

**ARTICLE 5 DEADLINE: 31 DECEMBER 2025**

INTERIM EXTENSION: NOT ON TRACK TO COMPLETE CLEARANCE

## KEY DATA

**ANTI-PERSONNEL (AP)  
MINE CONTAMINATION: HEAVY**

NATIONAL AUTHORITY ESTIMATE

**140.6 km<sup>2</sup>**

AP MINE  
CLEARANCE IN 2021

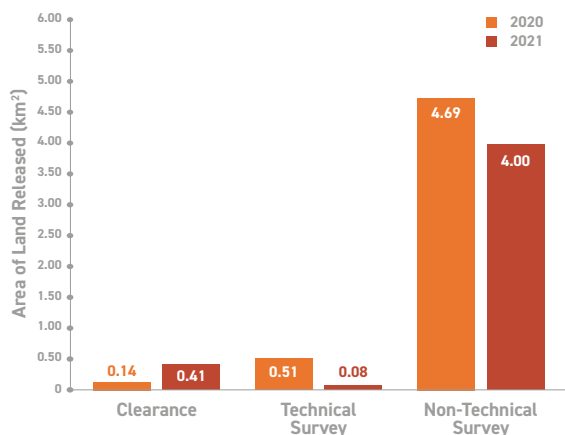
**0.41 km<sup>2</sup>**

AP MINES  
DESTROYED IN 2021

**14,176**

(INCLUDING 103 IMPROVISED  
ANTI-PERSONNEL MINES)

## LAND RELEASE OUTPUT



**CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET** (as per the Oslo Action Plan commitment): **LOW**

## KEY DEVELOPMENTS

Türkiye (formerly known as Turkey) published a strategic plan for 2020–25 setting out five broad goals, including clearance of all mined areas, but this was superseded in February 2021 by its request for a three-year and nine-month extension of its Article 5 deadline until the end of 2025, which was granted at the Anti-Personnel Mine Ban Convention (APBMC) 19<sup>th</sup> Meeting of States Parties (MSP) in November 2021. This extension provides for non-technical survey of all mined areas, which Türkiye expects to result in cancellation of up to a quarter of contamination estimates, as at the date of the request. It also provides the basis for another extension request preparing for completion of Türkiye's Article 5 obligations. The Turkish Mine Action Centre (TURMAC) has issued contracts for Phase 3 survey and clearance along the Eastern Border and work began in June 2021.

## RECOMMENDATIONS FOR ACTION

- Alongside plans for non-technical survey and expectations of substantial cancellation of hazardous areas, Türkiye should accelerate clearance, which is unacceptably low.
- Türkiye should provide details of plans to address the small amount of contamination reported in non-border areas.
- Türkiye should plan, implement, and report on mine clearance in territories it controls in northern Cyprus and northern Syria.
- Türkiye should set out plans to promote gender and inclusion in mine action.

## ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
<b>UNDERSTANDING OF CONTAMINATION</b> (20% of overall score)	7	7	Türkiye has good knowledge of the extent of its mine contamination and has, in theory, confirmed all hazardous areas but now plans to refine that understanding by non-technical survey of all mined areas. It expects that this will reduce the area that actually needs clearance by up to 40%.
<b>NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT</b> (10% of overall score)	6	6	Since 2015, Türkiye has developed an institutional framework for mine action under the control of the military and since 2018 has embarked on significant expansion of its operational capacity, although management has suffered from high staff turnover.
<b>GENDER AND DIVERSITY</b> (10% of overall score)	4	4	Türkiye makes no reference to gender and diversity in its 2020–25 strategic plan or the Article 5 deadline extension request submitted in early 2021. Military regulations prevent employment of women in military demining teams but TURMAC says women are included in survey and community liaison teams and in non-operational roles. It claims that it takes gender into account in planning new projects and has received training in gender mainstreaming from a United Nations Development Programme (UNDP) gender specialist during 2020 and 2021, with plans for training of more personnel in 2022.
<b>INFORMATION MANAGEMENT AND REPORTING</b> (10% of overall score)	7	7	TURMAC operates an Information Management System for Mine Action (IMSMA) database which became operational in 2018. It supported a desktop review of contamination data in 2019 that led to a significant adjustment in estimates of hazardous areas. Türkiye submits comprehensive and timely Article 7 reports.
<b>PLANNING AND TASKING</b> (10% of overall score)	7	7	In 2020, Türkiye published a long-awaited strategic plan for 2020–25 that set out five main goals, including becoming mine free by 2025. This was superseded in February 2021 by Türkiye's request for a three-year and nine-month extension to its Article 5 deadline in order to conduct non-technical survey of all hazardous areas with a view to establishing a clear baseline from which to plan how to complete clearance.
<b>LAND RELEASE SYSTEM</b> (20% of overall score)	7	7	Türkiye published 44 chapters of mine action standards in 2019 which it prepared in consultation with UNDP and the Geneva International Centre for Humanitarian Demining (GICHD). Türkiye updated five areas of the National Mine Action Standards (NMAS) in 2021 including chapters on accreditation, non-technical survey, and mechanical demining.
<b>LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE</b> (20% of overall score)	4	4	Türkiye has expanded its military demining capacity since 2018 but land release had continued to decline in 2019 and 2020. While clearance in 2021 saw a significant increase compared to 2020, it was still the second lowest amount in the last five years.
<b>Average Score</b>	<b>6.0</b>	<b>6.0</b>	<b>Overall Programme Performance: AVERAGE</b>

## DEMINEING CAPACITY

## MANAGEMENT CAPACITY

- Ministry of National Defence (MoND)
- Turkish Mine Action Centre (TURMAC)

## NATIONAL OPERATORS

- Altay (national sub-contractor under Denel MECHEM and The Development Initiative (TDI))
- Turkish Armed Forces including: Land Forces Military Demining Units (ÖMAT), Gendarmerie Forces Military Demining Units (JÖMAT) and Military Counter-Improvised Explosive Device (IED)/Mine teams.

## INTERNATIONAL OPERATORS

- Denel MECHEM (up to 2020)
- The Development Initiative (TDI) (from 2021)
- RPS Explosive Engineering Services (Quality Assurance (QA) and Quality Control (QC) of the European Union (EU) project)

## OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)

## UNDERSTANDING OF AP MINE CONTAMINATION

Türkiye reported it has 3,804 mined areas covering more than 140km<sup>2</sup> at the end of 2021,<sup>1</sup> down from 145km<sup>2</sup> a year earlier (see Table 1). Most contamination (85%) is along Türkiye's 909km-long border with Syria where land release accounted for 95% of the reduction in contamination in 2021. Estimated mined area on its borders with Armenia and Iraq remained the same as a year earlier.<sup>2</sup> A total of

198,146m<sup>2</sup> was released along the border with Iran, while in non-border areas, the estimate of confirmed hazardous areas (CHAs) went up by 320,416m<sup>2</sup>.<sup>3</sup> Aside from this increase, no new areas of previously unrecorded anti-personnel mine contamination were added to Türkiye's information management database in 2021.<sup>4</sup>

**Table 1: Anti-personnel mined area by region (at end 2021)<sup>5</sup>**

Region	CHAs	Area (m <sup>2</sup> )	AP mines	AV mines
Syrian border	1,519	119,202,073	409,884	193,186
Iraqi border	874	2,842,935	78,917	0
Iranian border	449	14,899,893	104,270	0
Armenian border	43	1,097,077	20,275	0
Non-border areas	919	2,544,911	33,798	0
<b>Total</b>	<b>3,804</b>	<b>140,586,889</b>	<b>647,144</b>	<b>193,186</b>

AP = Anti-personnel AV = Anti-vehicle

Türkiye reports mines were first laid along the Syrian border in the 1950s to prevent smuggling and later in south-eastern regions for military security.<sup>6</sup> Mines inside the country were laid around military installations during the 1984–99 conflict with the Kurdistan Workers' Party (Partiya Karkerên Kurdistan, PKK) in the south-east of the country. These are mostly in Ardahan, Batman, Bingöl, Bitlis, Diyarbakir, Hakkari, Mardin, Şırnak, Siirt, and Tunceli.<sup>7</sup> According to Türkiye, these mines, which were marked and fenced, have been progressively cleared since 1998.<sup>8</sup> The mines on Türkiye's other borders were mostly laid in 1955–59 and on some sections of the border with Armenia, Iran, and Iraq in 1992–95.<sup>9</sup> Türkiye reports that its western borders with Bulgaria and Greece, as well as the border with Georgia, are mine-free.<sup>10</sup>

In addition to mines laid by its security forces, Türkiye also reports the presence of mines of an improvised nature that it says were emplaced by non-State armed groups, rendering clearance more challenging.<sup>11</sup> Improvised explosive devices (IEDs) are mostly remote controlled or victim-activated pressure plate (in which case they fall within the definition of an anti-personnel mine under the APMBC). Explosive charges are mostly ammonium nitrate supported with plastic explosives.<sup>12</sup>

The number of mined areas along the Iraqi border, as well as part of the Iranian border, is an estimate, as, according to Türkiye, precise calculation is hampered by armed group activities and the presence of unconfirmed mined areas. In addition, fewer mines are expected along the Syrian border than indicated because of detonations by smugglers and as a result of wildfires.<sup>13</sup>

In its most recent Article 5 deadline extension request, Türkiye reports that, prior to TURMAC's establishment in 2015, some demining activities conducted solely by military demining units were cleared with a 90% to 95% mine detection/destroy rate and there was no quality assurance (QA)/quality control (QC) process in place before handover of the cleared area.<sup>14</sup> In these mined areas cleared solely by the military, and where there was an unacceptably low detection rate and no QA/QC, TURMAC must ensure that re-clearance/QC is conducted, to ensure that any anti-personnel mines missed previously are discovered and destroyed. In 2021, the APMBC Committee on Article 5 Implementation observed that Türkiye was still in the process of identifying the precise perimeter of mined areas and noted that the Committee "welcomed" updates from Türkiye on this issue.<sup>15</sup>

1 Article 7 Report (covering 2021), Form D.

2 Email from Maj. Zamil Koptekin, Deputy Director, Quality Management Department, TURMAC, 4 May 2021; and Article 7 Report (covering 2021), Form D.

3 Article 7 Report (covering 2021), Form D.

4 Email from Ömer Burga Gönen, Planning Expert, TURMAC, 8 August 2022.

5 Article 7 Report (covering 2021), Form D.

6 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 1.

7 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

8 Response to Landmine Monitor questionnaire by Elif Comoglu Ulgen, Head, Disarmament and Arms Control Department, Ministry of Foreign Affairs, 14 July 2008; and email from Maj. Can Ceylan, TURMAC, 11 July 2019.

9 Article 7 Report (covering 2019), Form D; 2013 Article 5 deadline Extension Request, pp. A-1 and A-5.

10 2021 Article 5 deadline Extension Request, p. 7.

11 2013 Article 5 deadline Extension Request, p. A-5.

12 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

13 Article 7 Report (covering 2015), Form C.

14 2021 Article 5 deadline Extension Request, p. 11.

15 'Preliminary Observations on the Implementation of Article 5 by Türkiye', Committee on Article 5 Implementation, Anti-Personnel Mine Ban Convention (APMBC) Intersessional Meetings, Geneva, 20–22 June 2022.

## NORTHERN CYPRUS

Türkiye's original Article 5 clearance deadline was 1 March 2014. In 2013, States Parties granted Türkiye an eight-year extension until 1 March 2022, for clearance of mines in Türkiye, but Türkiye did not request additional time for clearance of the areas it controls in northern Cyprus<sup>16</sup> (see the report on Cyprus for further information). This puts into question its compliance with Article 5 of the APMB. Türkiye's extension request, submitted in February 2021, makes no reference to Northern Cyprus.<sup>17</sup>

## NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Türkiye adopted Law No. 6586 establishing a national mine action centre under the Ministry of National Defence (MoND) in February 2015.<sup>18</sup> Its director reports directly to the Undersecretary of the MoND.<sup>19</sup> The law gave the centre, now known as TURMAC, responsibility for the clearance to humanitarian standards of mines and/or unexploded ordnance (UXO).<sup>20</sup> It also has responsibility to elaborate policies for clearance; to plan and steer related activities and to monitor their implementation; and to carry out the necessary coordination and cooperation with domestic and foreign institutions.<sup>21</sup> To strengthen project management, TURMAC planned to establish project offices in the regions where it is operational.<sup>22</sup> In 2021, a Project Office was established by the United Nations Development Programme (UNDP) for the Eastern Borders Mine Clearance Project (EBMCP) Phase 3. TURMAC asserts that, additionally, further project offices can be established by TURMAC if needed to support clearance operations in Mardin province, bordering Syria.<sup>23</sup>

Türkiye reports that the formation of TURMAC has led to significantly increased mine action activities and clearance,<sup>24</sup> but a high turnover of senior staff, including the director, has also had a negative effect on the national mine action programme. In September 2020, the government appointed Colonel Hasan Soydaş as acting director. He became the fourth person to lead TURMAC in five years.<sup>25</sup> Brigadier-General Mehmet Zeki Eren<sup>26</sup> was appointed Director of TURMAC on 24<sup>th</sup> August 2021; the first TURMAC Director to hold the rank of General.<sup>27</sup>

In 2021, the Committee on Article 5 Implementation observed that Türkiye's request submitted to the 19MSP contained an evidence-based and costed plan for clearance and survey for 2020 to 2025 and that Türkiye had further reported having a National Mine Action Strategy in place for those years. By 30 April 2023, Türkiye is expected to produce an updated detailed work plan for the remaining period covered by its extension.<sup>28</sup>

Mine action in Türkiye is mostly financed by the state. TURMAC and the Turkish Armed Forces demining units are financed entirely by the government.<sup>29</sup> In 2021, Türkiye reported that the MoND had approved allocating approximately TRY85 million from the national budget for humanitarian mine action between 2022 and 2026. TRY35 million of this budget will be used for capacity development of military units and the rest for demining.<sup>30</sup> In its Article 7 report covering 2020, Türkiye stated that it would allocate an annual budget of TRY53.2 million (approximately US\$6 million) for mine action in 2020–25.<sup>31</sup> As such, this TRY85 million to cover four years of mine action until 2026 would appear to represent a decrease in allocation of government funding. That said, Türkiye will also allocate €2.12 million to fund the fourth component of the Eastern Borders Mine Clearance Project, while the European Union (EU) is expected to contribute €18.5 million.<sup>32</sup> The MoND has pledged an additional TRY25 million for 2022 to 2023 to conduct mine clearance in Mardin province, bordering Syria.<sup>33</sup>

16 2013 Article 5 deadline Extension Request.

17 2021 Article 5 deadline Extension Request.

18 Article 7 Report (covering 2014), "Workplan for mine clearance activities", Annex 1; and Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report, Form A, 2015.

19 Presidency Decree No. 1 of 10 July 2018; Article 7 Report (for 2018), Form A; and Statement of Turkey on Clearance, 17<sup>th</sup> Meeting of States Parties, Geneva, 29 November 2018.

20 Article 7 Report (covering 2014), "Workplan for mine clearance activities", Annex 1; and CCW Amended Protocol II Article 13 Report, Form A, 2015.

21 Ibid.

22 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 8.

23 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

24 Article 7 Report (covering 2020), Form A.

25 Ibid.

26 'Demining improves security along Turkey's eastern border', *ReliefWeb*, 2 October 2021, at: <https://bit.ly/3S3FY6W>.

27 Article 7 Report (covering 2021), Form D.

28 "Preliminary Observations on the Implementation of Article 5 by Türkiye", Committee on Article 5 Implementation, Intersessional Meetings, Geneva, 20–22 June 2022.

29 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.

30 Article 7 Report (covering 2021), Form D.

31 Article 7 Reports (covering 2019 and 2020), Form A.

32 Article 7 Report (covering 2021), Form D.

33 Article 7 Report (covering 2020), Form A.

The Mardin project is the first mine clearance project to be tendered by the Turkish Government since the establishment of TURMAC in 2015. It encompasses 45 minefields containing 27,614 mines across 1.7km<sup>2</sup>.<sup>34</sup> It will be managed by TURMAC and implemented by a private contractor.<sup>35</sup> Private contractors will also be instrumental in Türkiye's plans to conduct non-technical survey of all known (3,692) minefields across fourteen provinces during the new extension period until the end of 2025. This project will be managed by UNDP and implemented by TURMAC and private contractors.<sup>36</sup>

Türkiye highlights various capacity building efforts in recent years. As part of the first two phases of the EBMCP between 2016 and 2019,<sup>37</sup> Türkiye describes how "TURMAC capacity development and continuity efforts" were implemented "in partnership with the UNDP and GICHD (the Geneva International Centre for Humanitarian Demining), as well as other national partners."<sup>38</sup> UNDP outlines how Phase 3 of the project will also provide training for TURMAC personnel in areas such as quality management (QM), use of mine detection dogs (MDDs), and technical survey operations including data management and analysis. This follows training provided to more than 500 personnel from TURMAC,

the Land Forces, and the Ministry of Interior under the previous two phases.<sup>39</sup>

Personnel from TURMAC undertook various training courses in 2021. In collaboration with UNDP, eight TURMAC personnel (one female, seven male), attended International Organisation for Standardisation (ISO) 9001 Lead Auditor training. One female TURMAC member of staff attended Information Management System for Mine Action (IMSMA) training, and 23 TURMAC personnel (8 women, 15 men), attended training on Gender Mainstreaming Awareness Raising, with further training on gender planned for 2022.<sup>40</sup> TURMAC reports that, to date in 2022, within the scope of EBMCP Phase 3 project in collaboration with UNDP and GICHD, a total of 20 personnel (4 female and 16 male) from TURMAC and Military Demining Units have attended technical survey training and 23 personnel (1 female and 22 male) from TURMAC and Military Demining Units have attended QM training. Additionally, 5 TURMAC personnel (3 female and 2 male) attended a Geographic Information System (GIS) course and 3 TURMAC personnel (all male) attended MDD accreditation methodology training.<sup>41</sup>

## ENVIRONMENTAL POLICIES AND ACTION

TURMAC outlines how, in order to minimise potential environmental harm from clearance, mines found during clearance activities are transported to a central area for destruction. This central destruction area is determined according to international standards, including considerations such as proximity to water resources and agricultural land.<sup>42</sup>

It is not known whether Türkiye has a national mine action standard on environmental management and/or a policy on environmental management.

## GENDER AND DIVERSITY

Türkiye did not address gender and diversity in its 2021–25 strategy or in the Article 5 deadline extension request submitted in February 2021. The APMBC Committee on Article 5 Implementation noted this omission in its preliminary observations on Türkiye's extension request and said it would welcome additional information on efforts to establish a baseline of contamination through inclusive consultations with women, girls, boys and men.<sup>43</sup> This was reiterated in 2021, when the Committee observed that Türkiye had not reported updated information on any such efforts. The Committee also noted that Türkiye had not reported on its efforts to ensure consideration of gender, age, or disability in mine action nor how it takes the diverse needs and experiences of people in affected communities into account in implementation of Article 5.<sup>44</sup>

In a statement to the 2021 Intersessional meetings, Türkiye said gender balance is taken into consideration in all mine action activities. It noted that although military demining units do not employ any women, civilian contractors are advised to hire female personnel and that 45% of TURMAC's personnel are women.<sup>45</sup> A UNDP gender specialist also provided training on

34 Article 7 Report (covering 2021), Form D.

35 Presentation by Capt. Mustafa Torun, Senior Planning Officer, TURMAC, Intersessional Meetings, Geneva, 22 June 2022.

36 Ibid.

37 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2018; Article 7 Report (covering 2017), Form A; Statement of Turkey on Clearance, 17<sup>th</sup> Meeting of States Parties, Geneva, 29 November 2018; and Article 7 Report (covering 2019), Form A.

38 Article 7 Report (covering 2021), Form I.

39 UNDP, "Demining improves security along Turkey's eastern border", Press release, 28 September 2021, at: <https://bit.ly/3BnxD8k>.

40 Article 7 Report (covering 2021), Form D.

41 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

42 Ibid.

43 Preliminary Observations, Committee on Article 5 Implementation, Intersessional Meetings, Geneva 22–24 June 2021.

44 Committee on Article 5 Implementation, Preliminary Observations on the Implementation of Article 5 by Türkiye, Intersessional Meetings, Geneva, 20–22 June 2022.

45 Turkey statement to the APMBC Intersessionals, 22–24 June 2021.

gender mainstreaming for 24 TURMAC staff in 2020,<sup>46</sup> and a further 23 TURMAC staff (8 women, 15 men ) in 2021. TURMAC has planned to make this training available again in 2022.<sup>47</sup> Türkiye also reports it is strengthening efforts to disaggregate data by age and gender and that demining projects are designed to promote equality and combat discrimination.<sup>48</sup>

TURMAC says national standards closely follow International Mine Action Standards (IMAS) on gender and that the issue is considered in the preparation of new project documents. Survey and community liaison teams include women to facilitate access and participation by all groups.<sup>49</sup>

## INFORMATION MANAGEMENT AND REPORTING

TURMAC installed IMSMA with support from the GICHD in 2017, and personnel from TURMAC and the armed forces have been trained in its use.<sup>50</sup> Türkiye reported the system contains all minefield and mine victim data and is used for all reporting and documentation.<sup>51</sup> TURMAC conducted information management training for new personnel and for military demining units.<sup>52</sup>

Türkiye has submitted Article 7 transparency reports annually that are both timely and which provide a comprehensive review of plans and performance.

## PLANNING AND TASKING

Türkiye states that its mine action programme is intended to achieve humanitarian goals and boost security by developing modern integrated border management on its eastern and southern borders.<sup>53</sup> In 2020, TURMAC released a 12-page Strategic Mine Action Plan through to the end of 2025 setting out a vision of Türkiye becoming mine-free by 2025. It estimated the cost of completion at about US\$332 million, to be financed by the national budget and international sources. The plan identified five goals:<sup>54</sup>

- to clear all of the emplaced anti-personnel mines in Türkiye
- to strengthen national capacity and ensure its sustainability
- to reduce the number of mines held in depots for training
- to provide Mine Risk Education and support mine victims; and
- to develop coordination and cooperation with national and international organisations related to mine action.

With respect to the third goal of reducing the number of mines held in depots for training, Türkiye revised this goal in 2021 and stated that it will, instead, maintain its number of retained mines to implement testing, development, and training, including of MDDs.<sup>55</sup> In June 2021, the Gendarmerie General Command started to provide clearance training, doubling the number of training centres where Türkiye will allocate anti-personnel mines for training purposes.<sup>56</sup>

TURMAC has prioritised its mine clearance activities according to four levels as follows:

**Level 1:** Lands with minefields along the southern and eastern borders of Türkiye, which prevent the establishment of new border surveillance technology and infrastructure (e.g. watchtowers, patrol roads).

**Level 2:** Interior lands with minefields, posing a danger to inhabitants.

**Level 3:** Lands requested to be cleared by governmental organisations.

**Level 4:** Disputed lands along the borders and interior parts of Türkiye, belonging to private owners.<sup>57</sup>

46 Email from Mark Frankish, Chief Technical Adviser, Demining and Increasing Border Surveillance Capacity at the Eastern Border, UNDP, 24 May 2021.

47 Article 7 Report (covering 2021), Form D.

48 Preliminary Mid-term Assessment, Türkiye, Status of Implementation – Victim Assistance, Committee on Victim Assistance, Intersessional Meetings, 20–22 June 2022.

49 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

50 Statements of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019; and on Clearance, 17<sup>th</sup> Meeting of States Parties, Geneva, 29 November 2018; email from Maj. Can Ceylan, TURMAC, 11 July 2019; and Article 7 Report (covering 2018), Form A.

51 Article 7 Report (covering 2019), Form A.

52 Ibid.

53 Article 7 Report (covering 2020), Form A.

54 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, pp. 7–8, 10.

55 Article 7 Report (covering 2021), Form C.

56 Ibid.

57 Article 7 Report (covering 2021), Form D.

In February 2021, Türkiye requested an extension of its Article 5 deadline for three years and nine months until the end of December 2025, setting out specific aims and timelines. Türkiye aims in particular to use the time to complete non-technical survey of all 3,483 CHAs with a view to producing baseline data from which to prepare plans for completing mine clearance. TURMAC is expected to conduct non-technical survey on 332 CHAs and to issue commercial contracts for survey of the remaining 3,502 CHAs. Each hazardous area is due to undergo a desk assessment followed by a field visit in accordance with standard non-technical survey methodology. Türkiye expects non-technical survey will result in cancellation of around 40km<sup>2</sup> of mined area.<sup>58</sup>

Türkiye has indicated that, during the latest extension period, it will address 183 mined areas measuring 10.7km<sup>2</sup> through mine clearance, including 27 mined areas measuring just over 1km<sup>2</sup> to be addressed as part of the Mardin Province Clearance Project in the period 2022 to 2023, 96 minefields measuring 4.2km<sup>2</sup> located in four Eastern border provinces as part of Phase 3 of the EBMCP project in 2022–25, and 60 mined areas measuring 5.4km<sup>2</sup> in areas located on the Iraqi and Syrian borders.<sup>59</sup>

### BORDERS WITH IRAQ AND SYRIA

Türkiye's 2013 Article 5 deadline extension request had projected completing clearance of the Syria border by the end of 2019.<sup>60</sup> Turkish officials have described the Syria border as Türkiye's easiest clearance task because the terrain is flat and has experienced minimal mine displacement due to environmental factors. Furthermore, the minefields are mostly marked and fenced and well-known to local populations. Türkiye, however, was held back by the Syria conflict<sup>61</sup> and has made little progress clearing the border.

Clearance operations underway since 2018 have focused on Hatay and Kilis provinces.<sup>62</sup> The Strategic Plan for 2020–25 said Turkish demining assets would clear a total of around 3.4km<sup>2</sup> in Gaziantep, Hatay, Kilis, Mardin, Şanlıurfa, and

Şırnak provinces on the Syrian border at a cost of TRY55 million (US\$8 million) funded from the national budget.<sup>63</sup> In Mardin province, the MoND plans to clear 27 areas covering nearly 1.06km<sup>2</sup> between 2021 and 2023.<sup>64</sup>

### EASTERN BORDERS

Türkiye's Eastern Border Mine Clearance project (EBMCP), which started on the Armenian border, is continuing southwards to the borders with Azerbaijan, Iran, and Iraq.<sup>65</sup> The project is supervised by Turkish authorities and implemented in a joint project with UNDP,<sup>66</sup> which is managing and quality assuring the demining.<sup>67</sup> Denel MECHEM (MECHEM) was awarded a contract to conduct demining as part of a consortium in which national operators would be subcontracted by the company.<sup>68</sup>

Phase 1 of the project, implemented between June 2016 and the end of 2017,<sup>69</sup> released a total of almost 3.3km<sup>2</sup> of mined area (much less than the 13.5km<sup>2</sup> envisaged in the Article 5 deadline extension request), destroying in the process 25,667 anti-personnel mines.<sup>70</sup> Phase 2, which started behind schedule in June 2018 and was completed in December 2019,<sup>71</sup> resulted in release of close to 1.7km<sup>2</sup> of land, bringing the total area released in the first two phases to 4.8km<sup>2</sup>.<sup>72</sup>

Phase 3 has four components: clearing 4.24 km<sup>2</sup>, building TURMAC capacity, mine risk education to build public awareness, and non-technical survey of 3,502 minefields. Clearance is to be conducted by a joint venture between TDI and the national operator Altay, which are expected to deploy up to 15 manual clearance teams supported by MDDs. The first three components will be funded by the EU. Türkiye will allocate €2.12 million to fund the fourth component involving non-technical survey.<sup>73</sup> After tendering for the third phase during 2020, Türkiye issued contracts for the project in December 2020 and started work in June 2021. The request also stipulates that manual clearance is followed by two levels of verification, including an extended search for missing mines and sampling checks conducted using MDDs.<sup>74</sup>

58 2021 Article 5 deadline Extension Request, p. 19; and email from Mark Frankish, UNDP, 24 May 2021.

59 Committee on Article 5 Implementation, Preliminary Observations on the Implementation of Article 5 by Türkiye, Intersessional Meetings, Geneva, 20–22 June 2022.

60 2013 Article 5 deadline Extension Request, pp. A-2, A-13, and A-14.

61 Article 7 Report (covering 2014), "Workplan for mine clearance activities", pp. 3 and 8; and Statement of Turkey, 15<sup>th</sup> Meeting of States Parties, Santiago, 29 November 2016.

62 Email from Maj. Can Ceylan, TURMAC, 11 July 2019; Article 7 Report (covering 2019), Form A.

63 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 8.

64 2021 Article 5 deadline Extension Request, p. 6.

65 2013 Article 5 deadline Extension Request, p. A-14.

66 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 6.

67 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016.

68 Interview with Gen. Celalettin Coban and Col. Ali Güngör, TURMAC, in Geneva, 18 February 2016.

69 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2018; and Article 7 Report (covering 2017), Form A.

70 Statements of Turkey on Clearance, 17<sup>th</sup> Meeting of States Parties, Geneva, 29 November 2018; and Intersessional Meetings, Geneva, 22 May 2019.

71 Statements of Turkey on Clearance, 17<sup>th</sup> Meeting of States Parties, Geneva, 29 November 2018; Article 7 Report (covering 2019), Form A.

72 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

73 Email from Maj. Şamil Koptekin, TURMAC, 4 May 2021.

74 2021 Article 5 deadline Extension Request, p. 20; email from Mark Frankish, UNDP, 24 May 2021.

In 2021, TURMAC was preparing a project document for EBMCP Phase 4, which is to include Van province, in order to secure funding of €18.5 million from the EU.<sup>75</sup> At the time of writing, Mine Action Review had not been able to ascertain whether this proposal had yet been submitted or whether this funding had been secured.

Türkiye reports that, as a result of the EBMCP in 2021, an area of just over 0.35km<sup>2</sup> was cleared, with 18,444 mines found and destroyed. However, at the time of Türkiye's submission of its Article 7 reporting for 2021, the QM process had not been completed and the data had not been uploaded to the IMSMA database, hence the clearance was not included in Türkiye's land release figures for 2021.<sup>76</sup>

TURMAC's non-technical survey teams are supporting operations in the EBMCP with QC and in an advisory capacity. Türkiye expects that one of the outcomes of the project will be an accurate picture of hazardous areas, which will facilitate "more reliable and precise schedule planning of mine clearance activities for the upcoming years."<sup>77</sup>

## NON-BORDER AREAS

Türkiye had planned to clear all 873 identified mined areas inside the country by 2021, involving release of 3.1km<sup>2</sup> and destruction of 34,410 mines. However, little progress has been made in recent years, with clearance of only 0.3km<sup>2</sup> at a former military range in 2018<sup>78</sup> and a further 9,584m<sup>2</sup> cleared in 2021. Türkiye estimated at the end of 2021 that 2.5km<sup>2</sup> remained.<sup>79</sup> The mined areas are scattered and TURMAC considers it practical for clearance to be conducted by military units even though their capacity to do so has so far been limited.<sup>80</sup>

Türkiye's Article 5 deadline extension request does not set out a timeline for tackling non-border areas. TURMAC reported that in 2021 a gendarmerie demining company would be assigned to clearance of non-border tasks in the south-eastern provinces of Diyarbakir and Siirt and the north-eastern province of Ardahan.<sup>81</sup> At the time of writing, Mine Action Review had not been able to ascertain if this planned activity had proceeded, although, as noted above, some clearance in unspecified non-border areas in 2021 had been reported.

## LAND RELEASE SYSTEM

### STANDARDS AND LAND RELEASE EFFICIENCY

Türkiye issued 44 national mine action standards, including on land release, in February 2019. The standards were prepared with support from UNDP and the GICHD.<sup>82</sup> A separate set of standards specific to the EBMCP were also reviewed in 2019, including regulations and medical standards for private companies.<sup>83</sup>

In 2021, Türkiye updated the following National Mine Action Standards:

- NMAS 4.10: Glossary of Mine Action Terms, Definitions and Abbreviations
- NMAS 7.30: Accreditation of Mine Action Organisations
- NMAS 8.10: Non-Technical Survey
- NMAS 9.50: Mechanical Demining
- NMAS 10.30: Occupational Health and Safety-Personal Protective Equipment.<sup>84</sup>

### OPERATORS AND OPERATIONAL TOOLS

Türkiye's main demining capacity is provided by the military. By 2020, after two years of rapid expansion, total military capacity amounted to 32 teams: 26 Land Forces demining teams with 420 personnel and 6 *Gendarmerie* teams with 120 personnel. To date, in 2022, the number of Gendarmerie demining teams has been increased from 6 to 18.<sup>85</sup> In its latest Article 7 Report (covering 2021), Türkiye noted plans to increase capacity further, up to a total of 50 military manual demining teams (32 Land Forces and 18 Gendarmerie).<sup>86</sup> While Türkiye has reached this target for the Gendarmerie, it remains six Land Forces teams below target. No time frame was given for this eventual planned increase.

75 Article 7 Report (covering 2021), Form D and CCW Protocol II 10 Report (covering 2021), Form E; and email from Maj. Şamil Koptekin, TURMAC, 4 May 2021.

76 Article 7 Report (covering 2021), Form D.

77 Ibid.

78 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; Article 7 Report (for 2017), Form A; Article 7 Report (for 2018), Form D; Article 7 Report (covering 2019), Form A.

79 Article 7 Report (covering 2021), Form D.

80 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

81 Email from Şamil Koptekin, TURMAC, 4 May 2021.

82 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016; and Article 7 Report (covering 2015), Form F; Article 7 Report (covering 2019), Form A.

83 Article 7 Report (covering 2019), Form A; email from Maj. Can Ceylan, TURMAC, 24 June 2020.

84 Article 7 Report (covering 2021), Form D.

85 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

86 Article 7 Report (covering 2021), Form D.



**Table 2: Turkish military operational clearance capacities deployed in 2021<sup>87</sup>**

Operator	Manual clearance teams	Total deminers	MDD teams	Mechanical assets	Comments
Gendarmerie	18	*120	0	0	Increase from 6 teams in 2020. 3 Mine Detection Dogs
Land Forces	26	420	0	0	Machines planned for use in 2021
<b>Totals</b>	<b>44</b>	<b>540</b>	<b>0</b>	<b>0</b>	

\* At the time of writing, TURMAC had confirmed to Mine Action review that the number of Gendarmerie manual clearance teams increased from 6 to 18 in 2021 but did not state an updated number of deminers. As such, the actual number of deminers is believed to be higher than the 120 stated here, which is the number reported for 2020.

In 2021 Türkiye reported that Turkish Land Forces (TLF) and Gendarmerie Command were in the process of forming one new humanitarian demining company each, with equipment in place and personnel assignment and training expected to be completed in 2022.<sup>88</sup>

MECHEM, a South African company, was contracted for mine clearance under the EBMCP.<sup>89</sup> In 2019, MECHEM deployed 15 MDD teams, 6 manual clearance teams (approximately 60 deminers), and 1 MineWolf machine.<sup>90</sup> Before 2019, MECHEM had subcontracted its demining to a national company, Altay, but in 2019 it recruited Turkish nationals directly.<sup>91</sup> RPS-Explosive Engineering Services, part of the United Kingdom (UK)-based RPS Group of companies, was contracted for QA and QC.<sup>92</sup> TURMAC also had oversight of operations on site.<sup>93</sup>

A joint venture between TDI and national organisation Altay won the contract for Phase 3 of the EBMCP, including non-technical survey and clearance in the provinces of Ağrı, Ardahan, Kars, and Iğdır. RPS Energy, also part of the UK-based RPS Group, won the contract for quality management.<sup>94</sup>

Accreditation and quality management of Turkish Land Forces and the Gendarmerie units is carried out by TURMAC.<sup>95</sup>

Türkiye's defence industries developed the Mechanical Mine Clearing Equipment (*MEMATT*), a light-medium, unmanned

demining machine with a tiller attachment, particularly suitable for demining on the flat terrain along the Syrian border. The MoND had planned to take delivery of two machines in 2020 and four in 2021, but cautioned that plans could be set back by the COVID-19 pandemic and later reported that it aimed to deploy all six machines in 2021.<sup>96</sup> However, in 2021, Türkiye sent six demining machines (MEMATT-I), to Azerbaijan to support mine clearance<sup>97</sup> and reported that it planned to complete the deployment of 20 MEMATT-II machines to Turkish military demining units "in the upcoming years".<sup>98</sup> No specific time frame was given and, at the time of writing it was not clear how many machines had been deployed inside Türkiye in 2021.

Following mechanical mine clearance equipment certification tests in 2020, Türkiye began a new certification process in April 2022 and plans to implement mechanical mine clearance equipment production with various companies.<sup>99</sup> Again, no specific time frame for this has been given.

Following MDD training and accreditation in 2020,<sup>100</sup> Turkish Land Forces planned to deploy MDDs for verification following clearance and technical survey with mechanical assets.<sup>101</sup> In 2021, three MDDs were introduced into Gendarmerie demining units and used for verification, with plans to introduce more MDDs in 2022.<sup>102</sup> At the time of writing, the total number of MDDs deployed by military demining units had increased to ten.<sup>103</sup>

87 Emails from Şamil Koptekin, TURMAC, 4 May 2021; and Ömer Burga Gönen, TURMAC, 5 September 2022.

88 CCW Protocol II 10 Report (covering 2021), Form A.

89 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.

90 Emails from Maj. Can Ceylan, TURMAC, 11 July 2019 and 24 June 2020.

91 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.

92 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.

93 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.

94 Email from Mark Frankish, UNDP, 2 July 2021.

95 CCW Protocol II 10 Report (covering 2021), Form B.

96 MoND Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 7; Article 7 Reports (covering 2019 and 2020), Form A.

97 Article 7 Report (covering 2021), Form I; and "Azerbaijan receives new MEMATT mine clearing robots from Turkey", *Global Defense and Security News*, 8 February 2021.

98 Article 7 Report (covering 2021), Form D.

99 Article 7 Report (covering 2021), Form C.

100 Ibid.

101 Email from Şamil Koptekin, TURMAC, 4 May 2021.

102 Article 7 Report (covering 2021), Form D and CCW Protocol II 10 Report (covering 2021), Form G.

103 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

## LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

### LAND RELEASE OUTPUTS IN 2021

Türkiye released 30 hazardous areas<sup>104</sup> encompassing almost 4.5km<sup>2</sup> in 2021, 0.8km<sup>2</sup> less than the previous year. Türkiye destroyed 14,176 anti-personnel mines (including 103 improvised anti-personnel mines), as well as 1,429 anti-vehicle mines, 237 IEDs, and one item of UXO.<sup>105</sup>

As in previous years, the overwhelming majority of the area released (91% in 2021), was through survey. In its Article 7 Report covering 2021, Türkiye reported that eight military demining teams of the Gendarmerie “addressed” 207,730m<sup>2</sup> land, destroying 11,916 mines across 23 areas in Van and Siirt provinces at the Eastern Borders and interior parts of Türkiye. It also stated that sixteen military demining teams of the Turkish Land Forces conducted demining operations in Hatay, Kilis, and Şırnak provinces at the Syrian Borders, “addressing” approximately 287,419m<sup>2</sup> of land and destroying 3,535 mines across 7 areas. These operations account for all of the 495,149m<sup>2</sup> reported by Türkiye as released in 2021. Of this total only 413,851m<sup>2</sup> is accounted for by clearance, which took place at the borders with Syria and Iran and non-border areas (see Table 5).<sup>106</sup>

### SURVEY IN 2021

Türkiye released a total of 4.08km<sup>2</sup> through survey in 2021,<sup>107</sup> a decrease from the almost 5.2km<sup>2</sup> released through survey in 2020.<sup>108</sup> As in 2020, almost all land released by survey (4km<sup>2</sup> cancelled through non-technical survey), was at the borders with Syria (see Table 3). A further 81,298m<sup>2</sup>, located along the border with Iran, was reduced through technical survey (see Table 4).<sup>109</sup>

**Table 3: Cancellation through non-technical survey in 2021<sup>110</sup>**

Operator	Region	Area cancelled through NTS (m <sup>2</sup> )
TURMAC NTS Teams	Syria border	4,000,000
<b>Total</b>		<b>4,000,000</b>

**Table 4: Reduction through technical survey in 2021**

Operator	Region	Area reduced (m <sup>2</sup> )
Land Forces Military Demining Units (ÖMAT)	Iran border	81,298
<b>Total</b>		<b>81,298</b>

### CLEARANCE IN 2021

Türkiye’s military demining capacity increased significantly in 2018 but the amount of land released through clearance then fell steadily until 2020 (see Table 6). In 2021, Türkiye reported clearance of 413,851m<sup>2</sup> and with 14,176 anti-personnel mines destroyed (see Table 5),<sup>111</sup> a significant increase on the 142,073m<sup>2</sup> cleared in 2020 and a reversal of the downward trend in the two years previously. It is still, however, the second lowest amount of land released by clearance in the last five years.<sup>112</sup>

In 2021, Military C-IED/Mine teams found and neutralised 1,157 IEDs, including 103 improvised anti-personnel mines, during security operations.<sup>113</sup> During border security operations along the borders with Syria, 51 anti-personnel mines, 237 IEDs, and 383 other explosive items were destroyed (see Table 5).<sup>114</sup>

As noted previously, 347,000m<sup>2</sup> of clearance undertaken in 2021 by commercial operators at the Eastern Borders as part of the EBMCP had not been uploaded to the IMSMA database or included in the reported land release figures in Türkiye’s Article 7 Report covering 2021, as it was pending completion of quality management.

104 Committee on Article 5 Implementation, Preliminary Observations on the Implementation of Article 5 by Türkiye, Intersessional Meetings, Geneva, 20–22 June 2022.

105 Article 7 Report (covering 2021), Form D.

106 Ibid; and CCW Protocol II 10 Report (covering 2021), Form B.

107 Article 7 Report (covering 2021), Form D.

108 Article 7 Report (covering 2020), Form D.

109 Article 7 Report (covering 2021), Form D.

110 Email from Ömer Burga Gönen, Planning Expert, TURMAC, 8 August 2022.

111 Ibid.

112 Article 7 Report (covering 2020), Form D.

113 Article 7 Report (covering 2021), Form D.

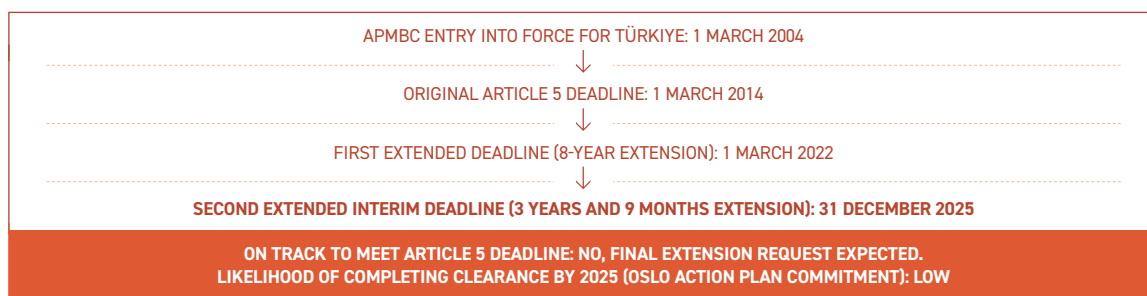
114 Article 7 Report (covering 2021), Form I.

**Table 5: Mine clearance in 2021<sup>115</sup>**

Region	Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Iran border	Land Forces Military Demining Units (ÖMAT)	116,848	11,845	0	1
Syria border	Gendarmerie Forces Military Demining Units (JÖMAT)	287,419	2,106	1,429	0
Syria border	N/K (Border security operations)	0	51	0	0
Non-border areas	Gendarmerie Forces Military Demining Units (JÖMAT)	9,584	71	0	0
N/K	Military C-IED/Mine teams*	0	**103	0	0
<b>Totals</b>		<b>413,851</b>	<b>14,176</b>	<b>1,429</b>	<b>1</b>

\* Military Counter-Improvised Explosive Device/Mine teams. \*\* Improvised anti-personnel mines.

## ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the eight-year extension granted by states parties in 2013), Türkiye was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2022. Türkiye did not meet this deadline and in 2021 it was granted an interim extension until the end of 2025.

The 2021 request represented "only the period of time necessary to gather and assess data on landmine contamination and other relevant information with a view to develop a meaningful forward-looking plan based on this information". During the period until the end of 2025, Türkiye has specified that it will carry out non-technical survey of anti-personnel mined areas; continue clearance; and prepare a final extension request for Article 5 implementation.<sup>116</sup>

Türkiye projects mine action costs in this extension period at €105 million, all funded by national sources except for €18.5 million, anticipated to be provided by the EU for the EBMCP project.<sup>117</sup>

In its latest Article 7 report covering 2021, Türkiye, notes that, since its first extension request, approximately 32km<sup>2</sup> of mined area has been addressed and almost 135,000 anti-personnel mines destroyed, with the total mined area remaining reduced from 172km<sup>2</sup> to 140km<sup>2</sup> between 2014 and 2021.<sup>118</sup>

Türkiye plans to clear 10km<sup>2</sup> by the new deadline of 31 December 2025 but the main focus of the request is on completing non-technical survey of all 3,843 mined areas. It expects the survey will result in cancellation of up to 40km<sup>2</sup> or more than a quarter of Türkiye's estimated 140km<sup>2</sup> of anti-personnel mined area. Türkiye plans to use the resulting estimate of contamination as the basis for another extension request setting out plans to complete clearance.<sup>119</sup>

<sup>115</sup> Article 7 Report (covering 2021), Form D; and emails from Ömer Burga Gönen, TURMAC, 8 August and 5 September 2022.

<sup>116</sup> Request For an Extension of the Deadline for Completing the Destruction of Anti-Personnel Mines in Accordance with Article 5 of the Convention, Executive Summary, 16 September 2021.

<sup>117</sup> 2021 Article 5 deadline Extension Request, p. 16.

<sup>118</sup> Article 7 Report (covering 2021), Form D.

<sup>119</sup> 2021 Article 5 deadline Extension Request, pp. 5 and 19.

The request has a number of gaps. It does not address Türkiye's Article 5 obligations in areas under its control in northern Cyprus and Syria. TURMAC said Turkish Armed Forces units conducting cross-border operations in Syria had not encountered any minefields but were clearing IEDs, some of which were mines along with items of UXO.<sup>120</sup> The request also provides no details of plans for clearance of the 90 identified mined areas remaining in non-border areas. TURMAC said it gives higher priority to clearing border minefields and installing border management facilities such as watch towers and patrol roads<sup>121</sup> with the aim of providing "a more secure and technologically advanced humanitarian border management system."<sup>122</sup>

In its extension request, Türkiye noted only two risk factors that could hold back implementation. It said measures to mitigate the spread of COVID-19 could interfere with mobilising and deploying survey and clearance teams. It also

noted that, although Türkiye's borders with Iraq and Syria were stable, any outbreak of conflict could interfere with humanitarian activities.<sup>123</sup>

**Table 6: Five-year summary of anti-personnel mine clearance**

Year	Area cleared (km <sup>2</sup> )
2021	0.41
2020	0.14
2019	0.67
2018	2.08
2017	*0.82
<b>Total</b>	<b>4.12</b>

\* Also included previously unreported clearance output relating to 2016.

## PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Türkiye has not provided information on whether it has a plan in place for dealing with any residual contamination following completion.

120 Email from Capt. Mustafa Torun, TURMAC, 12 August 2021.

121 Email from Capt. Mustafa Torun, TURMAC, 12 August 2021; and Article 7 Report (covering 2021), Form D.

122 Article 7 Report (covering 2021), Form D.

123 2021 Article 5 deadline Extension Request, p. 36.