

ARTICLE 5 DEADLINE: 1 MARCH 2020
CLEARANCE REPORTED COMPLETED

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

0 km²

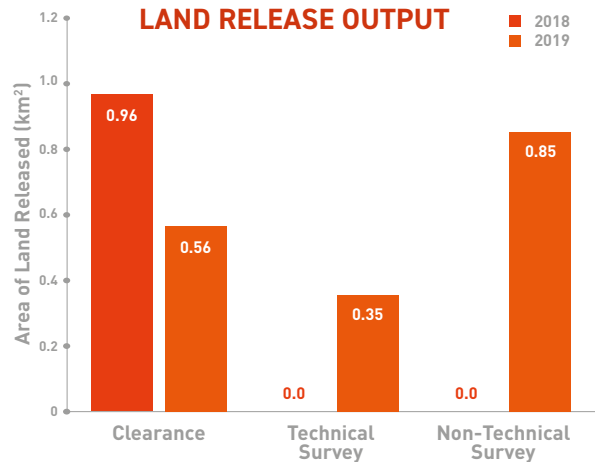
AP MINE
CLEARANCE IN 2019

0.56 km²

AP MINES
DESTROYED IN 2019

4,093

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Oslo Political Plan commitment): **Clearance completed in 2020**

KEY DEVELOPMENTS

Chile ended its formal mine clearance operations on 27 February 2020 and declared that it has addressed all known minefields within its territory, meeting its 1 March 2020 Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline.

RECOMMENDATIONS FOR ACTION

- Chile should ensure that sufficient capacity is maintained to address any residual contamination that may be discovered in the future.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2019)	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	9	7	It is understood that Chile has no known anti-personnel mine contamination remaining in the country since the end of February 2020.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	There is strong national ownership in Chile with effective leadership of the programme from the National Demining Commission (Comisión Nacional de Desminado, CNAD) and demining operations were fully funded by the Chilean government.
GENDER AND DIVERSITY (10% of overall score)	6	6	In previous years Chile has taken steps to mainstream gender across the armed forces with women working at all levels of the mine action programme. However, in 2019 only 4% of staff employed by the demining units were female.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	6	Chile uses the Information Management System for Mine Action (IMSMA) database. Chile submits timely Article 7 transparency reports and provides regular updates on progress in Article 5 implementation at the annual meetings of States Parties.
PLANNING AND TASKING (10% of overall score)	7	6	Chile has had a National Plan for Humanitarian Demining 2016–2020; it submitted updated clearance plans in 2019. Chile did not meet its land release target for 2019 but then far exceeded its target for 2020. As at May 2020, Chile had not provided information on its plan for residual risk post-completion.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Chile is guided by the International Mine Action Standards (IMAS) and the Humanitarian Demining Manual of the Chilean Army. All survey and clearance are undertaken by the military with both machines and dogs used during operations.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	10	5	Chile released almost 1.8km ² in 2019 and 2.8km ² in 2020, totalling a highly impressive 4.6km ² over just 14 months in order to meet its Article 5 deadline. Chile's survey output increased in 2019. Its clearance output fell in 2019 (0.56km ²) compared to the previous year but then rose rapidly in 2020 when Chile reportedly cleared 0.7km ² in just two months.
Average Score	8.1	6.4	Overall Programme Performance: VERY GOOD

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Demining Commission (Comisión Nacional de Desminado, CNAD)

NATIONAL OPERATORS

- Army Corps of Engineers (Arica, Calama, Punta Arenas), Navy Landmine Operations Squad (POMTA), Air Force (CEDDEX)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

As at 27 February 2020, Chile declared that it had addressed all known minefields and was now free of known anti-personnel mine contamination.¹ At the end of 2018, Chile had 4.45km² of anti-personnel mined area in five regions across 18 confirmed hazardous areas (CHAs) covering a total of 1.16km² and 4 suspected hazardous areas (SHAs) with a total size of 3.29km².² At the end of 2019, Chile reported seven hazardous areas totalling 2.70km² remaining across three regions (see Table 1), which it went on to fully release in January and February 2020. In addition, Chile added 4,430m² of previously unrecorded mine contamination in the regions of Valparaíso and Magallanes y Antártica Chilena to the database in 2019. In 2020, Chile added 102,902m² of previously unrecorded mine contamination in the regions of Arica y Parinacota, and Tarapacá to the database.³

Table 1: Anti-personnel mined area by region (at end 2019)⁴

Region	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Arica y Parinacota	2	179,981	1	145,297	3	325,278
Tarapacá	2	30,383	0	0	2	30,383
Antofagasta	1	62,591	1	2,279,112	2	2,341,703
Totals	5	272,955	2	2,424,409	7	2,697,364

The mines were all laid during the Pinochet regime in the 1970s on Chile's borders with Argentina in the south, and with Bolivia and Peru in the north. The mined areas, which typically contained both anti-vehicle and anti-personnel mines, were generally difficult to access and mostly in unpopulated regions. The regions of both Antofagasta and Arica y Parinacota were contaminated with anti-vehicle as well as anti-personnel mines while the region of Tarapacá was contaminated only with anti-personnel mines.⁵ The vast majority of the mines were laid in the northern region, with some minefields located as high as 5,000m above sea level.⁶ Of the seven mined areas identified in Table 1 two contained only anti-personnel mines.⁷

Chile is also contaminated with cluster munition remnants (currently estimated to cover 65km², although actual contamination is likely to be considerably lower) and to a limited extent other unexploded ordnance (UXO) (see Mine Action Review's *Clearing Cluster Munition Remnants 2020* report on Chile for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Demining Commission (CNAD), which is chaired by the Minister of Defence. In 2002, Supreme Decree No. 79 created CNAD as an advisory body to the President of the Republic and interministerial coordinating body to support the fulfilment of Chile's obligations under the APMBC.⁸ Its main functions are to advise the President, mobilise resources, coordinate demining with state agencies, and develop plans for implementing the APMBC. Demining operations are all funded by the Government of Chile.

Mine clearance operations were fully funded by the Chilean government.

GENDER AND DIVERSITY

While there is no specific gender policy within CNAD, Chile's policy of integrating women into the armed forces has been in place since 2000. As at May 2019, 14.4% of total armed forces personnel were female. In 2016, restrictions on the type of military positions a woman could hold were lifted and legislation was adopted to modify the military grading system, allowing women to be promoted in the same way as men. Women have been working in demining in Chile since 2004 across all types of roles, including as deminers and in managerial/supervisory roles.

In 2007, the first woman was appointed as Manual Demining Section Commander in Arica. In May 2018, a woman was appointed as Demining Company Commander in Arica. Chile has made it easier for women to work in the sector by, for example, adapting demining equipment to better suit female specifications, providing childcare, and eliminating the gender wage gap.⁹ Chile reported that in 2019, of the 246 personnel carrying out roles within the demining units, only 10 (4%) were women. They included two demining section commanders and four women in support roles (one medic, two nurses, and one paramedic).¹⁰

INFORMATION MANAGEMENT AND REPORTING

Since 2003, Chile has been using the Information Management System for Mine Action (IMSMA). During 2017, Chile upgraded to Version 6 of IMSMA after starting the MARS (Mine Action Reporting System) application that replaced IMSMA Mobile. This application has equipped Chile with high-quality geographic information to support decision-making around clearance.¹¹

Chile has submitted its Article 7 reports almost every year since its accession to the convention in 2002 and makes regular Article 5 statements at meetings of States Parties, although there have been some problems with the accuracy of the information presented. In previous years, Chile submitted clearance plans that contained estimates that were more than the amount of area that had been indicated as remaining.¹²

PLANNING AND TASKING

The National Plan for Humanitarian Demining 2016–2020 was formulated in accordance with the request of the Eleventh Meeting of the States Parties (11MSP) that Chile provide updates relative to the timelines presented in its 2011 extension request.¹³ The main objective of the plan was to eliminate all existing anti-personnel mines on national territory by the March 2020 clearance deadline.¹⁴

As at April 2019, Chile had cleared three mined areas totalling 26,603m² since January and planned to clear an additional 18 mined areas by the end of the year, leaving one mined area to clear in 2020 (see Table 2).¹⁵ In fact, Chile released 15 mined areas in 2019 totalling 1.76km², of which 0.56km² was cleared, 0.35km² was reduced through technical survey, and 0.85km² was cancelled through non-technical survey. Then in January and February 2020, Chile released a further 2.8km² of mined area, of which 2.09km² was reduced through technical survey and 0.71km² was cleared.¹⁶

Table 2: Updated demining plan (2019–20)¹⁷

Year	Mined areas	Planned release (m ²)
2019	18	4,374,448
2020	1	50,600
Totals	19	4,425,048

Annually, CNAD issues a National Directive on the Execution of Demining Activities from the Government of Chile, which contains a set of provisions and tasks to support the planning of demining activities.¹⁸ Clearance was prioritised according to proximity to populated areas, impact on land that has been designated a national park or is a historical site of touristic interest, and impact on land that obstructs development.¹⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Chile is guided by the International Mine Action Standards (IMAS).²⁰ In addition to the IMAS Chile also follows the provisions and regulations as set out in the "Humanitarian Demining Manual of the Chilean Army".²¹

OPERATORS AND OPERATIONAL TOOLS

Mine clearance in Chile is conducted by the Army Corps of Engineers, the Navy Landmine Operations Squad, and the Air Force.²²

In 2019, there were four non-technical survey teams deployed totalling 11 personnel. In addition, there were 14 technical survey teams totalling 121 personnel. In 2020, there were two non-technical survey teams deployed totalling six personnel and eight technical survey teams totalling fifty-five personnel.²³

Table 3: Operational clearance capacities deployed in 2019²⁴

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**
Arica	6	69	2	3
Calama	2	45	0	3
Punta Arenas	2	26	0	0
POMTA	2	28	0	0
CEDDEX	2	12	0	0
Totals	14	180	2	6

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters.

Table 4: Operational clearance capacities deployed in 2020²⁵

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**
Arica	6	69	0	3
Calama	2	45	0	3
Totals	8	114	0	6

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters.

Since 2008, mechanical assets have been used to support manual demining in Chile. During 2019, machines were deployed to conduct clearance in the regions of Arica y Parinacota and Antofagasta.²⁶ Chile also used explosive detection dogs for the first time in 2018 to carry out quality control of an area that had been cleared using machines.²⁷

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2019 AND 2020

Chile released a total of 4.56km² from 1 January 2019 to 27 February 2020, of which 1.27km² was cleared, 2.44km² was reduced through technical survey, and 0.85km² was cancelled through non-technical survey. A total of 16,619 anti-personnel mines and 11,357 anti-vehicle mines were found and destroyed. The clearance figures include 107,332m² of previously unrecorded mine contamination in the regions of Arica y Parinacota, Magallanes y Antártica Chilena, Tarapacá, and Valparaíso which was added to the database in 2019 and 2020 and cleared during that period.

SURVEY IN 2019

In 2019, Chile released a total of 1.20km² through survey across four regions, of which almost 0.85km² was cancelled through non-technical survey (see Table 5) and 0.35km² was reduced through technical survey (see Table 6).²⁸ This is a huge increase from 2018 when no mined area was cancelled or reduced through survey.²⁹

Table 5: Cancellation through non-technical survey in 2019³⁰

Region	Area cancelled (m ²)
Arica y Parinacota	121,104
Tarapacá	4,216
Antofagasta	613,615
Magallanes y Antártica Chilena	108,930
Total	847,865

Table 6: Reduction through technical survey in 2019³¹

Province	Area reduced (m ²)
Arica y Parinacota	312,873
Tarapacá	1,272
Antofagasta	11,306
Magallanes y Antártica Chilena	26,039
Total	351,490

SURVEY IN 2020

In 2020, Chile reduced a massive 2.09km² through technical survey in just two months (see Table 7), almost six times the amount reduced through technical survey throughout the whole of 2019. The contaminated area of Seilao in Antofagasta province was estimated to cover 2.28km² when technical survey was carried out in 2017 based on the information from manual and mechanical demining conducted in the area since 2010.³² This area was then partially reduced by survey in 2019. No mined area was cancelled through non-technical survey in 2020.³³

Table 7: Reduction through technical survey in 2020³⁴

Province	Area reduced (m ²)
Arica y Parinacota	160,899
Tarapacá	24,278
Antofagasta	1,905,685
Total	2,090,862

CLEARANCE IN 2019

In 2019, a total of 0.56km² was released through clearance in five regions with 4,093 anti-personnel mines and 1,187 anti-vehicle mines found and destroyed (see Table 8).³⁵ This is a 42% decrease from the 0.96km² cleared in 2018, although an increase from the 3,908 anti-personnel mines and 1,117 anti-vehicle mines that were found and destroyed.³⁶

Table 8: Mine clearance in 2019³⁷

Region	Area cleared (m ²)	AP mines destroyed	AV mines destroyed
Arica y Parinacota	183,399	886	663
Tarapacá	13,328	167	0
Antofagasta	321,542	1,553	524
Valparaíso	15,787	0	0
Magallanes y Antártica Chilena	25,306	1,487	0
Totals	559,362	4,093	1,187

AP = Anti-personnel AV = Anti-vehicle

CLEARANCE IN 2020

In 2020, over two months, Chile cleared 0.71km² across three regions, finding and destroying 12,526 anti-personnel mines and 10,170 anti-vehicle mines (see Table 9).³⁸ This is a 27% increase in the amount cleared over the whole of 2019 and a threefold increase in the number of anti-personnel mines found and destroyed. According to Chile, it managed to achieve this amount of clearance as the climatic conditions were optimal. In addition, the mechanical demining units were reorganised allowing them to work up to three shifts per day, thereby significantly increasing clearance output.³⁹

Table 9: Mine clearance in 2020⁴⁰

Region	Area cleared (m ²)	AP mines destroyed	AV mines destroyed
Arica y Parinacota	265,786	11,176	9,934
Tarapacá	7,600	212	0
Antofagasta	436,018	1,138	236
Totals	709,404	12,526	10,170

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the eight-year extension request granted by States Parties in 2012), Chile 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 2020. Chile reported in its Article 7 report covering 2019 that it had completed clearance on 27 February 2020. As at 29 February 2020, Chile had destroyed a total of 177,725 emplaced landmines since it became a State Party to the APMBC.⁴¹ Chile fulfilled its obligations by releasing an impressive 4.56km² in just 14 months while facing considerable challenges to implementation from the climate and topology.

Table 10: Six-year summary of AP mine clearance

Year	Area cleared (km ²)
2020*	0.71
2019	0.56
2018	0.96
2017	0.86
2016	3.52
2015	1.89
Total	8.50

* January and February 2020

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

As at May 2020, Chile had not provided information on whether it had a plan in place for dealing with residual risk since completion. It is expected that this capacity will come from the Chilean military, which it plans to redeploy to conduct survey and clearance of the remaining cluster munition remnant contamination.

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|----|--|----|---|
| 1 | Article 7 Report (covering 2019), Form G. | 19 | Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018. |
| 2 | Article 7 Report (covering 2018), Form C. | 20 | Article 7 Report (covering 2018), Form F. |
| 3 | Article 7 Report (covering 2019), Form F. | 21 | Article 7 Report (covering 2019), Form F. |
| 4 | Ibid., Form C. | 22 | Email from Carlos Rivera Bugueño, CNAD, 6 August 2020. |
| 5 | Article 7 Report (covering 2018), Form C. | 23 | Ibid. |
| 6 | Article 7 Report (covering 2009), Form I. | 24 | Ibid. |
| 7 | Article 7 Report (covering 2019), Form C. | 25 | Ibid. |
| 8 | Article 7 Report (covering 2017), Form A3. | 26 | Ibid. |
| 9 | Statement from Chile during the Thematic Discussion on Integrating Gender into Mine Action, Intersessional Meetings, 23 May 2019; and emails from Col. Juan José López Demuth, Executive Secretary, CNAD, 22 and 27 June 2019. | 27 | CNAD, "Desminado Canino", 27 December 2018, at: bit.ly/2VCpHwb . |
| 10 | Email from Carlos Rivera Bugueño, Senior Sub-Officer, CNAD, 6 August 2020. | 28 | Article 7 Report (covering 2019), Form F. |
| 11 | Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018. | 29 | Article 7 Report (covering 2018), Form F. |
| 12 | Conclusions on the implementation of Article 5, 16th Meeting of States Parties, 18–21 December 2017. | 30 | Article 7 Report (covering 2019), Form F. |
| 13 | Decisions on the request submitted by Chile for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 11MSP, 2 December 2011. | 31 | Ibid. |
| 14 | Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018. | 32 | Email from Carlos Rivera Bugueño, CNAD, 6 August 2020. |
| 15 | Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019. | 33 | Article 7 Report (covering 2019), Form F. |
| 16 | Article 7 Report (covering 2019), Form F. | 34 | Ibid. |
| 17 | Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019. | 35 | Ibid. |
| 18 | Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018; and Article 7 Report (covering 2019), Form A. | 36 | Article 7 Report (covering 2018), Form F. |
| | | 37 | Article 7 Report (covering 2019), Form F. |
| | | 38 | Ibid. |
| | | 39 | Email from Carlos Rivera Bugueño, CNAD, 6 August 2020. |
| | | 40 | Article 7 Report (covering 2019), Form F. |
| | | 41 | Article 7 Report (covering 2019), Form G. |