canal-Pigi (Jonglei state) and New Fangak (Upper Nile state). With one mechanical clearance asset (MW-240) it could take, for example, as many as 15 years to clear known AP mined areas in Canal-Pigi, where the rainy season means the operational window is just four months a year, but with three MW-240s, the AP mines in Canal-Pigi could be cleared by June 2027.<sup>122</sup>

The suggested new APMBBC clearance deadline is based on a projection of current resources and assumes no further deterioration in the country's economic or security situation.<sup>123</sup> It also assumes that flooded areas in Jonglei and Upper Nile will be accessible by June 2025; that few additional mined areas will be identified; that survey will cancel or reduce recorded hazards to accurate polygons; and that projected clearance rates can be sustained.<sup>124</sup> Alongside clearance efforts, South Sudan will seek support to develop a regionally based coordination mechanism to address reports of hazardous items and undertake survey of newly identified hazardous areas. In the early years, the aim is that an independent entity, such as an international NGO will capacity build the NMAA to take the lead on this. The work plan assumes that about another 7km<sup>2</sup> of land will need to be searched for AP mines.<sup>125</sup>

South Sudan reports that the programme applies a balanced approach to the clearance of areas contaminated by different types of ordnance, in line with the annual work plan and competing priorities. The commitment to declare South Sudan free from AP mines by June 2026 in line with Article 5 of the APMBBC influences the allocation of resources, but in 2023 most clearance teams continued to work on CMR clearance.<sup>126</sup>

In order to coordinate survey and clearance with international NGOs, where activities are guided by the NGOs' own agendas, UNMAS conducts two annual workshops, where priorities and seasonal clearance work plans are developed and approved. Prioritisation depends on a number of factors linked to the UNMISS mandate—particularly the protection of civilians and the creation of conditions conducive to delivery of humanitarian assistance—but also seasonal access, insecurity, accidents, and support to vulnerable communities.<sup>127</sup> The new work plan indicates that South Sudan will continue to take a pragmatic approach to the sequencing of tasks, deploying clearance teams through a process that aims to balance "security, logistical requirement and concentration of effort".<sup>128</sup> Task dossiers continue to be issued in a timely and effective manner according to international NGOs.<sup>129</sup>

#### ABYEI

In 2023, UNMAS UNISFA continued to work on identified mined areas with an "integrated" approach.<sup>130</sup> There was a plan to increase the daily clearance rate through using a newly contracted clearance/ground preparation machine (MW370).<sup>131</sup>

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## LAND RELEASE SYSTEM

### STANDARDS AND LAND RELEASE EFFICIENCY

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South Sudan's NTSGs, which outline the technical requirements expected of all demining operators working in South Sudan, are adapted from the IMAS. The NTSGs are annually reviewed and revised by UNMAS and implementing

partners and then approved by the NMAA,<sup>132</sup> taking into account any lessons learned during the year and any changes in the IMAS.<sup>133</sup> In 2023, amendments included elaborating procedures for mechanised vegetation removal, and

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120 Ibid., pp. 20–23 and 26–36.

121 Ibid., p. 36.

122 Ibid., pp. 9–10.

123 Email from Deborah Asikeit, UNMISS, 30 April 2024; and Updated Work Plan for January 2024 to June 2026, 31 March 2024, pp. 37–38.

124 Updated Work Plan for January 2024 to June 2026, 31 March 2024, pp. 37–38.

125 Ibid., p. 23.

126 Email from Deborah Asikeit, UNMISS, 26 April 2024.

127 Ibid.

128 Updated Work Plan for January 2024 to June 2026, 31 March 2024, p. 25.

129 Emails from Leah Grace, MAG, 9 April 2024, Ida Marie Højgaard Jørgensen, DCA, 8 May 2024; and John Sorbo, DRC, 30 April 2024.

130 Email from Jes Luckett, UNMAS UNISFA, 26 April 2024.

131 Ibid.

132 Article 7 Report (covering 2019), Form 4; and email from Jakob Donatz, UNMAS UNMISS, 16 July 2024.

133 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

IMAS EOD Level 2 was introduced as a minimum level of competency for team leaders.<sup>134</sup> In 2024, MAG asked UNMAS to accredit community liaison teams for NTS as they have received the requisite training.<sup>135</sup>

In 2022, standards for a new clearance method—broadly termed manual linear-section-based methodology by UNMAS—were developed and added.<sup>136</sup> This approach involved clearance being conducted sideways along a baseline rather than, as in conventional clearance, away from the baseline into the mined area.<sup>137</sup> UNMAS said it had employed this model for reasons of efficiency on the basis that dedicated detector-search deminers can conduct uninterrupted detector search in a linear fashion throughout the work day, while support deminers conduct other preparatory and follow-up activities, such as vegetation cutting and removal, search lane set-up, and signal investigation. Additional advantages related to quality management, command and control, and a comfortable working position for deminers.<sup>138</sup> The method was piloted in a mixed minefield, which was cleared. However, various challenges arose with use of the method

in areas and in soil with high levels of metal. The efficiency and effectiveness may be tested in the future in areas with suitable conditions, otherwise the preferred method remains mechanical clearance.<sup>139</sup>

DCA noted that prior to having to close its mine action programme due to a lack of funding, it changed its operational set-up to a rolling structure with no stand-downs other than for Christmas, saving considerable time previously allocated to refresher trainings and accreditation, resulting in an increase in its clearance rate in 2022 and in 2023.<sup>140</sup>

UNMAS has noted that the NTSGs require all mine action teams to conduct regular internal quality assurance (QA), along with QC sampling of 10% of each area cleared.<sup>141</sup> The minimum frequency for the organisational senior management internal QA visits to each team was set at one per month in 2021, and a standardised scoring matrix was introduced for the EOD written examination.<sup>142</sup> The QA requirement for manual mine clearance was changed to 100% in 2021.<sup>143</sup>

## OPERATORS AND OPERATIONAL TOOLS

Clearance teams in South Sudan are normally accredited for and deployed to a variety of tasks, including AP and AV mine clearance, CMR clearance, EOD, and risk education. None is exclusively allocated to AP mine activities. All teams are accredited to conduct multiple mine action activities, including clearance. Among international NGOs, only DCA conducted any release of AP mined area in 2023, before their programme closed in July 2023.<sup>144</sup>

In contrast, UNMAS reported that a total of 31 teams (three commercial companies: G4S, TDI, and SLG; and three international NGOs: DCA, DRC, and MAG) were accredited for AP mine and CMR survey and clearance in 2023 (NB DCA only fielded two teams until July 2023);<sup>145</sup> and of these, only the three commercial operators conducted NTS of AP mined area, and together with DCA, conducted AP mine clearance.<sup>146</sup> This is an overall decrease from 36 teams in 2022, with one international NGO operator (DCA) completely ceasing operations during 2023 due to a lack of funding.<sup>147</sup> The number of operational personnel involved in technical survey (TS) and clearance during 2023 was 393 (see Table 5), down from 447 personnel in 2022.<sup>148</sup>

UNMAS reported that among its contracted commercial operators, the minimum number of deminers required in clearance teams was increased from 10 deminers in 2022 to 15 from 2023, providing greater flexibility and efficiency as teams can split and work independently for prolonged periods of time.<sup>149</sup> It also increased the number of Integrated Clearance Capacity (ICC) teams among its contracted commercial operators from two to four and carefully considered different mechanical assets (two MW240, a MW330, and a GCS100) for required outputs and deployability. A mechanical asset, the GCS100, was introduced after the reporting period, which is small and lightweight, and easier to transport to hard-to-reach areas.<sup>150</sup>

134 Email from Deborah Asikeit, UNMISS, 26 April 2024.

135 Email from Leah Grace, MAG, 9 April 2024.

136 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

137 Email from Matt Williams, UNMAS South Sudan, 25 July 2023.

138 Emails from Matt Williams, UNMAS South Sudan, 14 and 16 August 2023.

139 Emails from Deborah Asikeit, UNMISS, 30 April 2024; and Jakob Donatz, UNMAS UNMISS, 16 July 2024.

140 Email from Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

141 Email from Ayaka Amano, UNMAS, 2 May 2019.

142 Email from Fran O'Grady, UNMISS, 9 March 2022.

143 Email from Jakob Donatz, UNMAS UNMISS, 16 July 2024.

144 Email from Ida Marie Højgaard Jørgensen, DCA, 4 May 2024.

145 Email from Deborah Asikeit, UNMISS, 26 April 2024.

146 Email from Deborah Asikeit, UNMISS, 30 April 2024.

147 Emails from Matt Williams, UNMAS South Sudan, 23 March 2023; and Deborah Asikeit, UNMISS, 26 April 2024.

148 Ibid.

149 Emails from Deborah Asikeit, UNMISS, 30 April 2024; and Jakob Donatz, UNMAS UNMISS, 16 July 2024.

150 Ibid.

UNMAS did not expect any major changes in the number of survey or clearance personnel in 2024.<sup>151</sup> MAG, however, did deploy an additional demining team in May 2024, focusing on survey and clearance of AP mines in Magwi in Eastern Equatoria.<sup>152</sup> DRC has submitted a number of funding proposals and hopes to increase the number of clearance personnel in 2024.<sup>153</sup> As at May 2024, DCA only had a risk education team and was awaiting the outcome of funding applications so it could restart survey and clearance.<sup>154</sup>

**Table 5: Operational TS and clearance capacities deployed in 2023 (data provided by UNMAS)<sup>155</sup>**

Operator	Manual teams	Total deminers	Dogs and dog handlers	Mechanical assets
G4S	14	210	4 / 2 (2 x MDD teams)	2 (2 x TRAXX RC562 for ground preparation)
SLG	5	75	0	0
TDI	2	20	0	2 (1 x MW240, 1 x MW330)
MAG*	6	54	0	3 (1 x PT300, 2 x Bozena 4)
DRC**	3	22	0	0
DCA***	1	9/12	0	1 MW240 from August 2022–July 2023
<b>Totals</b>	<b>31</b>	<b>390/393</b>	<b>4 dogs and 2 handlers</b>	<b>8 including the TRAXX RC 562</b>

\* Including two EOD teams with 14 personnel; MAG did not undertake any AP mine clearance in 2023.

\*\* DRC had two MTT teams and one EOD team. The two MTTs were stood down in July 2023 due to funding but were recalled in August.<sup>156</sup>

\*\*\* DCA had one team with nine personnel, which was increased to twelve until July 2023 when the programme closed.<sup>157</sup>

## ABYEI

TDI, an international commercial company, is the only organisation conducting survey and clearance of mines in Abyei. UNMAS UNISFA operates with integrated teams that have survey, community liaison, and clearance capacities.<sup>158</sup>

**Table 6: Operational NTS and TS capacities deployed in Abyei in 2023<sup>159</sup>**

Operator	NTS teams	NTS personnel	TS teams	Total TS personnel	Comments
TDI	2	20	2	20	NTS and TS activities are led by a technical field manager and a team leader. Each team can be split into two.
<b>Totals</b>	<b>2</b>	<b>20</b>	<b>2</b>	<b>20</b>	

**Table 7: Mine clearance capacities deployed in Abyei in 2023<sup>160</sup>**

Operator	Manual clearance teams	Total deminers	No. of mechanical assets/machines	Comments
TDI	2	20	2	Each team can be split into two.
<b>Totals</b>	<b>2</b>	<b>20</b>	<b>2</b>	

151 Email from Deborah Asikeit, UNMISS, 26 April 2024.

152 Emails from Leah Grace, MAG, 9 April 2024; and Eric Okoth, MAG, 9 July 2024.

153 Email from John Sorbo, DRC, 30 April 2024.

154 Email from Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

155 Emails from Deborah Asikeit, UNMISS, 26 April 2024; Jakob Donatz, UNMAS UNMISS, 16 July 2024; Leah Grace, MAG, 9 April 2024 and 16 May 2024; John Sorbo, DRC, 24 May 2024, Ida Marie Højgaard Jørgensen, DCA, 8 and 16 May 2024.

156 Email from John Sorbo, DRC, 24 May 2023.

157 Email from Ida Marie Højgaard Jørgensen, DCA, 16 May 2024.

158 Email from Jes Lockett, UNMAS UNISFA, 9 May 2024.

159 Ibid.

160 Ibid.

In 2023, there was a reduction in team strength due to the removal of an integrated clearance team which had operated in 2022. No major change in survey or clearance personnel is anticipated in 2024.<sup>161</sup> UNMAS UNISFA contracted a heavy mine clearance/ground preparation machine (MW370) in 2023 to speed up clearance of suspected hazardous areas. The machine replaced one of two light-medium mine clearance/ground preparation machines (MW240). The aim was to increase daily clearance rate.<sup>162</sup>

## LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

### LAND RELEASE OUTPUTS IN 2023

UNMAS and the NMAA reported that a total of just under 0.6km<sup>2</sup> of AP mined area was released through survey and clearance in 2023. Of this, just over 0.58km<sup>2</sup> was cleared and just over 0.02km<sup>2</sup> was cancelled through NTS. A total of 100 AP mines were destroyed, including 14 during spot tasks. No area was reduced through TS. Just under 0.18km<sup>2</sup> of previously unrecorded AP mined area was discovered and added to the database.<sup>163</sup>

#### ABYEI

In 2023, UNMAS UNISFA also reported that just under 0.6km<sup>2</sup> of AP mined area was released through clearance in Abyei with one AP mine and one AV mine were destroyed. No hazardous area was released through survey. An additional 0.44km<sup>2</sup> of legacy contamination was added to the database.<sup>164</sup>

### SURVEY IN 2023

In 2023, 0.02km<sup>2</sup> of hazardous area was cancelled through NTS (see Table 8), a huge decrease on the 2km<sup>2</sup> cancelled in 2022, when the last large old polygon on the database, measuring 1,978,079m<sup>2</sup>, was resurveyed and released.<sup>165</sup> It had been predicted that as South Sudan moved towards a more accurate estimate of mine contamination, cancellation rates will slow.<sup>166</sup> As in 2022, no area was reduced through TS in 2023.<sup>167</sup> A total of 179,311m<sup>2</sup> of previously unrecorded AP mined area was added to the database in 2023.<sup>168</sup>

**Table 8: Release of mined area through NTS in 2023<sup>169</sup>**

State	Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )
Central Equatoria	TDI	1	0
Central Equatoria	SLG	1	0
Upper Nile	TDI	1	20,527
<b>Totals</b>		<b>3</b>	<b>20,527</b>

#### ABYEI

No AP mined area was reported as released in Abyei through NTS or TS in 2023 or 2022.<sup>170</sup>

### CLEARANCE IN 2023

A total of just over 0.58km<sup>2</sup> of mined area was cleared in 2023 (see Table 9).<sup>171</sup> This is more than double the 0.28km<sup>2</sup> of hazardous area cleared in 2022 when 124 AP mines were destroyed during clearance and 12 during EOD spot tasks.<sup>172</sup>

161 Ibid.

162 Email from Jes Luckett, UNMAS UNISFA, 26 April 2024.

163 Email from Deborah Asikeit, UNMISS, 30 April 2024.

164 Emails from Johan Maree, UNMAS UNISFA, 27 July 2023; and Jes Luckett, UNMAS UNISFA, 26 April 2024.

165 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

166 Presentation by Richard Boulter, UNMAS, "South Sudan – Achieving Article Five compliance, and Delivering a Long-Term Solution", NDM23, 12 February 2020.

167 Emails from Matt Williams, UNMAS South Sudan, 23 March 2023; and Deborah Asikeit, UNMISS, 30 April 2024.

168 Email from Deborah Asikeit, UNMISS, 30 April 2024.

169 Ibid.

170 Email from Johan Maree, UNMAS UNISFA, 27 July 2023.

171 Ibid.

172 Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

**Table 9: Mine clearance in 2023<sup>173</sup>**

State	Operator	AP mined areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Central Equatoria	G4S	2	56,217	*8	*6	8
Central Equatoria	TDI	2	152,003	29	0	9
Central Equatoria	SLG	0	0	*1	*5	0
Eastern Equatoria	DCA	1	151,153	13	8	24
Eastern Equatoria	G4S	1	13,050	4	*1	0
Eastern Equatoria	SLG	1	13,020	1	0	0
Eastern Equatoria	MAG	0	0	*3	0	0
Jonglei	G4S	0	0	*1	0	0
Jonglei	SLG	0	0	0	*2	0
Lakes	G4S	0	0	0	*1	0
Unity	G4S	0	0	0	*1	0
Upper Nile	SLG	1	42,335	0	0	10
Upper Nile	TDI	2	155,074	39	0	0
Upper Nile	G4S	0	0	0	*1	0
Upper Nile	DRC-MA	0	0	*1	*1	0
Western Bahr El Ghazal	G4S	0	0	0	*1	0
Western Equatoria	SLG	0	0	0	*1	0
<b>Spot task totals</b>				<b>14</b>	<b>20</b>	
<b>Totals</b>		<b>10</b>	<b>582,852</b>	<b>100</b>	<b>28</b>	<b>51</b>

\* Destroyed as spot tasks.

UNMAS and the NMAA reported that four mined areas covering 22,977m<sup>2</sup> were cleared during the year which contained no AP mines.<sup>174</sup>

## DEMINE SAFETY

There were two security incidents in 2023 involving UNMAS implementing partners. On 15 March 2023, two vehicles travelling between Pibor and Akobo in Jonglei state were fired on and one was looted. No injuries were reported, and the personnel subsequently proceeded with their journey. On 14 July 2023, an UNMAS implementing partner temporarily halted operations in Shalara, Juba County in Central Equatoria state after two armed groups started shooting at each other close to a clearance site. No team members were hurt.<sup>175</sup> DRC reported that threats from communities and clashes in certain locations, led to interruptions in programming related to mine action activities.<sup>176</sup>

## ABYEI

In Abyei, one hazardous area covering 599,957m<sup>2</sup> was cleared in 2023, with one AP mine and one AV mine destroyed. This is a huge increase on the 15,624m<sup>2</sup> of SHA that was cleared manually in 2022.<sup>177</sup> Another 252,399m<sup>2</sup> of SHA was released through battle area clearance in 2022.<sup>178</sup>

<sup>173</sup> Email from Deborah Asikeit, UNMISS, 30 April 2024; NB in its Article 7 report (covering 2023) South Sudan gives the same total AP mine clearance figure at p. 10, but at p. 37, it states that in 2023 South Sudan cleared 559,875m<sup>2</sup> of hazardous area. The South Sudan National Mine Action Strategy 2024–2028 gives the total AP mined clearance figure for the year of 594,087m<sup>2</sup> (p. 20).

<sup>174</sup> Email from Deborah Asikeit, UNMISS, 30 April 2024.

<sup>175</sup> Email from Deborah Asikeit, UNMISS, 26 April 2024.

<sup>176</sup> Emails from John Sorbo, DRC, 30 April 2024; and Ida Marie Højgaard Jørgensen, DCA, 8 May 2024.

<sup>177</sup> Email from Johan Maree, UNMAS UNISFA, 27 July 2023.

<sup>178</sup> Ibid.

Table 10: Mine clearance in Abyei in 2023<sup>179</sup>

Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
TDI	599,957	1	1	0
<b>Totals</b>	<b>599,957</b>	<b>1</b>	<b>1</b>	<b>0</b>

There were no reports of staff being killed or injured in Abyei as a result of demining accidents in 2023. There was, however, an attack on demining operation on 17 April 2024, when a vehicle belonging to TDI was hijacked by armed assailants. The vehicle was never recovered.<sup>180</sup>

## ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC, and in accordance with the five-year extension granted by States Parties in 2020, South Sudan is required to destroy all AP mines in mined areas under its jurisdiction or control as soon as possible, but not later than 9 July 2026. South Sudan has acknowledged that it will not meet this deadline and has already proposed a new work plan with a deadline of June 2027.

In 2023, AP mine clearance of 0.58km<sup>2</sup> almost doubled from that of the previous year, but was still well below the work plan (2022–26) target of 2.73km<sup>2</sup>. In line with the extension to its Article 5 deadline granted at the Eighteenth Meeting of the States Parties in 2020, South Sudan produced its second periodic updated detailed work plan in April 2024. The plan again sets out disaggregated contamination figures, the methodology for clearing AP mines, along with the assumptions on which the plan is based and attendant risks.

South Sudan indicates the various risks and challenges which could affect clearance, many of them repeated from its previous work plan: insecurity from conflict or a potential Ebola Virus Disease outbreak in neighbouring Democratic Republic of Congo; a deterioration in South Sudan's economy and inflationary pressures; environmental risks and extreme weather conditions that could damage infrastructure and restrict access to mined areas; anticipated reductions in

funding from UNMISS and other international donors; the discovery of unrecorded minefields beyond those predicted; that resurvey does not lead to a reduction of the largest recorded hazards; and that project clearance rates cannot be maintained.<sup>181</sup>

South Sudan has taken measures to increase its rate of mine clearance in recent years. Nevertheless, given the variables outlined above and the fact that South Sudan has only once cleared as much as 1km<sup>2</sup> in any of last five years, the target of clearing an average of 1.46km<sup>2</sup> annually until June 2027 is highly ambitious to say the least.

Table 11: Five-year summary of AP mine clearance

Year	Area cleared (km <sup>2</sup> )
2023	0.58
2022	0.28
2021	0.25
2020	0.71
2019	1.00
<b>Total</b>	<b>2.82</b>

## PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

While there is no independent national capacity to clear residual contamination, an EOD mobile team within the national authority was trained and accredited during an eight-month project that concluded in March 2022.<sup>182</sup> South Sudan has previously indicated that it would seek funding to enable an independent entity—potentially an international NGO—to train and equip the NMAA in taking the lead in coordinating a response to newly reported hazardous items, and has reiterated that it will need international assistance and cooperation to prepare for residual contamination.<sup>183</sup> The National Mine Action Strategy 2024–2028 has a series of targets relating to strengthening national survey and clearance capacities and a specific target regarding the development of a strategy to manage residual contamination by 2028.<sup>184</sup>

<sup>179</sup> Email from Jes Lockett, UNMAS UNISFA, 25 April 2024.

<sup>180</sup> Ibid.

<sup>181</sup> Updated Work Plan for January 2024 to June 2028, pp. 39–40.

<sup>182</sup> Email from Matt Williams, UNMAS South Sudan, 23 March 2023.

<sup>183</sup> Updated Work Plan for January 2022 to June 2026, p. 12; and Voluntary CCM Article 7 Report (covering 2023), Form G.

<sup>184</sup> Email from Deborah Asikeit, UNMISS, 26 April 2024; and "South Sudan National Mine Action Strategy 2024–2028", NMAA, April 2024, p. 20.