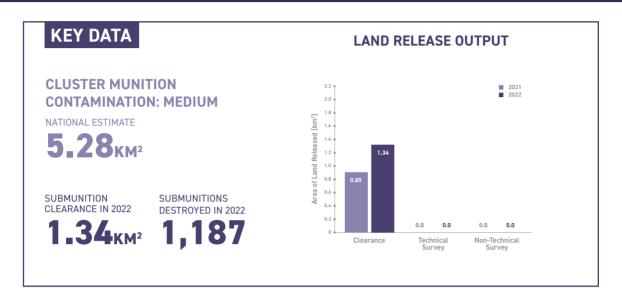
# **GERMANY**



ARTICLE 4 DEADLINE: 1 AUGUST 2025
NOT ON TRACK TO MEET DEADLINE



# **KEY DEVELOPMENTS**

In 2022, Germany more than doubled its clearance output from the previous year but still fell short of its clearance target for the year. Germany has reported that it is now at full clearance capacity but will need to increase its clearance output further still in 2023 in order to have a chance of meeting its Article 4 deadline of August 2025.

# RECOMMENDATIONS FOR ACTION

- Germany should improve its reporting by ensuring that its annual Convention on Cluster Munitions (CCM) Article 7 transparency report complies with the treaty requirements, by reporting the annual cluster munition remnants (CMR) clearance output for the reporting period rather than just a cumulative total.
- Germany should produce an updated work plan with revised annual clearance targets to 2025 based on current capacities.

# ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

|  | Score  | Score  |  |
|--|--------|--------|--|
| Criterion  | (2022) | (2021) | Performance Commentary   |
| UNDERSTANDING OF CMR CONTAMINATION (20% of overall score)            | 8      | 8      | Germany has a good understanding of the extent of its sole CMR-contaminated area in a former Soviet military training area at Wittstock in the east of the country. Due to the lack of detailed data on the use of weapons at the site, and the significant amount of other explosive remnants of war (ERW), Germany has not been able to determine the exact extent and density of CMR.                               |
| NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)   | 8      | 8      | There is strong national ownership and commitment to release the sole CMR-contaminated area. Roles and responsibilities for clearance are clear, coherent, and entirely funded by the federal government, albeit at high cost.   |
| GENDER AND<br>DIVERSITY<br>(10% of overall score)                    | 7      | 7      | There is equal access to employment for qualified women and men for explosive ordnance disposal (EOD), including of CMR, although women make up only a small proportion of the sector. At the end of 2022, between 10% and 17% of operational roles were filled by women, while in the on-site project management and clearance supervision company 40% of employees were women. This is slightly higher than in 2021. |
| INFORMATION<br>MANAGEMENT<br>AND REPORTING<br>(10% of overall score) | 8      | 8      | Germany submits timely and accurate Article 7 reports, but it continues to report solely cumulative clearance output to date, rather than annual clearance output, as the CCM requires.  |
| PLANNING<br>AND TASKING<br>(10% of overall score)                    | 7      | 8      | While Germany does not have a national mine action strategy, it does have a completion plan in place to address the remaining CMR contamination and it elaborates annual work plans, which it adjusts according to capacity and output.  |
| LAND RELEASE<br>SYSTEM<br>(20% of overall score)                     | 8      | 8      | Germany has now reached its maximum clearance capacity with between 184 to 194 demining personnel deployed in 2022. Demining at Wittstock is primarily conducted manually due to the high levels of other ERW at the site, which restricts the use of technical survey (TS) and the full application of mechanical assets.   |
| LAND RELEASE OUTPUTS AND ARTICLE 4 COMPLIANCE (20% of overall score) | 6      | 5      | In 2022, Germany cleared 1.34km² of cluster munition-contaminated area, a 58% increase on the previous year. Its clearance output, however, continues to fall behind its annual land release targets and, as it is currently working at full capacity, it is unclear how Germany will manage to increase clearance output to the levels needed to meet its Article 4 deadline.   |
| Average Score  | 7.4    | 7.3    | Overall Programme Performance: GOOD  |

# **CLUSTER MUNITION SURVEY AND CLEARANCE CAPACITY**

#### **MANAGEMENT**

■ The Wittstock site is administrated and project managed by the Federal Forestry Agency as a subdivision of the Institute for Federal Real Estate (BImA), with support from the Central Office of the Federal Government for UXO Clearance and a consulting engineer.

## **NATIONAL OPERATORS**

- Commercial UXO clearance contractors: Röhll Munitionsbergung GmbH (Brandenburg (Havel)); Schollenberger Kampfmittelbergung GmbH (Celle); and SafeLane Global GmbH (Ludwigsfelde).
- On-site project management/clearance supervision company: IB Winkelmann.
- Destruction of CMR and other ordnance is the ultimate responsibility of the Brandenburg state explosive ordnance disposal (EOD) agency: KMBD.

## INTERNATIONAL OPERATORS

None

# **OTHER ACTORS**

None

# UNDERSTANDING OF CMR CONTAMINATION

As at the end of 2022, Germany reported 5.28km² of remaining cluster munition-contaminated area at a former Soviet military training area at Wittstock, Brandenburg, in former East Germany.¹ This is a reduction from the figure of 6.62km² reported for the end of 2021,² which is the result of clearance in 2022.

A wide range of Soviet-era submunitions have been found at Wittstock: AO-1 SCh, AO-1 M, AO-2.5, AO-2.5 RTM, AO-10 SCh, ShOAB-0.5, PTAB-1, PTAB-1 M, PTAB-2.5 M, PTAB-2.5 TG, PTAB-10.5, ZAB 1-E, ZAB 2.5M, ZAB 2.5 S, and ZAB 2.5.3

CMR were discovered "by chance" at Wittstock and declared at the CCM intersessional meetings in June 2011.<sup>4</sup> From 2011 to early 2014, suspected CMR contamination was reported to total 4km<sup>2</sup>.<sup>5</sup> In August 2014, however, Germany reported that the total suspected hazardous area (SHA) was actually 11km<sup>2</sup>.<sup>6</sup> The increased estimate was ascribed to discovery of submunitions during non-technical survey (NTS) across a wider area than previously reported.<sup>7</sup> According to Germany, the dense vegetation cover and the special hazards posed by CMR and other explosive ordnance precluded the conduct of technical survey over the SHA.<sup>8</sup>

The entire Wittstock site, which extends over 120km², is heavily contaminated with various kinds of unexploded ordnance (UXO), in varying spatial distribution and overlapping contamination, as a result of use of the site for military training purposes in 1952–93.9 The 11km² of CMR contamination is in the area of a mock airfield within the site, which was used by the air force for bombing practice; by the army for artillery firing exercises; as well as for general military exercises and training. Usage involved a wide range of munitions over a period of four decades. Only general information on historical use of cluster munitions at the site is available and the degree of contamination from submunitions and other UXO is not known for a large part of the hazardous area.¹0

In early October 2011, ownership of Wittstock was transferred from the military to the federal government authority in charge of real estate, Institute for Federal Real Estate (BIMA). BIMA implemented a risk education programme that included marking the perimeter and preventing civilian access to the area, based on a "danger prevention plan".<sup>11</sup>

Persistent delay in initiating clearance of CMR at Wittstock until March 2017<sup>12</sup> was ascribed to extensive preliminary work needed to prepare the area for CMR clearance. Due to the dense vegetation in the contaminated area, Germany opted to burn the area in sections, to ensure an unobstructed view of the ground.<sup>13</sup> Preparation for burning and clearance in turn necessitated a desk study and creation of an evacuation and access road network in 2013–15, to make the SHA accessible for clearance operators.<sup>14</sup>

This was followed in 2015–16 by the creation and maintenance of an internal site-wide system of firebreaks surrounding and subdividing the area suspected to be contaminated with CMR, to prevent uncontrolled forest fires during prescribed burning of the CMR-contaminated area.<sup>15</sup> Owing to contamination from large items of UXO, the fire-breaks were created using an unmanned, remote-controlled caterpillar by an explosive ordnance disposal (EOD) contractor in 2016.<sup>16</sup> This was completed in 2016, with the exception of a small forested area on the eastern edge of the SHA.<sup>17</sup>

The prescribed burning of the first sections of the SHA started in 2017 and will continue periodically to prepare land for clearance. It requires special meteorological conditions to keep the fire under control, and, as such, prescribed burning can only take place on a few days each year.<sup>18</sup>

- 1 Article 7 Report (covering 2022), Form F; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May 2023.
- 2 Article 7 Report (covering 2021), Form F.
- 3 Ibid.
- 4 Statement of Germany, Anti-Personnel Mine Ban Convention (APMBC) intersessional meetings (Standing Committee on Mine Action), Geneva, 21 June 2011; and Statement of Germany, CCM intersessional meetings (Clearance and Risk Reduction Session), Geneva, 28 June 2011.
- 5 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 7 May 2018; and Statement of Germany, CCM Third Meeting of States Parties, Oslo, 13 September 2012; Article 7 Reports (covering 2012 and 2013), Form F.
- 6 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 4 August 2014.
- 7 Statement of Germany, First CCM Review Conference, Dubrovnik, 7 September 2015.
- 8 CCM Article 4 deadline Extension Request, 2019 (hereafter, CCM Article 4 Extension Request 2019), p. 9.
- 9 Emails from official on the Desk for Conventional Arms Control, Federal Foreign Office, 7 May and 12 July 2018; CCM Article 4 Extension Request 2019, p. 11; Statements of Germany, First CCM Review Conference, Dubrovnik, 7 September 2015; CCM Eighth Meeting of States Parties, Geneva, 3–5 September 2018; and Article 7 Report (covering 2021), Form F.
- 10 CCM Article 4 Extension Request 2019, p. 9.
- 11 Statement of Germany, APMBC Intersessional meetings, Geneva, 23 May 2012; and CCM Article 7 Report (covering 2011), Form G.
- 12 Germany, Extension Request Report Answers to the Analysis Group, 8 February 2019, p. 5, at: http://bit.ly/2DnYvGw.
- 13 Article 7 Reports (covering 2015, 2018, and 2021), Form F.
- 14 CCM Article 4 Extension Request 2019, pp. 16 and 36-37.
- 15 Ibid., pp. 14, 16–17, and 36–37.
- 16 lbid., p. 19; email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 19 April 2017; and Article 7 Report (covering 2016), Form F.
- 17 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 19 April 2017; and Article 7 Report (covering 2016), Form F.
- 18 CCM Article 4 Extension Request 2019, p. 22.

# NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Germany has full national ownership of its land release efforts. The Wittstock site is administrated and project managed by the Federal Forestry Agency as a subdivision of the BImA. The BImA is an institution incorporated under public law and which is wholly owned by the federal government. The Federal Forestry Agency's responsibilities include project coordination and control, risk management, and budget planning. Support is provided by the Central Office of the Federal Government for UXO Clearance and a consulting engineer. Commercial UXO clearance contractors are contracted and managed by the local branch of the Federal Forestry Agency, Bundesforstbetrieb West Brandenburg. The Regulatory Agency of the County of Ostprignitz-Ruppin is responsible for public security under the police law of the federal state of Brandenburg.

In Germany, the clearance and disposal of UXO is a security task that is under the control of the police and administrative legislation and is therefore the responsibility of the respective federal states. Almost all federal states have set up a corresponding state agency for EOD for these tasks. In Brandenburg, this is the KMBD (an abbreviation

for, in English, the Brandenburg state war material disposal service), which is part of the Brandenburg police. Under German legislation, the federal government is not allowed to maintain an agency for EOD.<sup>23</sup> Contracting foreign companies for CMR clearance in Wittstock is also not possible under German law.<sup>24</sup> SafeLane Global, an international commercial clearance contractor, has been registered and operational in Germany since 2018, and was therefore eligible to bid for the tender.<sup>25</sup>

All CMR clearance costs are paid for by the federal BIMA. National funding to complete CMR clearance has been fully secured and is said to cover unforeseen cost increases. CMR clearance costs have increased substantially year on year from just over €1.6 million in 2017 to €12.9 million in 2020,²6 €21.4 million in 2021, and €32.1 million in 2022.²7 This in part reflects the upscaling of clearance operations and Germany reported that it expected the significant increase in costs from 2021 due to price inflation as part of the new tender.²8 Germany anticipates that an additional €100 million will need to be spent to complete clearance of Wittstock, bringing the total clearance cost to €157 million.²9

### **ENVIRONMENTAL POLICIES AND ACTION**

According to Germany, environmental considerations are taken into account in the federal "Guidelines for the Clearance of Explosive Ordnance". At Wittstock, close coordination is reported to have been established with relevant and responsible authorities with respect to environmental aspects during planning and execution of clearance work, to assure that negative effects are avoided. The burning of the heath is a necessary step before any clearance can take place, and strict environmental regulations are enforced. These regulations include conducting the burning outside bird breeding seasons, and when the ground fauna, such as insects and lizards, are in their hibernation habitats to prevent any adverse effects from the burning. The burning, followed by the ploughing of the topsoil, deprives the vegetation of nutrients which contributes to a NATURA 2000 objective to preserve the native flora as it has adapted to

dry, nutrient-poor soil conditions.<sup>30</sup> However, there are also environmental implications of vegetation burning, including the resultant carbon emissions. Once safely released, the site is due to remain part of a "nature protection area" in the Kyritz-Ruppiner-Heide, managed by BIMA as part of the Europa NATURA 2000 site, under the European Union (EU) Habitats Directive.<sup>31</sup>

Another aspect of environmental protection is associated with EOD. Only explosive ordnance that is too hazardous to transport is destroyed on site, primarily consisting of cluster munitions and certain types of bombs. The remaining explosive ordnance will be disposed of by the clearance service "in a skilled and environmentally responsible manner." 32

- 19 Germany, Extension Request Report Answers to the Analysis Group, 8 February 2019, p. 5.
- 20 Ibid.
- 21 Ibid.
- 22 Ibid., p. 6.
- 23 CCM Article 4 Extension Request 2019, p. 12.
- 24 Ibid., p. 34.
- 25 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 24 June 2022.
- 26 Article 7 Report (covering 2020), Form I; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2021.
- 27 Article 7 Report (covering 2022), Form I; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May 2023.
- 28 Germany, Extension Request Report Answers to the Analysis Group, 8 February 2019, p. 4.
- 29 Presentation of Germany, CCM Intersessional meetings, Geneva, 31 August 2022.
- $30 \quad \text{Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 18 \ July 2023.}$
- 31 APMBC Article 5 deadline Extension Request, 15 April 2013, p. 7; and CCM Article 7 Report (covering 2015), Form F.
- 32 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 18 July 2023.

# **GENDER AND DIVERSITY**

Although there is equal access to employment for qualified women and men for EOD clearance in Germany, women only make up a small proportion of the sector, especially in terms of the number of qualified female EOD technicians with a licence for commercial EOD.<sup>33</sup> As at the end of 2022, as Table 1 illustrates, the proportion of women in operational roles was between 10% and 17%, while IB Winkelmann, the on-site project management/clearance supervision company had 40% female staff.<sup>34</sup> This is slightly higher than the proportions of women employed in 2021.

Table 1: Gender composition of operators in 202235

| Operator   | Total staff | Women<br>employed | Total staff in<br>managerial or<br>supervisory<br>positions | Women in<br>managerial or<br>supervisory<br>positions | Total staff in operational positions | Women in<br>operational<br>positions |
|--|-------------|-------------------|---|---|--------------------------------------|--------------------------------------|
| Röhll Munitionsbergung<br>GmbH (Brandenburg/<br>Havel) | 88          | 14                | 6   | 1   | 88                                   | 13                                   |
| Schollenberger<br>Kampfmittelbergung<br>GmbH (Celle)   | 78          | 9                 | 6   | 2   | 72                                   | 7                                    |
| SafeLane Global GmbH<br>(Ludwigsfelde)                 | 46          | 7                 | 5   | 0   | 41                                   | 7                                    |
| IB Winkelmann  | 5           | 2                 | 5   | 2   | 0                                    | 0                                    |

# INFORMATION MANAGEMENT AND REPORTING

Germany uses its own information management system to record the special distribution of CMR, including use of a geographic information system (GIS).<sup>36</sup>

Germany provides regular updates on its progress in Article 4 implementation, both in its annual Article 7 reports and in statements at the Meeting of States Parties. However, in its Article 7 report for 2022,<sup>37</sup> Germany again reported cumulative clearance output for 2017–22, rather than the annual clearance output for the year, as the Convention requires.

## PLANNING AND TASKING

Due to the fact that cluster munition contamination is limited to Wittstock, Germany does not have a national mine action strategy for CCM Article 4 implementation.<sup>38</sup> Germany did, however, submit a detailed and timely Article 4 deadline extension request, which was considered and granted by States Parties at the Ninth Meeting of States Parties in 2019. Based on clearance projections of 1.5–2km² per year, CMR clearance was expected to be completed by the end of 2024, with associated documentation to be finalised in 2025.<sup>39</sup> Clearance rates envisaged in Germany's Article 4 extension request have fallen short of these projections, but annual, evidence-based work plans are elaborated which provide the basis for clearance, and which are adjusted if and when required (such as upscaling demining capacity).<sup>40</sup>

A project coordination committee meets on a weekly basis with its core members, and each month with an extended group, to assess the status of clearance progress as well as the quality of clearance, costs, and milestones compared to the project plans. Fortnightly reports are disseminated to document clearance and progress.<sup>41</sup>

- 33 Emails from official on the Desk for Conventional Arms Control, Federal Foreign Office, 31 July 2020 and 10 May 2021.
- 34 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May 2023.
- 35 Ibid.
- 36 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 16 April 2019.
- 37 Article 7 Report (covering 2022), Form F.
- 38 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.
- 39 CCM Article 4 Extension Request 2019, p. 3.
- 40 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.
- 41 Germany, Extension Request Report Answers to the Analysis Group, 8 February 2019, p. 3; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 31 July 2020.

Nature conservation requirements limit the controlled burning to a maximum of 200–300 hectares (2–3km²) annually, which, for safety reasons and environmental concerns, is limited to a few days per year. Germany plans to burn approximately 250 hectares (2.5km²) per year, to build up a reserve of burnt areas for clearance.<sup>42</sup> In 2022, 1.4km² was burned in the north-eastern part of the clearance site.<sup>43</sup> The positive effects of burning only last for up to two years before the heath grows back more densely than before.<sup>44</sup>

Germany planned to clear 1.5km<sup>2</sup> of cluster munition-contaminated area in 2022 but fell short of the target with 1.34km<sup>2</sup> cleared.<sup>45</sup> Detailed planning of the specific sections of the CMR-contaminated area to be cleared is not possible beyond annual planning, because it is determined by the location of areas that have been burnt, which in turn is contingent on weather conditions on the day of burning.<sup>46</sup>

# LAND RELEASE SYSTEM

#### STANDARDS AND LAND RELEASE EFFICIENCY

CMR clearance in Germany is conducted in accordance with German federal legislation and legislation of the state of Brandenburg, occupational safety standards of the German Statutory Accident Insurance Association (Deutsche Gesetzliche Unfallversicherung, DGUV), and the construction technical guidelines on UXO clearance of the federal government (Baufachlichen Richtlinien Kampfmittelräumung des Bundes). According to Germany, federal and state legislation is binding and takes precedence over the application of international health and safety or technical standards.<sup>67</sup>

The "Guidelines for the Clearance of Unexploded Ordnance on Federal Properties" are the legal basis for the clearance of UXO on federal government properties and thus apply to action on the Wittstock site. In addition, site-specific work instructions, approved by the KMBD, include detection of UXO (instruments and their use); handling of submunitions and other UXO (on-site transport, storage, and disposal); and documentation.<sup>48</sup> These guidelines are updated on an ongoing basis, for instance to include new technical and safety aspects.<sup>49</sup>

The entire area suspected to be contaminated with CMR has been divided into  $50 \times 50$  metre boxes, each of which is subject to prescribed burning, followed by subsurface clearance. CMR clearance started in an area where the occurrence of CMR was known from earlier finds, and was conducted outwards in  $50 \times 50$  metre boxes. According to Germany, CMR have been found in almost every parcel cleared, and therefore technical survey has not been deemed useful thus far. Germany has declared that if, during future clearance, areas are often encountered which do not contain CMR, the method of land release will be changed to technical survey. The smallest target for detector sensitivity for clearance has been defined as a half sphere of a ShOAB-0.5 submunition.

Under state regulation of war material ("Kampfmittelverordnung"), the transport and disposal of explosive ordnance in Brandenburg state is the sole responsibility of the KMBD. $^{53}$ 

## **OPERATORS AND OPERATIONAL TOOLS**

In Germany, site clearance (search, discovery, identification, recovery, and preparation for handover to state agencies for demolition) is typically conducted by commercial contractors that meet the requirements of the law on explosives. Two commercial UXO clearance contractors won the original public tender for CMR clearance at Wittstock: Röhll Munitionsbergung GmbH (Brandenburg (Havel)) and Schollenberger Kampfmittelbergung GmbH (Celle).<sup>54</sup> A third contractor, SafeLane Global (Ludwigsfelde), was hired in late 2021, following a new tender for the period 2021–25.<sup>55</sup> As a result, in 2022, clearance capacity had increased to between 184 to 194 full-time personnel.<sup>56</sup>

- 42 CCM Article 4 Extension Request 2019, p. 35.
- 43 Virtual meeting with official on the Desk for Conventional Arms Control, Federal Foreign Office, 15 June 2023.
- 44 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 22 June 2022.
- 45 Article 7 Reports (covering 2022), Form F; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.
- Germany, Extension Request Report Answers to the Analysis Group, 8 February 2019, p. 3.
- 47 Ibid., p. 2.
- 48 CCM Article 4 Extension Request 2019, p. 12.
- 49 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.
- 50 CCM Article 4 Extension Request 2019, p. 25.
- 51 Germany, Extension Request Report Answers to the Analysis Group, 8 February 2019, p. 2.
- 52 Ibid.
- 53 2019 CCM Extension Request, p. 12.
- 54 Germany, Extension Request Report Answers to the Analysis Group, 8 February 2019, p. 5.
- 55 Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.
- 56 Article 7 Report (covering 2022), Form F.

Table 2: Operational clearance capacities deployed in 2022<sup>57</sup>

| Operator   | Clearance teams | Total clearance personnel* | Mechanical assets** |
|--|-----------------|----------------------------|---------------------|
| Röhll Munitionsbergung<br>GmbH (Brandenburg/Havel)   | 7-9             | 78-82                      | 7                   |
| Schollenberger<br>Kampfmittelbergung<br>GmbH (Celle) | 6-8             | 68-72                      | 7                   |
| SafeLane Global<br>GmbH (Ludwigsfelde)               | 4-5             | 38-40                      | 3                   |
| Totals   | 17-22           | 184-194                    | 17                  |

<sup>\*</sup> Excluding team leaders, medics, drivers, etc. \*\* Excluding vegetation cutters and sifters.

Germany said that the reason for the increase in EOD capacity was in order to ensure the timely completion of clearance at Wittstock. Germany believes that the maximum capacity at Wittstock has now been reached, due to necessary safety and security precautions. On-site project management and supervision are provided by a separate company. A consulting engineer supports and advises the project management and coordination of the Federal Forestry Agency. He also supports and controls the work conducted on the site. As previously mentioned, disposal, whether through destruction or other means, is conducted by the KMBD.

In 2023, Germany expected a decrease in the amount of personnel available following the termination of SafeLane Global's contract on 1 January 2023. To compensate for this the number of staff contracted by the other two operators is planned to increase. $^{62}$ 

Subsurface CMR clearance at Wittstock is conducted only manually. According to federal guidelines, while mechanical clearance would be possible for clearance of CMR, it is not possible at Wittstock. This is due to the large calibre of some of the munitions present (large quantities of air-dropped and shaped-charge munitions), which would pose a hazard to both the operators and the equipment. Mechanical clearance is also limited due to environmental regulations as Wittstock, as it is part of a nature reserve.

# LAND RELEASE OUTPUTS AND ARTICLE 4 COMPLIANCE

## LAND RELEASE OUTPUTS IN 2022

A total of almost 1.34km $^2$  of CMR-contaminated area was cleared in 2022, with the destruction of 1,187 submunitions. No area was released through survey. $^{64}$ 

## **SURVEY IN 2022**

No CMR-contaminated area was cancelled through non-technical survey or reduced through technical survey in 2022, or in the previous year. $^{65}$ 

<sup>57</sup> Ibid.

<sup>58</sup> Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.

<sup>59</sup> Germany, Extension Request Report – Answers to the Analysis Group, 8 February 2019, p. 5.

<sup>60</sup> Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 18 July 2023.

<sup>61</sup> CCM Article 4 Extension Request 2019, p. 12.

<sup>62</sup> Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May 2023.

<sup>63</sup> CCM Article 4 Extension Request 2019, p. 15; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 22 June 2022.

<sup>64</sup> Article 7 Reports (covering 2022), Form F.

<sup>65</sup> Article 7 Reports (covering 2022 and 2021), Form F.

#### CLEARANCE IN 2022

The clearance total in Germany's Article 7 report for 2022 was 1,339,200m², destroying in the process 1,187 submunitions either in situ or in a nearby demolition site. Germany provided only a cumulative clearance output from 2017 to 2022 inclusive and from this it is possible to calculate the annual output by calculating the difference between the cumulative output (and number of submunitions destroyed) reported as at the end of 2022 and the figures for the end of 2021. In addition, a further 209,600m² was cleared by operators in 2022 outside the CMR-contaminated area, for reasons of fire protection and in order to allow for clearance at the contaminated sites. The contaminated sites.

The clearance total differs slightly from the figures provided by Germany to Mine Action Review at 1,338,000m<sup>2</sup> due to rounding by operators, see Table 3, which is a more detailed breakdown of the clearance output then provided in the Article 7 report.<sup>68</sup>

Table 3: CMR clearance in 202269

| Operator  | Area cleared (m²) | Submunitions destroyed |
|---|-------------------|------------------------|
| Röhll Munitionsbergung GmbH (Brandenburg/Havel) | 564,000           | 300                    |
| Schollenberger Kampfmittelbergung GmbH (Celle)  | 371,000           | 629                    |
| SafeLane Global GmbH (Ludwigsfelde)             | 403,000           | 258                    |
| Totals  | 1,338,000         | 1,187                  |

Clearance output in 2022 was a 58% increase on that achieved in the previous year, when  $0.85 \,\mathrm{km^2}$  of CMR-contaminated area was cleared with the destruction of 466 submunitions. This was due to the increased capacity of personnel and a reduced impact from COVID-19. In addition to the submunitions destroyed, operators have also destroyed or recycled 36,158 items of UXO.

CMR clearance is subject to internal quality control (QC) by the commercial contractors and to external QC by an independent engineering company of between 10% and 20% of each  $50 \times 50$  metre clearance box.<sup>73</sup>

#### ARTICLE 4 DEADLINE AND COMPLIANCE



Under Article 4 of the CCM, Germany is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than its extended deadline of 1 August 2025. Germany is working to increase the efficiency of its operations to meet this deadline, although it is behind its planned clearance targets and Mine Action Review concludes that it is not on track to complete clearance in time.

After extensive and lengthy preliminary work for preparation of the site for clearance, including survey and a creation of a fire protection system, Germany finally began CMR clearance in March 2017. A total of 5.25km² of CMR contamination has been cleared in the last five years (see Table 4).

Table 4: Five-year summary of CMR clearance

| Year  | Area cleared (km²) |
|-------|--------------------|
| 2022  | 1.34               |
| 2021  | 0.85               |
| 2020  | 1.09               |
| 2019  | 1.21               |
| 2018  | 0.76               |
| Total | 5.25               |

<sup>66</sup> Ibid.

<sup>67</sup> Ibid.

<sup>68</sup> Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May 2023.

<sup>69</sup> Emails from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May and 20 June 2023.

<sup>70</sup> Article 7 Reports (covering 2022 and 2021), Form F; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.

<sup>71</sup> Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May 2023.

<sup>72</sup> Ibid.

<sup>73</sup> CCM Article 4 Extension Request 2019, p. 28.

In 2018, Germany predicted that it would take between five years (meaning completion of clearance in 2023) and six years (completion of clearance in 2024), based on the estimated 980 hectares (9.8km²) of remaining CMR contamination as at the end of 2018, and an estimated annual clearance capacity of 140 personnel, working 225 days per annum, at a clearance rate of 50–60m² per person per day. This corresponds to clearance of 1.5–2km² per annum. Reporting and documentation relating to clearance efforts are predicted to be finalised in 2025.74

Clearance output of 1.34km² in 2022 was a significant increase on the previous years, but still fell short of Germany's planned clearance output of 1.5km².75 Germany did increase its clearance capacity in 2022 to nearly 200 personnel which it considers to be full capacity. Germany plans to clear 1.1km² in 2023 due to reduced numbers of personnel following the termination of SafeLane Global's contract and the increased density of contamination at the target areas.76 This would leave Germany with 4.18km² at the end of 2023 to clear by August 2025, far exceeding the annual clearance outputs it has achieved so far.

Other obstacles that continue to impact Germany's ability to meet its clearance deadline include the very high levels of other UXO contamination that are being encountered. Germany reports that the screening process of every UXO and piece of scrap metal that is detected considerably slows down clearance of the area. In 2022, more than 680 tonnes of UXO, other than CMR, and scrap metal was cleared, destroyed or recycled, with CMR contamination making up between only 1-4% of the total amount of contamination found.77 Germany also has difficulty hiring and retaining staff at Wittstock due to the peripheral location of the site and a lack of trained personnel from which to recruit from. Germany's clearance plan also assumes that a sufficient amount of controlled burning is able to take place to meet the planned clearance output and due to the ongoing drought and high temperatures in the area there are various fire protection works that must take place alongside clearance as well as the need for frequent scheduled breaks for staff. There are also long lead times for new equipment and replacement parts which results in unplanned downtime.78

Due to extensive hygiene measures and controls, the COVID-19 pandemic did not result in any significant impairment of CMR clearance operations in 2021 or in 2022.<sup>79</sup>

### PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Germany is not aware of any further cluster munition contamination beyond Wittstock, but if, contrary to expectations, contamination does become known in the future, the responsible authority would depend on the ownership of the area in question. For any federal property, the Institute for Federal Real Estate (BImA), which is responsible for clearance at Wittstock, would be the responsible authority to deal with such new contamination.<sup>80</sup>

<sup>74</sup> CCM Article 4 Extension Request 2019, pp. 33 and 37.

<sup>75</sup> Article 7 Report (covering 2022), Form F; and email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.

<sup>76</sup> Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 25 May 2023.

<sup>77</sup> Ibid.; and virtual meeting with official on the Desk for Conventional Arms Control, Federal Foreign Office, 15 June 2023.

<sup>78</sup> Article 7 Report (covering 2022), Form F.

<sup>79</sup> Article 7 Reports (covering 2022 and 2021), Form F.

<sup>80</sup> Email from official on the Desk for Conventional Arms Control, Federal Foreign Office, 10 May 2022.