

ARTICLE 4 DEADLINE: 1 AUGUST 2020 (ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	2017	2016
Problem understood	9	9
Target date for completion of cluster munition clearance	9	7
Targeted clearance	8	7
Efficient clearance	8	7
National funding of programme	9	9
Timely clearance	8	6
Land-release system in place	7	7
National mine action standards	6	6
Reporting on progress	8	6
Improving performance	8	8
PERFORMANCE SCORE: VERY GOOD	8.0	7.2

PERFORMANCE COMMENTARY

Croatia continued to make steady progress in clearance of cluster munition remnants (CMR) in 2017, despite a small drop in clearance output compared to the previous year. Croatia maintained its dedicated national funding and strong political commitment to meeting its obligations under Article 4 of the Convention on Cluster Munitions (CCM). The Croatian Mine Action Centre (CROMAC)'s national workplan aims to complete clearance of all known CMR-contaminated areas by the end of 2018 – well in advance of its Article 4 deadline.

RECOMMENDATIONS FOR ACTION

- → Croatia should revisit its 2015 Mine Action Law to rectify some of the unintended challenges it poses to the implementation of mine action operations.
- → Croatia should ensure that sustainable capacity and systems are in place to address residual risk from CMR that may arise following completion of its CCM Article 4 obligations.

CONTAMINATION

At the end of 2017, Croatia had 11 areas confirmed to contain CMR, covering a total area of over $1.05 \, \text{km}^2$ (see Table 1). This compares to reported contamination a year earlier of 10 confirmed hazardous areas (CHAs) over a total of $1.74 \, \text{km}^2$.

While more than 1km of CMR-contaminated land was cleared in 2017, some new areas of previously unknown contamination were also discovered, including a very small amount in Split-Dalmatia, a county which had been declared completed in 2016, as well as in three other counties.³ The CMR in Split-Dalmatia were discovered during the regular course of demining activity.⁴

Table 1: CMR contamination by county (as at end 2017)⁵

County	CHAs	Area (m²)
Lika-Senj	5	731,162
Zadar	3	18,564
Šibenik-Knin	2	167,641
Split-Dalmatia	1	448
Sisak-Moslavina	1	136,276
Totals	12	1,054,091

Croatia was contaminated with unexploded KB-1 and Mk-1 submunitions by the conflicts in the 1990s that followed the break-up of the Socialist Federal Republic of Yugoslavia. CROMAC reports that CMR have more of a socio-economic than humanitarian impact, and the last recorded CMR-related incident was more than 10 years ago. As at September 2017, 25.7% of the remaining CMR-contaminated area was defined as agricultural; 72.1% as forested, and 2.2% as other area (e.g. water, marshland, landslides, coast).

Other Explosive Remnants of War and Landmines

Croatia is heavily contaminated by other unexploded ordnance (UXO) and anti-personnel mines (see Mine Action Review's *Clearing the Mines* report on Croatia for further information).

PROGRAMME MANAGEMENT

CROMAC was established on 19 February 1998 as the umbrella organisation for mine action coordination. CROMAC is responsible for the collection, processing, and recording of data on mine and explosive remnants of war (ERW) contamination, survey, and clearance; marking of contaminated areas; non-technical survey; quality control (QC) of clearance; and technical survey. CROMAC is accountable to the Government of Croatia through the Managing Board (formerly known as the CROMAC Council) whose members are representatives of the relevant ministries and other stakeholders, appointed by the Government.

The mandate of the previous government-appointed members expired in August 2016,¹³ and between August 2016 and the establishment of the CROMAC council by Government Decree in July 2017, the council did not meet on a monthly basis, as was foreseen. During this period, the lack of a government decree posed administrative challenges, such as delay in the CROMAC's annual workplan being sent for government approval and

restrictions regarding recruitment decisions.¹⁴ A new Director of CROMAC, Zdravko Modrušan, was appointed at the end of September 2017.¹⁵

In April 2012, the government created the Office for Mine Action (OMA), reporting to the Prime Minister's office, to function as a focal point for mine action, strengthen coordination among stakeholders and funding agencies, and raise public awareness about mine and ERW hazards. 16 The OMA does not sit above CROMAC; rather, it is the government institution dealing with the political aspects of mine action whereas CROMAC deals with operations. 17 The OMA includes a Unit for European Union (EU) Funds, tasked with promoting access to a range of EU funds to support the mine action sector. 18 The establishment of the OMA has elevated the status of mine action within the country as it can politically pressure the government and international actors in ways that CROMAC, as a technical body, cannot.19

Strategic Planning

Croatia has a National Mine Action Strategy 2009-2019, which was drafted by CROMAC with the agreement of concerned ministries, the OMA, the National Protection and Rescue Directorate and local administration and self-administration bodies with hazardous areas.²⁰ The strategy, which was adopted by the Croatian Parliament, includes among its main goals the tackling of CMR in accordance with the obligations of the CCM.²¹ All CMR-contaminated areas are said to be cleared in accordance with county and state priorities.²²

Based on the approved funding, CROMAC drafts annual workplans, which are submitted to the responsible ministries, the OMA, and other state bodies for comment and approval.²³ The national mine action plan for 2018 was officially approved by the Croatian government in March 2018, and one of its main goals is to eliminate all known CMR contaminated areas by the end of 2018.24

Legislation and Standards

A new law on mine action was adopted by the Croatian Parliament on 21 October 2015, incorporating developments from the latest International Mine Action Standards (IMAS), and specifically those relating to the use of technical survey to confirm the presence or absence of contamination.²⁵ The 2015 law introduces a new procedure for "supplementary general survey" (i.e. non-technical survey) and enables "exclusion" (i.e. reduction) of suspected hazardous areas (SHAs) through technical survey, which was not possible under the previous law.²⁶ The 2015 law has eliminated the need for standing operating procedures (SOPs), as all aspects of mine action are now clearly defined.²⁷ National mine action standards are also encompassed within it.²⁸

While the 2015 Law, which was initiated by the OMA with the text drafted by the Ministry of Interior, marks an improvement in certain respects (for instance, by permitting land release through technical survey), there is widespread agreement among mine action experts and professionals with significant experience in the field (e.g. CROMAC staff and deminers), that overall the new law is not practical to implement in the field, and impedes efficient and effective mine action.²⁹

Under the new law, authorised CROMAC staff no longer have the authority to review personnel and technical equipment prior to and during demining operations. This now falls under the responsibility of the Ministry of Interior, in addition to the fact that all demining equipment used must be certified and demining companies accredited.³⁰ CROMAC only undertake quality control (QC) of executed demining operations.31 In addition, CROMAC no longer has responsibility for investigating demining accidents. This responsibility now lies with the State Attorney, under the oversight of the Ministry of Interior, rather than with the body with the requisite technical expertise. CROMAC only receives accident report summaries from the Ministry.³²

Under the 2015 law, the Ministry of Interior assesses authorised legal entities for conducting demining; this was formerly CROMAC's responsibility. 33 Regarding accreditation, the Ministry of Interior now provides three separate permits: approval for manual mine detection, approval for mechanical mine detection, and approval for operations by mine and UXO detection dogs. This replaces the former unified accreditation license.34

Quality Management

With the adoption of the 2015 Law on Mine Action, CROMAC now undertakes only QC of executed demining operations.35 Supervision during and after survey and clearance has been replaced by ongoing QC of cleared land during demining operations, and final QC, when the company has reported completion of demining of an area. Required "ongoing QC" for clearance operators has increased to 5% of each worksite, no later than three working days from the last conducted QC, in order to increase safety and quality.³⁶ In addition, CROMAC QC officers review a minimum of 5% of control samples at least every three days, and final quality control of 1% of the total demined surface is conducted by a commission consisting of two CROMAC representatives and an inspector from the Ministry of Interior.37

The shift in focus away from QA practices prior to and during demining operations to QC practices post-clearance is a concern for CROMAC (see section on Legislation and standards). The QC requirements of the 2015 Law are said to pose a significant capacity challenge for both operators and CROMAC, and rather than strengthen quality management as intended, they threaten to weaken it³⁸ and have negative impacts on the implementation of the land release plans.39

Information Management

For the purposes of information management, CROMAC established a mine information system (MIS), which is compliant with IMAS and customised to meet CROMAC's needs. The MIS uses databases and a geoinformation system (GIS), to deliver a fully integrated information management system.40

Operators

In 2017, 40 authorised commercial demining companies were accredited for mine and CMR clearance operations, with a total capacity of 676 deminers, 45 demining machines, and 99 mine detection dogs (MDDs).41 Of this, four companies were engaged in CMR clearance operations in 2017, namely DIZ-EKO, MINA PLUS, RUMITAL, and TITAN. CROMAC reported that it had retained a high quality of CMR operations throughout 2017, to help meet its Article 4 obligations, and it expected capacity to remain the same in 2018.⁴²

LAND RELEASE

Croatia released 1.01km² of CMR area by clearance in 2017.⁴³ Output was a slight decrease on 2016, when 1.2km² of area containing only CMR was cleared, in addition to a further 0.1km² of mixed mine and CMR clearance.⁴⁴

Survey in 2017

CROMAC identified and confirmed four CMR-contaminated areas totalling 158,750m² in 2017: 8,158m² in Lika-Senj county; 448m² in Split-Dalmatia county; 136,276m² in Sisak-Moslavina county; and 13,868m² in Šibenik-Knin county.

Table 2: Clearance of CMR-contaminated area in 2017⁴⁷

County	Areas cleared	Area cleared (m²)	Submunitions destroyed
Lika-Senj	2	53,476	24
Šibenik-Knin	3	245,953	52
Zadar	1	715,034	47
Totals	6	1,014,463	123

Clearance was in five demining projects which contained exclusively CMR contamination, and one additional contracted mine clearance project completed in Zadar county, which also resulted in destruction of CMR.⁴⁸ All the areas cleared were found to have CMR.⁴⁹

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Croatia is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2020. It is on track to meet this deadline.

In 2017, Croatia contributed around €4.3 million (approximately US\$5.1 million) in national funding towards the cost of CROMAC, but did not report the amount of national funding contributed towards CMR survey and clearance operations. The However, CROMAC did maintain that it still expects to complete CMR clearance using national funding and believes funding is sufficient for it to complete CMR clearance by the end of 2018, in accordance with its national mine action plan. The survey of the control of the survey of

Croatia has cleared a total of 4.45km² of CMR-contaminated area over the past five years (see Table 3). Croatia plans to meet its Article 4 deadline by completing clearance of all known CMR contamination by the end of 2018, well in advance of its August 2020 deadline.⁵² Challenges to CMR clearance are posed by rocky, forested, and mountainous areas, which prevent use of demining machines.⁵³

Table 3: Five-year summary of CMR clearance⁵⁴

Year	Area cleared (km²)
2017	1.01
2016	1.20
2015	0.43
2014	0.66
2013	1.15
Total	4.45

Croatia cleared six areas in three counties covering just over 1.01km² of CMR-contaminated area in 2017, destroying a total of 123 KB-1 submunitions (see Table 2).⁴⁶

- Email from Davor Laura, Head of Quality Control, CROMAC, 6 April 2018; and CCM Article 7 Report (for 2017), Form F.
- 2 Email from Nataša Mateković, Assistant Director and Head of Planning and Analysis Department, CROMAC, 22 March 2017.
- 3 Email from Davor Laura, CROMAC, 6 April 2018.
- 4 Email from Dejan Rendulić, CROMAC, 14 June 2018.
- 5 Ibid.; and CCM Article 7 Report (for 2017), Form F.
- 6 CCM Article 7 Report (for 2017), Form F.
- 7 Email from Nataša Mateković, CROMAC, 22 March 2017.
- 8 Email from Davor Laura, CROMAC, 6 April 2018.
- 9 Statement of Croatia, Clearance Session, Seventh Meeting of States Parties to the CCM, Geneva, 5 September 2017.
- 10 CROMAC, "National Mine Action Strategy of Croatia 2009–2019", Zagreb, June 2009, p. 2.
- 11 APMBC Article 5 Extension Request (draft), 29 March 2018, p. 24.
- 12 Ibid., p. 25.
- 13 Emails from Miljenko Vahtarić, CROMAC, 24 August 2016; and Nataša Mateković, CROMAC, 20 June 2017.
- 14 Email from Davor Laura, CROMAC, 6 April 2018; interviews with Hrvoje Debač, Acting Director, Government Office for Mine Action (OMA), 17 May 2017, Zagreb; and Neven Karas, Assistant Director and Head of Sector for General and Financial Affairs, CROMAC, Sisak, 18 May 2017.
- 15 Interview with Hrjove Debač, OMA and Davor Laura, CROMAC, in Geneva, February 2018; and email from Davor Laura, 6 April 2018.
- 16 Interview with Dijana Pleština, Director, OMA, in Geneva, 23 May 2012 and 10 April 2014; and email from Miljenko Vahtarić, CROMAC, 4 July 2013.
- 17 Email from Miljenko Vahtarić, CROMAC, 3 June 2016.
- 18 Interview with Miljenko Vahtarić, CROMAC, in Geneva, 11 April 2013, and email, 4 July 2013.
- 19 Interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.
- 20 APMBC Article 5 deadline Extension Request (draft), 29 March 2018, p. 25.
- 21 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.
- 22 Email from Milienko Vahtarić, CROMAC, 10 June 2015.
- 23 APMBC Article 5 deadline Extension Request (draft), p.25, 29 March 2018; and email from Davor Laura, CROMAC, 6 April 2018.
- 24 Email from Davor Laura, CROMAC, 6 April 2018.
- 25 National Gazette No. 110/15; and CCM Article 7 Report (for 2017), Form A.
- 26 CCM Article 7 Report (for 2017), Form A; and emails from Miljenko Vahtarić, CROMAC, 13 and 18 May 2016.
- 27 Email from Miljenko Vahtarić, CROMAC, 13 May 2016; and CCM Article 7 Report (for 2015), Form A.

- 28 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.
- 29 Interviews with Neven Karas, CROMAC; and Tomislav Ban, Assistant Director and Head of Sector for Operational Planning and Programming, CROMAC, Sisak, 18 May 2017.
- 30 Email from Dejan Rendulić, CROMAC, 14 June 2018.
- 31 Email from Nataša Mateković, CROMAC, 30 August 2017.
- 32 Ibid.; and interview with Ante Brkljačić, CROMAC, in Geneva, 9 June 2017.
- 33 Email from Miljenko Vahtarić, CROMAC, 24 August 2016.
- 34 Ibid
- 35 Ibid; and APMBC Article 5 deadline Extension Request (draft), 29 March 2018. p. 28.
- 36 Emails from Miljenko Vahtarić, CROMAC, 13 May 2016; Nataša Mateković, CROMAC, 2 May and 20 June 2017; and APMBC Article 5 deadline Extension Request (draft), 29 March 2018, p. 28.
- 37 Emails from Miljenko Vahtarić, CROMAC, 13 May 2016; Nataša Mateković, CROMAC, 2 May and 20 June 2017; and APMBC Article 5 deadline Extension Request (draft), 29 March 2018, p. 28.
- 38 Interviews with Tomislav Ban, CROMAC, Sisak, 18 May 2017; and a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.
- 39 APMBC Article 5 deadline Extension Request (draft), 29 March 2018, p. 29.
- 40 CROMAC website, "CROMAC's Mine Information System", accessed 26 June 2018, at: https://www.hcr.hr/pdf/MISWebENG.pdf.
- 41 Ibid., p. 26; and email from Davor Laura, CROMAC, 6 April 2018.
- 42 Email from Davor Laura, CROMAC, 6 April 2018.
- 43 CCM Article 7 Report (for 2017), Form F.
- 44 Email from Nataša Mateković, CROMAC, 20 June 2017; and CCM Article 7 Report (for 2016), Form F.
- 45 Email from Davor Laura, CROMAC, 6 April 2018.
- 46 CCM Article 7 Report (for 2017), Form F.
- 47 Ibid.
- 48 Ibid
- 49 Email from Davor Laura, CROMAC, 6 April 2018.
- 50 Ibid
- 51 Interview with Nataša Mateković, CROMAC, in Geneva, 10 February 2017; email from Davor Laura, CROMAC, 6 April 2018; Statement of Croatia, Clearance Session, 7th Meeting of States Parties to the CCM, Geneva, 5 September 2017; and interview with Hrjove Debač, OMA; and Davor Laura, CROMAC, in Geneva, February 2018.
- 52 Email from Davor Laura, CROMAC, 6 April 2018.
- 53 Ibid
- 54 See Cluster Munition Monitor and Mine Action Review reports on clearance in Croatia covering 2013–16.