

## RECOMMENDATIONS FOR ACTION

- The Saharawi Arab Democratic Republic (SADR) should reaffirm its written commitment to respect and implement the Anti-Personnel Mine Ban Convention (APMBC), including clearance of all anti-personnel mines east of the Berm, consonant with its human rights obligations.
- Facing significant challenges due to a decrease in operational capacity and funding for 2019, Western Sahara's mine action strategy targets for completing mine survey and clearance should be reassessed, and a revised mine action strategy developed.
- A resource mobilisation plan should be developed with the aim of attracting international donor support.
- Greater support should be provided to the Saharawi Mine Action Coordination Office (SMACO) to enable it to continue to coordinate mine action in Western Sahara and ensure that capacity development efforts are not lost.
- Mine action in Western Sahara must not become forgotten or overlooked by the international mine action community. Support must still be given to address remaining mine, cluster munition, and other explosive remnants of war (ERW) contamination.

## UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of mine contamination across Western Sahara is not known, although the areas along the Berm<sup>1</sup> are thought to contain some of the densest mine contamination in the world.<sup>2</sup> The contamination is a result of fighting in previous decades between the Royal Moroccan Army (RMA) and the Popular Front for the Liberation of Saguia el Hamra and Rio de Oro (Polisario Front) forces.

According to the UN Mine Action Service (UNMAS), the primary mine threat in Western Sahara east of the Berm, excluding both the Berm itself and the buffer strip, is from anti-vehicle rather than anti-personnel mines; cluster munition remnants (CMR) are also a major hazard.<sup>3</sup> As at end 2018, no areas suspected or confirmed to contain solely anti-personnel mines remained to the east of the Berm, and the majority of mine contamination identified during ongoing and historical clearance efforts was from anti-vehicle mines.<sup>4</sup> However, UNMAS reported that, during the year, as a result of non-technical survey conducted in the Agwanit Area of Responsibility, a number of large minefields previously thought to contain only anti-vehicle mines were found to also contain anti-personnel mines.<sup>5</sup>

At the end of 2018, land in Western Sahara to the east of the Berm contained a total of 26 areas confirmed and suspected to contain mixed anti-personnel and anti-vehicle mine contamination covering a total of nearly 216.3km<sup>2</sup>, as set out in Table 1.<sup>6</sup> This is an overall decrease of one area with a size of approximately 1.85km<sup>2</sup> from that remaining at the end of 2017.<sup>7</sup>

In September 2018, UNMAS reported that following non-technical survey efforts, 10 of the then 27 mined areas, were reported to remain covering an estimated total of almost 120km<sup>2</sup>, and are located within the 5km-wide buffer strip and are inaccessible for clearance.<sup>8</sup> Clearance of the buffer strip of mines and ERW is not foreseen in United Nations Mission for the Referendum in Western Sahara (MINURSO) mission agreements, which, according to the UN, considerably limits the ability of MINURSO military observers to patrol and verify developments.<sup>9</sup>

Table 1: Mined area east of the Berm (at end 2018)<sup>10</sup>

Type of contamination	CHAs	Area (km <sup>2</sup> )	SHAs	Area (km <sup>2</sup> )	Total CHAs and SHAs	Total area (km <sup>2</sup> )
AP mines	0	0	0	0	0	0
AV mines	2	0.11	0	0	2	0.11
AP/AV mines	14	90.19	10	125.96	24	216.15
<b>Totals</b>	<b>16</b>	<b>90.30</b>	<b>10</b>	<b>125.96</b>	<b>26</b>	<b>216.26</b>

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

Both the north and south of Western Sahara are known or suspected to contain anti-personnel mines, with 24 areas confirmed or suspected areas with a total size of almost 216.3km<sup>2</sup> remaining to be addressed at the end of 2018, as set out in Table 2.<sup>11</sup> This is compared to the end of the previous year, when a total of 11 areas confirmed or suspected to

contain anti-personnel mines were reported to remain with a total size of more than 169.5km<sup>2</sup>.<sup>12</sup>

According to UNMAS, a total of six additional mined areas with a size of just over 367,200m<sup>2</sup> were added to the database in 2018.<sup>13</sup>

**Table 2: Mined area containing anti-personnel mines by province east of the Berm (at end 2018)<sup>14</sup>**

Province	CHAs	Area (km <sup>2</sup> )	SHAs	Area (km <sup>2</sup> )	Total CHAs and SHAs	Total area (km <sup>2</sup> )
North Region	4	0.50	3	4.10	7	4.60
South Region	10	89.79	7	121.86	17	211.65
<b>Totals</b>	<b>14</b>	<b>90.29</b>	<b>10</b>	<b>125.96</b>	<b>24</b>	<b>216.25</b>

A survey in 2006–08 by an international non-governmental organisation (NGO), Landmine Action, later renamed Action on Armed Violence (AOAV), identified 37 mined areas east of the Berm, nearly half of which were in Bir Lahlou, followed by Tifariti, Mehaires, and Agwanit.<sup>15</sup>

Neither survey nor clearance has been conducted in the 5km-wide buffer strip to the east of the Berm. The extent of contamination west of the Berm remains unknown, and as of 2019, no survey had been carried out there.<sup>16</sup>

UNMAS reported in 2018 that there were areas of known contamination in the buffer strip that remained inaccessible for clearance due to military agreements.<sup>17</sup> The RMA controls territory to the west of the Berm where it has been conducting large-scale demining. According to UNMAS, the RMA cooperates with the MINURSO mine action component and submits regular monthly reports, helping to build a clearer understanding of the mine and ERW threat across Western Sahara.<sup>18</sup>

## OTHER EXPLOSIVE REMNANTS OF WAR AND CLUSTER MUNITION REMNANTS

Western Sahara also has a significant problem from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Western Sahara for further information).<sup>19</sup>

## NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

UNMAS Western Sahara, formerly the MINURSO Mine Action Coordination Centre (MACC), manages and supports mine action activities, of which, survey and clearance activities were implemented by commercial contractor SafeLane Global (formerly Dynasafe MineTech Limited, DML) and humanitarian NGO Norwegian People's Aid (NPA) in 2018. On 30 April 2019, MINURSO's mandate was extended for an additional six months until 30 October 2019 under Security Council Resolution 2468 (2019). UNMAS Western Sahara serves as the UN focal point for mine action activities within the MINURSO area of operations. Its contracted teams work in areas east of the Berm only.

The Royal Moroccan Army operates its own demining operations in areas west of the Berm.

In 2013–14, the Polisario Front, with UN support, established the SMACO, which is responsible for coordinating mine action activities in Western Sahara east of the Berm, excluding the buffer strip.<sup>20</sup>

In 2018, UNMAS continued to implement an ongoing capacity development project with SMACO, with funding from the German Federal Foreign Office, which concluded in October after 28 months.<sup>21</sup> Emphasis was placed on building the programme's capacity to translate local mine action requirements into proposals and budgets with the aim of ensuring that SMACO can independently seek funds and report on progress in the future.<sup>22</sup> UNMAS stated that efforts were also aimed at regularly raising the profile of SMACO within the local and wider international communities.<sup>23</sup>

NPA also reported continuing its efforts in partnership with SMACO to develop the local staff capacity through on-the-job trainings in the support office as well as operationally.<sup>24</sup> It stated that SMACO's ability to coordinate operations improved significantly in 2018, but raised serious concerns about the cessation of funding from the German government for capacity development activities, noting that SMACO's running costs and ability to pay staff salaries were at risk.<sup>25</sup> UNMAS informed Mine Action Review, however, that it had allocated non-earmarked funding to cover SMACO's operating costs for 2019, and to include the development of a communications and resource mobilisation strategy during that year.<sup>26</sup>

## GENDER

UNMAS has reported that gender policies are implemented in accordance with UNMAS, the UN Office for Project Services (UNOPS), and MINURSO guidelines, as well as with direction from the Polisario.<sup>27</sup> NPA reported that gender mainstreaming considerations were included in its Memorandum of Understanding with SMACO, in NPA's

internal strategy documents, and taken into account during recruitment. Additionally, during survey, efforts are made to ensure the needs of men, women, girls, and boys are taken into consideration for more effective and efficient operations, despite challenges presented by conducting survey activities targeting Bedouin populations.<sup>28</sup>

In 2018, NPA reported that, during recruitment, the programme actively selected female candidates for interviews wherever possible. NPA has encouraged local journalists to highlight the work of female deminers and their ability to work equally well in a highly challenging environment, with the aim of overcoming widely held perceptions in local

communities that demining is a job only for men. It stated that six women were employed in operational roles in 2018, or just over 18% of the total operational staff. Two women held managerial roles, including Head of Finance and Head of Human Resources, making up 40% of NPA's management staff in Western Sahara.<sup>29</sup>

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## INFORMATION MANAGEMENT AND REPORTING

According to UNMAS, the Information Management System for Mine Action (IMSMA) database for Western Sahara improved as a result of an ongoing data audit initiated at the end of 2015.<sup>30</sup> Routine database clean-up was conducted throughout 2018.<sup>31</sup> The Geneva International Centre for Humanitarian Demining (GICHD) has also provided ongoing support to correct database errors, and an upgrade to the latest database software version, IMSMA Core, was scheduled to take place in August 2019.<sup>32</sup>

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## PLANNING AND TASKING

In July 2019, UNMAS informed Mine Action Review that a new mine action strategy specific to Western Sahara was under development and would be completed in 2019, in line with the newly published global UN Mine Action Strategy 2019–2023.<sup>33</sup>

The previous mine action strategy for Western Sahara foresaw the completion of non-technical survey in 2017 or 2018 and a 50% reduction in the total number of recorded SHAs and CHAs remaining on the territory of Western Sahara by the end of 2022.<sup>34</sup> In May 2019, UNMAS informed Mine Action Review that these targets were not met due to “changing priorities” for mine action. It reported that the new end state for completing the clearance of all known

hazards to the east of the Berm would be the end of 2023 in the forthcoming revised strategy, given enough funding and enabling political and security conditions.<sup>35</sup>

UNMAS and SMACO identify priorities for clearance of both minefields and cluster munition strikes to the east of the Berm in conjunction with MINURSO. Priorities are identified based on humanitarian needs for the safety and freedom of movement of local populations, while UNMAS ensures that observation patrol routes are safe for military observers and the transport of logistical supplies.<sup>36</sup>

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## LAND RELEASE SYSTEM

### STANDARDS AND LAND RELEASE EFFICIENCY

Local mine action standards were in place and implemented in 2018.<sup>37</sup> The standards were developed and finalised in 2016 by UNMAS, together with SMACO, and in coordination with mine action partners. NPA has reported that operators duly updated their standing operating procedures (SoPs), and that the local mine action standards set realistic benchmarks for efficient operations.<sup>38</sup> A first annual review of the standards was completed in November 2018 with a review board consisting of representatives from UNMAS, SMACO, and all implementing partners. No significant changes were made, and UNMAS reported in June 2019 that translation of the standards into Arabic had been completed and shared with SMACO.<sup>39</sup>

An external quality management system was in place in 2018 and implemented by UNMAS and SMACO to the east of the Berm.<sup>40</sup> NPA confirmed a considerable increase in quality assurance (QA) activities in 2018, which it said was due to the relocation of UNMAS to Tindouf, Algeria, with easier access to territory under Polisario control. NPA confirmed that SMACO and UNMAS QA officers conducted many QA site visits in 2018, conducted accreditation for new NPA staff, monitored progress on tasks, and conducted quality control of completed areas.<sup>41</sup>

### OPERATORS

SafeLane Global (formerly DML) and NPA were the implementing operators conducting survey and clearance in Western Sahara in 2018. UNMAS reported no change in operational capacity during the year. The overall mine action capacity in Western Sahara in 2018 consisted of nine multi-task teams (MTTs) and one community liaison/survey team, with a total of 116 operational staff in the field. This included six DML teams and one community liaison/survey team. The total number of MTTs was reduced by one in July 2018.<sup>42</sup>

In 2018, NPA continued to deploy one team to clear mined areas and two manual teams to address CMR in Bir Lahlou, along with five risk education teams operating in the Saharawi refugee camps in southern Algeria. The risk education project, funded by Germany and supervised by UNMAS/SMACO, ended in April 2018.<sup>43</sup> NPA made the “difficult decision” to close down its programme, effective on 1 January 2019, after releasing the last known contaminated areas in Bir Lehlou province in August 2018.<sup>44</sup>

## LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

### LAND RELEASE OUTPUTS IN 2018

A total of nearly 3.71km<sup>2</sup> of mixed mined area was released in 2018: more than 2.38km<sup>2</sup> through clearance and 1.32km<sup>2</sup> through survey.<sup>45</sup>

### SURVEY IN 2018

According to UNMAS, of the 1.32km<sup>2</sup> released through survey in 2018, more than 0.87km<sup>2</sup> was cancelled through non-technical survey (see Table 3) and 0.45km<sup>2</sup> reduced through technical survey.<sup>46</sup>

**Table 3: Cancellation of mined area through non-technical survey in 2018<sup>47</sup>**

Region	Operator	Area cancelled (m <sup>2</sup> )
North	SLG	182,868
North	NPA	346,359
South	SLG	342,198
<b>Total</b>		<b>871,425</b>

**Table 4: Reduction of mined area through technical survey in 2018<sup>48</sup>**

Region	Operator	Area reduced (m <sup>2</sup> )
North	NPA	265,492
North	SLG	185,264
<b>Total</b>		<b>450,756</b>

### CLEARANCE IN 2018

In 2018, according to UNMAS, a total of just over 2.38km<sup>2</sup> of areas thought to contain mixed anti-personnel and anti-vehicle mine contamination was cleared, with the destruction of 37 anti-personnel mines, 35 anti-vehicle mines, and three items of UXO (see Table 5).<sup>49</sup> This was a substantial increase from 2017, when close to 0.28km<sup>2</sup> of area thought to contain anti-personnel mines contamination was cleared; however no anti-personnel mines were found. Thirty-two anti-vehicle mines and ten items of UXO were destroyed.<sup>50</sup>

Western Sahara is not a state party to the APMBC. In June 2014, however, the SADR submitted a voluntary APMBC Article 7 transparency report to the UN "as a sign of the support of the Sahrawi State for the goals of the Treaty".<sup>51</sup>

In July 2019, UNMAS informed Mine Action Review that a new mine action strategy specific to Western Sahara was under development and would be completed by the end of year, in line with the newly published global UN Mine Action Strategy 2019–2023.<sup>52</sup>

The previous mine action strategy for Western Sahara foresaw the completion of non-technical survey before the end of 2018 and a 50% reduction in the total number of recorded SHAs and CHAs remaining in Western Sahara by the end of 2022.<sup>53</sup> In May 2019, UNMAS reported that the new end state for clearance of all known mine and ERW contamination to the east of the Berm would be set at the end of 2023.<sup>54</sup>

This is almost two years earlier than UNMAS' previous estimate, which had sought to release all high and medium hazardous areas in Western Sahara east of the Berm by 2025.<sup>55</sup> UNMAS has reported that delays to clearing mined areas continued as a result of restrictions on accessing certain areas of the buffer strip established by various MINURSO mission agreements.<sup>56</sup> NPA has cited other challenges to operations, including working in a remote desert environment allied to serious difficulties with the procurement of certain equipment and materials.<sup>57</sup> Temperatures of up to 60 degrees Celsius, strong winds, sandstorms, and heavy rain during the wet season can also cause mine action activities to be suspended.<sup>58</sup>

In 2019, with the loss of NPA as a key mine action implementer, along with the cessation of both German and Norwegian funding for mine clearance activities, the future of Western Sahara's mine action programme remained uncertain. Additional resources and capacity, along with support to SMACO, needed to be secured urgently. In July 2019, UNMAS informed Mine Action Review that mine action capacity had reduced by more than 50% and there was no indication of funding available to maintain capacity going forward.<sup>59</sup>

**Table 5: Mine clearance in 2018<sup>60</sup>**

Region	Operator	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
North	NPA	2	1,040,387	37	5	2
North	SLG	3	508,228	0	8	0
South	DML	2	834,911	0	22	1
<b>Totals</b>		<b>7</b>	<b>2,383,526</b>	<b>37</b>	<b>35</b>	<b>3</b>

AP = Anti-personnel AV = Anti-vehicle

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- 1 A 2,700km-long defensive wall, the Berm was built during the conflict, dividing control of the territory between Morocco on the west and the Polisario Front on the east. The Berm is 12 times the length of the Berlin Wall and second in length only to the Great Wall of China.
- 2 See UNMAS, "About UNMAS in Western Sahara", updated May 2015, at: [bit.ly/2MEmsjN](http://bit.ly/2MEmsjN); and Action on Armed Violence (AOAV), "Making life safer for the people of Western Sahara", London, August 2011.
- 3 Email from Graeme Abernethy, UNMAS, 1 March 2018.
- 4 Emails from Robert Thompson, Chief of Operations, UNMAS, 31 July 2019; and Virginie Auger, UNMAS, 29 March 2017.
- 5 Email from Graeme Abernethy, UNMAS, 1 March 2018.
- 6 Email from Robert Thompson, UNMAS, 31 July 2019.
- 7 Email from Graeme Abernethy, UNMAS, 1 March 2018.
- 8 Email from Graeme Abernethy, UNMAS, 14 September 2018. The buffer strip is an area 5km wide east of the Berm. MINURSO, "Ceasefire Monitoring Overview", undated but accessed 1 June 2016, at: [bit.ly/2Yxg1nv](http://bit.ly/2Yxg1nv).
- 9 "Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2017/307, 10 April 2017, p. 8.
- 10 Email from Robert Thompson, UNMAS, 31 July 2019.
- 11 Ibid.
- 12 "Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2017/307, p. 8.
- 13 Email from Robert Thompson, UNMAS, 31 July 2019.
- 14 Ibid.
- 15 Email from Penelope Caswell, Field Programme and Geographic Information System Manager, AOAV, 18 May 2010.
- 16 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018; and UNMAS, "2017 Portfolio of Mine Action Projects: MINURSO".
- 17 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
- 18 Email from Graeme Abernethy, UNMAS, 14 September 2018; and UNMAS, "2017 Portfolio of Mine Action Projects: MINURSO".
- 19 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email, 17 May 2016.
- 20 Response to questionnaire by Sarah Holland, UNMAS, 24 February 2014, and email, 25 February 2014.
- 21 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
- 22 Ibid.
- 23 Ibid.
- 24 Email from El Hadji Mamadou Kebe, NPA, 4 May 2019.
- 25 Ibid.
- 26 Email from Dandan Xu, UNMAS, 28 June 2019.
- 27 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
- 28 Emails from El Hadji Mamadou Kebe, NPA, 4 May 2019 and 14 March 2018.
- 29 Email from El Hadji Mamadou Kebe, NPA, 4 May 2019.
- 30 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
- 31 Email from Robert Thompson, UNMAS, 29 April 2019.
- 32 Email from Robert Thompson, UNMAS, 31 May 2019.
- 33 Email from Robert Thompson, UNMAS, 31 July 2019.
- 34 Ibid.
- 35 Email from Robert Thompson, UNMAS, 31 May 2019.
- 36 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
- 37 Email from El Hadji Mamadou Kebe, NPA, 4 May 2019.
- 38 Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.
- 39 Emails from Robert Thompson, UNMAS, 29 April 2019; and Dandan Xu, UNMAS, 28 June 2019.
- 40 Email from Robert Thompson, UNMAS, 29 April 2019.
- 41 Email from El Hadji Mamadou Kebe, NPA, 4 May 2019.
- 42 Email from Robert Thompson, UNMAS, 31 May 2019.
- 43 Email from El Hadji Mamadou Kebe, NPA, 4 May 2019.
- 44 Ibid.
- 45 Email from Robert Thompson, UNMAS, 31 July 2019.
- 46 Ibid.
- 47 Email from Robert Thompson, UNMAS, 31 July 2019.
- 48 Ibid.
- 49 Ibid.
- 50 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
- 51 "SADR initiative welcomed by Maputo Conference on Mine Ban", Sahara Press Service, 2 July 2014, at: [bit.ly/2GE1JqW](http://bit.ly/2GE1JqW).
- 52 Email from Robert Thompson, UNMAS, 31 July 2019.
- 53 Ibid.
- 54 Email from Robert Thompson, UNMAS, 31 May 2019.
- 55 Emails from Virginie Auger, UNMAS, 10 May and 29 March 2017; and Sarah Holland, UNMAS, 21 April and 18 May 2016.
- 56 Email from Virginie Auger, UNMAS, 15 March 2017.
- 57 Emails from El Hadji Mamadou Kebe, NPA, 8 April 2017 and 14 March 2018.
- 58 UNMAS, "About UNMAS in Western Sahara", updated January 2017, at: [bit.ly/2MEmsjN](http://bit.ly/2MEmsjN).
- 59 Email from Robert Thompson, UNMAS, 31 July 2019.
- 60 Email from Robert Thompson, UNMAS, 31 July 2019.