

CROATIA

ARTICLE 5 DEADLINE: 1 MARCH 2019
 (NOT ON TRACK TO MEET DEADLINE)

MINE ACTION PROGRAMME PERFORMANCE	For 2016	For 2015
Problem understood	7	7
Target date for completion of mine clearance	7	7
Targeted clearance	7	7
Efficient clearance	8	8
National funding of programme	7	7
Timely clearance	7	7
Land release system in place	7	7
National mine action standards	6	7
Reporting on progress	7	6
Improving performance	6	7
PERFORMANCE SCORE: AVERAGE	6.9	7.0

PERFORMANCE COMMENTARY

Croatia's mine action programme performance in 2016 was mixed. Annual clearance output, while still high at more than 38km², was slightly lower than in 2015, and the amount of land cancelled by non-technical survey was significantly lower. In a positive development, the Croatian Mine Action Centre (CROMAC) reported land reduced by technical survey for the first time; this was made possible under the 2015 Law on Mine Action. Despite this positive aspect, there are concerns that overall the new law may impede effective and efficient operations. There were numerous demining accidents in 2016 but under the new law, CROMAC is no longer directly responsible for investigating them.

RECOMMENDATIONS FOR ACTION

- Croatia should ensure it fully uses both non-technical and technical survey to efficiently confirm mine contamination and to discredit suspected areas that are not contaminated. CROMAC should ensure there is sufficient survey capacity to meet its technical and non-technical survey land release targets.
- Croatia should revisit the 2015 Law on Mine Action to rectify some of the unintended challenges it poses to the implementation of mine action operations.
- Croatia should evaluate the revised procedures in place to investigate demining accidents since the adoption of the 2015 demining law, including potentially re-establishing and strengthening CROMAC's role in accident investigation, as the national body with the requisite technical expertise.

CONTAMINATION

Croatia is affected by mines and, to a much lesser extent, explosive remnants of war (ERW), including cluster munition remnants (CMR), a legacy of four years of armed conflict associated with the break-up of the former Yugoslavia in the early 1990s. At the end of 2016, total confirmed mined area (excluding military sites) was 281.5km² across 64 sites, while mines were suspected to cover a further 161.7km², across 52 suspected hazardous areas (SHAs) (see Table 1).¹ This represents a decrease compared to the 294km² across 66 confirmed hazardous areas (CHAs), and 189km² across 55 SHAs, as at the end of the previous year.² Nine counties out of a total of twenty-one are still mine-affected, with records indicating that a total of 35,776 anti-personnel mines and 6,115 anti-vehicle mines remain to be cleared.³

The 443.2km² of combined suspected and confirmed contamination is slightly lower than the figure of 446.6km² reported in Croatia's Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report for 2016 and its Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 and Amended Protocol II Article 13 reports, which include 3.3km² of contamination which is unexploded ordnance (UXO) only, and not mine contamination.⁴

In addition, a further 32km² of mined area exists under military control, said to contain 25,299 anti-personnel mines and 1,040 anti-vehicle mines. The military facilities include three barracks, three training sites, and four storage sites, with 30km² of the overall military mined area contained in the training sites.⁵

Table 1: Mined area by county (as at end-2016)*⁶

County	CHAs	Area (km ²)	SHAs	Area (km ²)
Brod-Posavina	1	1.98	0	0.00
Karlovac	9	16.58	8	32.93
Lika-Senj	9	99.4	8	38.35
Osijek-Baranja	12	38.39	10	21.69
Požega-Slavonia	2	24.4	2	5.52
Split-Dalmatia	4	18.5	2	3.37
Sisak-Moslavina	10	45.08	9	33.31
Šibenik-Knin	7	19.24	5	7.60
Zadar	10	17.92	8	18.94
Totals	64	281.5	52	161.7

* A further 31.92km² of mined area exists under military control.⁷

Croatia was impacted by the flood disaster that hit several states across south-eastern Europe in May 2014, though in Croatia only 2.2km² of SHA in three municipalities in Vukovar-Srijem county was affected. According to CROMAC, there was no change in contamination because the river bank was breached downstream of the SHAs.⁸ After the floods, though, CROMAC made demining the flooded areas a priority. Clearance of the most critical SHA, between the river bank and railway line in Gunja municipality, started as soon as the waters receded, an “in-kind donation” of services by Croatian demining companies.⁹ The remaining SHA in two areas along the flood-affected border with Serbia, located in Vrbanja and Nijemci municipalities, was subsequently released as planned in 2015, and the county of Vukovar-Srijem (including the municipalities of Vrbanja and Nijemci, within the county) was cleared of all mines.¹⁰

In July 2017, media incorrectly reported that 34 landmine explosions had been triggered in southern Croatia, in an area thought to be mine-free, following the spread of a

forest fire from neighbouring Montenegro.¹¹ However, this information was wrong, and the reported explosions were in fact caused by a local resident firing a gas-fuelled sound cannon to deter wild boars.¹²

Mine contamination in Croatia predominantly has a socio-economic impact on local communities, and prevents safe use of land for livestock and forestry-related activities. As at the end of 2016, 92.6% of suspected contamination was reportedly on forested land, much of which is protected as national park or Natura 2000 area; 7.1% was on agricultural land; and 0.3% was on other areas (e.g. water, marshland, coast).¹³ CROMAC planned to complete demining of agricultural land in 2018. Much of the remaining mined area is in mountainous areas and has not been accessed for twenty years, so the terrain and conditions will pose challenges to demining.¹⁴

The last civilian victim of a mine incident in Croatia was in 2013, and the last mine incident involving a child was 2004.¹⁵

PROGRAMME MANAGEMENT

CROMAC was established on 19 February 1998 as the umbrella organisation for mine action coordination.¹⁶ The CROMAC Council, the oversight and strategic planning body for mine action, is supposed to meet on a monthly basis¹⁷ but since the expiry of the mandate of government-appointed members in August 2016, the council has not met.¹⁸ As at May 2017, the CROMAC Council had been reformed, but was awaiting a new government decree in order to be formally established and commence its work.¹⁹

Delay in government approval of the CROMAC Council primarily poses administrative challenges, rather than hindering mine action operations on the ground. Until the Decree is passed, the CROMAC Council is not able to send documents to the government for approval, such as the annual workplan, and it also impacts negatively on recruitment within CROMAC.²⁰ This explains why the head of CROMAC was still “Acting” Director as at writing.

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 hazards.²¹ 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.²² 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.²³ 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.²⁴

Strategic Planning

Croatia’s 2008 Article 5 deadline extension request set out annual demining targets and strategic goals, including elimination of all mine threat to housing and areas planned for the return of displaced people by 2010; to infrastructure by 2011; to agricultural land by 2013; and to forest areas by 2018.²⁵ While clearance of the mine threat to housing and infrastructure is now complete, Croatia missed its target on agricultural land, which is being prioritised for clearance and released annually, but which remained contaminated as at the end of 2016.

CROMAC also has a National Mine Action Strategy 2009–2019, which was approved by the Croatian Parliament in September 2009, and includes the goal of all mine clearance by 2019.²⁶ Mine clearance priorities are divided into three main groups: safety, socio-economic, and ecological. The aim is to improve safety and promote economic development, focusing on the release of the highest priority areas with priorities set in collaboration with local authorities. CROMAC has completed release of most of the highest priority areas.²⁷

Legislation and standards

A new Mine Action Law 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 of contamination or discredit it in an SHA.²⁸ The 2015 law introduces a new procedure for “supplementary general survey” (i.e. non-technical survey) and enables “exclusion” (i.e. reduction) of SHAs through technical survey, which was not possible under the previous law.²⁹ Under the new law, CROMAC can use technical survey to release land, and to better define and confirm minefields for which it has no record.³⁰ The 2015 Law on Mine Action has eliminated the need for standing operating procedures (SOPs), as all aspects of mine action are now clearly defined in the new law.³¹ National Mine Action Standards are also encompassed within it.³²

The 2015 Law, the elaboration of which was initiated by the OMA with the text drafted by the Ministry of Interior, marks an improvement in certain respects on earlier operational procedure (for instance, by permitting land release through technical survey), but also poses challenges to the efficient and effective running of Croatia’s mine action programme. Operators were extensively consulted during the drafting of the former mine action law, but this did not occur during the elaboration of the 2015 Law. While CROMAC provided expert input and feedback on the draft, many of its substantive recommendations were not incorporated.³³

There is widespread agreement among mine action experts and professionals with significant experience in the field (e.g. CROMAC staff and deminers), that the new law is not practical to implement in the field, and impedes efficient and effective mine action operations.³⁴ Certain articles of the 2015 Law lack clarity and are hard to interpret, or do not make good sense operationally.³⁵ One such example concerns quality assurance (QA). Under the new law, authorised CROMAC staff no longer have the authority to control personnel and technical equipment prior to and during demining operations, and instead only undertake quality control (QC) of executed demining operations.³⁶ Furthermore, the 2015 Law has limited CROMAC’s supervision of the commercial operators, including with regard to decisions relating to the rates of demining, the level of pressure faced by companies, and quality assurance.³⁷ The new law reportedly works in a more prescriptive way, with significant sanction for failure to comply, but lacking preventive measures to combine safety and promote better quality of work.³⁸

Another consequence of the new law is that 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.³⁹ Five mine-related accidents occurred in 2016, resulting in three fatalities and four people injured (see the Deminer Safety section below, for details).⁴⁰

The former Law on Mine Action prescribed that after three years deminers needed to retrain, but this requirement was eliminated under the new 2015 Law, as was the requirement for deminers to undergo retraining in order to keep their licence if mistakes such as missed mines were made.⁴¹ The OMA have suggested that the by-law regarding safety be revised to require deminers to undergo refresher training at least once a year.⁴² A CROMAC representative emphasised that it is equally important for the leaders/managers responsible for the demining projects to be properly trained and regulated.⁴³

With sufficient political will, the challenges posed by the 2015 Law could be addressed and its provisions strengthened.⁴⁴ CROMAC would prefer that this is achieved through amendments to the law itself, rather than through the creation of supplementary by-laws and regulations, which is currently the case.

Article 143 of the Law on Mine Action required that by-laws be adopted to cover a number of issues, including demining methodology. Accordingly, a working group under the Ministry of Interior developed two supplementary regulations. The first by-law, “Regulations on demining, quality control, non-technical and technical surveys and marking of suspected hazardous areas”, entered into force in May 2016, and included, among other aspects, distinct technical survey procedures for mines and CMR, respectively. The second by-law, “Regulations on personal supervisory booklet and ID card of mine action employees and record forms”, entered into force in June 2016.⁴⁵

In March 2017, the amendments to the “By-law on the Method of Conducting Demining Operations, Quality Control, General and Technical Survey and Marking of Suspected Hazardous Area”, were published in the Official Gazette, after which they entered into force.⁴⁶ Amendments adopted through this by-law elaborate in more detail the provisions in the 2015 Law on Mine Action relating to the implementation of demining activities. Adoption of the amended by-law is said to require that demining activities be systematically monitored “in order to eliminate or correct possible deficiencies or impropriety that slow down or hamper the demining process”.⁴⁷ Unfortunately however, the by-law reportedly does not help to rectify the negative impacts of the 2015 demining law on efficient and effective implementation of clearance operations. Instead, CROMAC believes it further weakens the final QC criteria for demined areas.⁴⁸

Under the 2015 Law, the Ministry of Interior assesses authorised legal entities to conduct demining; this was formerly CROMAC’s responsibility.⁴⁹ With regard to 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.⁵⁰

Quality Management

In 2016, during QC of cleared areas during ongoing demining operations, CROMAC QC supervisors and auxiliary staff found that in 28 cases, across 10 working sites, mine clearance operations did not meet the prescribed quality requirement and ordered repetition of demining on an area of 45,005m². During final QC, the QC committee established that in four cases demining activities had not been performed in accordance with regulations and companies were ordered to repeat operations on an area of 15,783m².⁵¹ The QC committee is appointed by the director of CROMAC and consists of two authorised CROMAC employees and one representative of the Humanitarian Demining Inspectorate under the Ministry of Interior.⁵²

Under the former demining law, authorised CROMAC staff had the authority to monitor personnel and technical equipment prior to and during demining operations. However, with the adoption of the 2015 Law on Mine Action, CROMAC now only undertakes QC of executed demining operations.⁵³ Supervision during and after survey and clearance has been replaced by ongoing QC and final QC. Required "ongoing QC" for clearance operators has increased to 5%, in order to increase safety and quality. In addition, CROMAC QC officers review a minimum of 5% of control samples at least every three days, and final quality management of 1% is conducted by a commission with two representatives from CROMAC and one from the Ministry of Interior.⁵⁴ 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 negatively impact it.⁵⁵

Operators

As a result of conditions for earlier World Bank funding, Croatia has an unusually commercialised mine action sector, with almost all civil clearance conducted by local companies competing for tenders. CROMAC believes this model of privatised clearance is faster, cheaper, and more efficient.⁵⁶ Much foreign donor funding is tendered by ITF Enhancing Human Security, while CROMAC manages tendering for the Croatian Government and EU money in accordance with the Law on Public Procurement. The trust fund, "Croatia without Mines", raises money from private sources.⁵⁷

At the beginning of 2016, 46 commercial companies, with a total capacity of 653 deminers, 55 machines, and 42 mine detection dogs (MDDs), were accredited to conduct CMR and mine clearance. By the end of the year, this had decreased to 41 accredited commercial companies with a total of 600 deminers, 51 demining machines, and 60 MDDs.⁵⁸ Overall capacity remained roughly the same, but use of MDDs significantly increased in 2016.⁵⁹ Most assets were deployed for mine clearance, with 23 companies undertaking mine clearance operations in 2016.⁶⁰ As at May 2017, CROMAC did not expect any major changes to demining capacity in 2017, although overall capacity might increase towards 2018 given that several large projects were planned for mid-2017.⁶¹

The exception to the commercial tendering system is the state-owned enterprise MUNGOS, which is directly assigned a sufficient number of tasks by CROMAC to keep it solvent while it slowly phases down clearance operations.⁶² MUNGOS is one of the oldest demining organisations in Croatia and, as at May 2017, employed 50 deminers, 11 auxiliary staff, and 6 managers.⁶³ MUNGOS is currently undergoing restructuring which has helped improve its efficiency, and as at May 2017, two-thirds of MUNGOS's capacity was dedicated to technical survey.⁶⁴ A large proportion (two-thirds) of MUNGOS deminers are, however, ready to retire and receive their pension, and the rest will be transferred to CROMAC to perform technical survey.⁶⁵ The director of MUNGOS believed technical survey is an extremely good means by which to reduce the size of SHA, and also feels that demining could benefit from greater exchange of expertise and information between countries in the region.⁶⁶

NGOs are barred from competing for commercial tenders as CROMAC views their subsidy by other funds as unfair.⁶⁷

As barriers to entry into the mine clearance market are relatively low there is considerable fragmentation. Of the 23 companies demining in 2016, 12 cleared less than one square kilometre and only one company, Istraživač, was responsible for more than 20% of the total area cleared (see Table 2).⁶⁸ The United Nations Development Programme (UNDP) 2014 needs assessment observed that in the years preceding the assessment the number of demining companies in Croatia had grown but capacity overall had decreased.⁶⁹ A representative of the Croatian Employers' Association (CEA) – Humanitarian Demining Association – reported that the 2015 Mine Action Law had resulted in an increase in the number of demining organisations in Croatia.⁷⁰ This rise is in part due to deminers becoming dissatisfied and starting up new firms, and the 2015 Law requires a minimum of only five deminers per company.⁷¹ The current number of demining companies is disproportionate to the number of deminers, and according to a representative from CROMAC, it would be more realistic to have half the number of companies, but to ensure each one is properly managed.⁷²

Lower demining costs are said to make it more difficult for firms to make a profit on clearance. Larger firms claimed they were hampered by earlier over-investment in mechanical assets and equipment based on assumptions that funding would match the levels outlined in the 2009–19 mine action strategy.⁷³ Some companies have sought to diversify with operations outside Croatia, but given the relatively higher wages of Croatian deminers, lack of international experience, and lack of brand recognition, they have found it difficult to compete for tenders.⁷⁴ An NGO representative claimed that the quality of demining suffers when the price of demining is low.⁷⁵ A director of a commercial demining firm echoed this concern, saying that lower prices put greater pressure on deminers to clear more square metres a day.⁷⁶ The Humanitarian Demining Association indicated that the 2015 Law on Mine Action has resulted in more pressure on deminers to work longer periods each year, as the new law does not set a minimum wage.⁷⁷

In 2014, CROMAC reported it had started issuing larger value tenders, to allow companies to reduce the cost of their operations, saying that this had provided an incentive for companies to do better planning and to cooperate with each other.⁷⁸ A CROMAC representative claimed that although prices were lower, the larger tenders allowed continual work, resulted in fewer stoppages, and enabled companies to negotiate on better terms with hotels and services in their project areas.⁷⁹

However, bigger contracts, some of which covered areas as large as 5km², resulted in companies needing to form large consortia to compete for the new tenders. It was envisaged that four or five companies would form each consortium, but CROMAC has seen instances of 25 companies per consortium, and even of 30 companies bidding together.⁸⁰ In some instances this has resulted in disputes over the allocation of funds and areas assigned for clearance within the consortia, often to the disadvantage of smaller organisations.⁸¹ Very large project tenders are also more complicated to draft and demand more time and resources to administer and monitor.⁸²

The new Acting Director of CROMAC has subsequently tended towards much smaller project sizes (0.5km²–1km², excluding the EU polygons already procured), which encompass single, specific types of land, e.g. forested areas or agricultural land.⁸³ These are also easier to administer, monitor, and analyse.⁸⁴ The 2014 UNDP needs assessment recommended that CROMAC consider longer-term contracting to maximise use of operational assets in Croatia for both technical survey and mine clearance.⁸⁵ However, CROMAC plans

operations on a yearly basis, in accordance with the annual and three-year demining plans, which are set by the Government. CROMAC is unable to award multi-year contracts because it has to budget year-by-year, and in accordance with its own by-laws it is not possible to contract and reserve funds for the next year until the budget is set.⁸⁶ Tenders are awarded to the lowest priced bidder, but if bids are unusually low, CROMAC requests additional information on wages and other costs and tenders are rejected if the costs do not add up.⁸⁷

UNDP also noted that the current contracting of defined polygons is suitable for mine clearance but would not be conducive for effective technical survey, and called for a new procedure to be drafted once the law is changed.⁸⁸ The Humanitarian Demining Association reported that it would be preferable if, where possible, technical survey was already undertaken on project tasks prior to tendering them, so that commercial companies have as much information as possible to accurately plan for the tender.⁸⁹

With the adoption of the new law, which enables use of technical survey, CROMAC plans to target demining on confirmed mined areas and to conduct technical survey on the remaining SHA.⁹⁰ However, as at May 2017, there was insufficient capacity to conduct technical survey to the extent CROMAC would like, and it may in fact be several years until the required capacity is fully developed.⁹¹ CROMAC is looking at options to increase capacity, including the use of MDDs, which are now easier to deploy under the 2015 Law, and which are being used by several commercial companies to expedite release of land.⁹²

LAND RELEASE

In 2016, 38.75km² of mined area was released by clearance (38.3km² by operators working under the direction of CROMAC and a further 0.45km² by the Ministry of Defence) and a further 1.39km² was reduced by technical survey.⁹³

In addition, non-technical survey cancelled 1.77km², and confirmed nearly 1.9km² as mined in eight SHAs during 2016.⁹⁴

Survey in 2016

CROMAC non-technical and technical survey released 3.2km² in 2016⁹⁵ (1.39km² through technical survey and 1.77km² through non-technical survey).⁹⁶ In addition, 1.88km² of mined area was confirmed.⁹⁷

Clearance in 2016

Operators working under the direction of CROMAC cleared more than 38km² from 106 mined areas in 2016, with the destruction of 1,342 anti-personnel mines, 505 anti-vehicle mines, and 1,974 items of UXO.⁹⁸ Of this, some 0.41km² of clearance in 2016 resulted in no mines being found; an improvement on the equivalent of 0.83km² in 2015.

In addition, the demining battalion of the Croatian Armed Forces cleared 0.45km² of military facilities, and destroyed 38 anti-personnel mines, 2 anti-vehicle mines, and 5,084 items of UXO. As part of the “less arms, fewer tragedies” programme, in partnership with the UNDP, the Croatian Police (under the Ministry of Interior) collected 156 anti-personnel mines, 35 anti-vehicle mines, and 4,749 items of UXO, which were subsequently transported to and destroyed at Croatian military facilities.⁹⁹

The 38km² of mined area cleared under CROMAC in 2016 represents a slight decrease compared to the 40.6km² cleared in 2015,¹⁰⁰ and the 1,342 anti-personnel mines destroyed under CROMAC in 2016, was also lower than the equivalent 2,435 destroyed in 2015. Clearance in 2016 was, however, accomplished with a reduced average number of deminers per day (an 8% decrease compared to 2015), but a significant increase in the use of MDDs (an average of six MDDs employed in 2016 per working day, compared to one per working day in 2015). Furthermore, there were differences in the type of terrain and weather conditions between 2015 and 2016.¹⁰¹

Table 2: Anti-personnel mine clearance in 2016¹⁰²

Operator	Areas cleared	Area cleared (m ²)	Region/county	AP mines destroyed	AV mines destroyed	UXO destroyed
Alfa	4	198,381	Karlovac/Osječk-baranjska/Šibenik-Knin	8	0	4
Capsula Interna	4	913,037	Šibenik-Knin/Sisak-Moslavina/Zadar	5	3	26
Cor	4	2,508,535	Brod-Posavina/Karlovac/Požega-Slavonia/Sisak-Moslavina	6	0	76
Credo	1	6,947	Sisak-Moslavina	0	0	0
Diz-Eko	6	1,721,596	Požega-Slavonia/Šibenik-Knin/Sisak-Moslavina	29	1	191
Dok-Ing	4	1,585,057	Lika-Senj/Požega-Slavonia/Sisak-Moslavina	21	0	39
Fas	6	1,317,560	Brod-Posavina/Split-Dalmatia/Šibenik-Knin	68	11	25
Fossio	3	397,863	Brod-Posavina/Split-Dalmatia/Zadar	16	0	0
Harpija	1	56,925	Zadar	0	0	0
Heksogen	5	4,172,576	Sisak-Moslavina/Osijek-Baranja/Šibenik-Knin	207	15	368
Istraživač	11	8,610,645	Lika-Senj/Osijek-Baranja/Požega-Slavonia/Sisak-Moslavina/Zadar	439	350	116
Istraživač Benz	3	421,359	Lika-Senj/Sisak-Moslavina/Zadar	3	0	91
Loco	1	178,335	Brod-Posavina	0	0	0
Maper	1	91,699	Šibenik-Knin	0	0	0
Mina Plus	1	52,390	Zadar	0	0	0
Mka Deming	3	435,404	Požega-Slavonia/Sisak-Moslavina	79	0	581
Mungos	15	2,470,010	Brod-Posavina/Karlovac/Osijek-Baranja/Požega-Slavonia/Split-Dalmatia/Zadar	159	16	85
Piper	7	1,844,250	Karlovac/Lika-Senj/Osijek-Baranja/Požega-Slavonia/Sisak-Moslavina/Zadar	6	0	18
Piper	1	25,651	Sisak-Moslavina	0	0	0
Piton	3	517,722	Požega-Slavonia/Split-Dalmatia/Šibenik-Knin	2	0	0
Rumital	7	5,299,356	Lika-Senj/Požega-Slavonia/Šibenik-Knin/Sisak-Moslavina/Zadar	110	1	110
Titan	5	2,579,091	Brod-Posavina/Lika-Senj/Osijek-Baranja/Sisak-Moslavina/Zadar	109	97	30
Zeleni Kvadrat	10	2,859,591	Brod-Posavina/Karlovac/Lika-Senj/Požega-Slavonia/Šibenik-Knin/Zadar	75	11	214
Totals	106	38,263,980		1,342	505	1,974

AP = Anti-personnel

AV = Anti-vehicle

The combined total released by non-technical and technical survey in 2016 was 3.2km², which is only 13% compared to the plan for 2016.¹⁰³ Less technical survey was conducted in 2016 than intended, as funding was used to finish clearance, but the new funding will reportedly focus on increased technical survey.¹⁰⁴

In July 2016, Croatia signed a contract to demine its border with Hungary, as part of the cross-border cooperation project. The total area to be covered by the project was 1.46km², and 1.45m² was demined in 2016, destroying 137 anti-personnel mines, 103 anti-vehicle mines, and 66 items of UXO during clearance. Of the total project, 3,400m² remained to be cleared as at the end of 2016, as it was submerged under water.¹⁰⁵ Demining of the remaining mined area was subsequently completed in the first half of 2017.¹⁰⁶

A further 1.75km² of suspected mine contamination remains on Croatia's border with Hungary, 1km from the border.¹⁰⁷ As at August 2017, CROMAC had begun planning for how to release this remaining mined area over the next two years.¹⁰⁸

Deminer Safety

There were five mine accidents in 2016, which resulted in three fatalities (all deminers) and four injured (three deminers and one auxiliary worker), all of whom were men aged between 36 and 60.¹⁰⁹ This represents an increase compared to the two anti-personnel mine accidents in 2015, which killed one and injured two.¹¹⁰

In January 2016, during demining operations in Šibenik-Knin county, a mine accident involving a PROM-1 mine occurred in which one auxiliary worker sustained light injuries. In April 2016, a mine accident on a search and demining project in Lika-Senj county resulted in the death of one deminer from a PROM-1, with two others sustaining light injuries. In June 2016, a deminer suffered light injuries during a PMA-3 mine accident in Lika-Senj county. In October 2016, a mine accident involving a PROM-1 in Brod-Posavina county resulted in the death of a deminer; and in December, a deminer was killed by a PROM-1 mine in Zadar county.¹¹¹

Five of the seven mine accidents recorded in 2015 and 2016 involved PROM-1 bounding anti-personnel mines, which are especially dangerous due to their high sensitivity, instability, and lethality. CROMAC reported that the PROM-1 is particularly difficult to render safe because its fuze becomes unstable after being exposed to weather conditions for several years.¹¹² On the other hand, PROM-1 mines are very easy to detect due to their high metal content, which could indicate that demining accidents are more likely to be the result of procedures not being followed correctly.¹¹³

As mentioned previously, under the 2015 Law on Mine Action, responsibility for investigating demining accidents now lies with the State Attorney, under the oversight of the Ministry of Interior, rather than with CROMAC, the body with the requisite technical expertise.¹¹⁴ In light of the concerning number of demining accidents in 2016, and the need to fully determine the reason for the accidents, Croatia should consider re-evaluating its current procedure for accident investigation with a view to increasing CROMAC's involvement.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the ten-year extension request granted by states parties in 2008), Croatia is 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 2019. Croatia is not on track to meet the deadline.

In May 2016, though, CROMAC had reported that if all planned EU-financed projects are carried out, and dependent on available funding, Croatia still expected to meet its March 2019 deadline.¹¹⁵ In November, Croatia acknowledged that mine clearance activities in 2016 had not achieved the levels forecasted, but that the Croatian government and all mine action stakeholders in Croatia were still determined to solve the mine problem and systematise mine action activities so that the main goal and objective of completion by 2019 was still attainable.¹¹⁶

CROMAC has reported that achieving Article 5 completion depends solely on financing the necessary resources, as the demining capacities and experience are more than suitable. It highlighted, however, that meeting the 2019 Article 5 deadline "will be very challenging", based on the overall pace of progress.¹¹⁷

Almost 180km² of mined area in Croatia has been cleared over the last five years (see Table 3). However, while annual clearance output exceeds the targets in Croatia's 2009–19 mine action strategy,¹¹⁸ the amount of land released by survey each year has fallen well behind the yearly targets outlined in the strategy, including for 2016, for which 4.6km² was forecast to be released through reduction, and a further 10km² by general survey. Only 1.39km² was actually reduced by technical survey and 1.77km² cancelled by survey in 2016.

Table 3: Mine clearance in 2012–16

Year	Area cleared (km ²)
2016	38.8*
2015	40.6
2014	37.7
2013	32.3
2012	30.5
Total	179.9

*Includes 0.45km² cleared by the Ministry of Defence

In 2016, Croatia contributed around €4.9 million (approximately US\$5.3 million) in national funding towards the cost of CROMAC, and around €21 million (approximately US\$23 million) to cover survey and clearance of mined areas.¹¹⁹ CROMAC expected to receive continued funds in 2017, including from the EU, which was anticipated to account for up to 63% of total funding.¹²⁰

Overall, €39.4 million for mine action was realised in 2016.¹²¹ For the second year in a row, funding from external sources surpassed funds from the state budget, which until 2015 accounted for more than 60% of the total funds spent for mine clearance operations in 1998–2014.¹²² In 2016, EU funds accounted for the largest share of the mine action, representing approximately 65% of the total funds spent and contracted; with share from the Croatian state budget accounting for approximately 34%, and donations 1%.¹²³

As a result of its accession to the EU, Croatia is no longer on the Organization for Economic Cooperation and Development's Development Assistance Committee (OECD DAC) list and so can no longer be a recipient of official development assistance (ODA), which UNDP has identified as an impediment to Croatia's removal of the mine threat.¹²⁴ CROMAC received more funding in 2016, particularly from the EU, but expected that funding from other international donors would reduce now that Croatia is an EU member.¹²⁵

UNDP's Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia stated that the ability to release land through technical survey would enhance the capacity to more quickly recover from disasters and speed up land release.¹²⁶ However, it raised concerns that CROMAC did not have sufficient survey capacity to

enable the release of land through technical survey once the demining law is changed and advised CROMAC should boost this capacity to fully implement land-release methodology.¹²⁷ As at October 2016, CROMAC reported it had increased its capacity for technical survey through internal reallocation and that it was using MUNGOS for technical survey.¹²⁸ However, as at May 2017, CROMAC revealed that technical survey capacity was still not sufficient to meet requirements, and may not reach full required capacity until after 2018.¹²⁹

CROMAC's priority for survey and clearance operations in 2017 was to reduce the overall size of SHAs, and to complete release of agricultural areas and areas in the "Kopački Rit" Nature Park.¹³⁰ According to its 2017 Annual Plan of Mine Action, it planned to release a total of 75km² in 2017: 54km² through clearance and 21km² through technical survey, non-technical survey, and "supplementary non-technical survey activities" (during which control samples are taken to determine the absence of mines and UXO).¹³¹ Croatia, however, reported that in the first four months of 2017, only 4.98km² had been released through survey and clearance, which represents only 6.6% of the Annual Mine Action Plan forecast for 2017,¹³² suggesting that it was falling behind its 2017 targets.

In order to ensure greater progress towards meeting Croatia's Article 5 obligation, CROMAC will need to increase its capacity and implementation of survey operations, including the use of non-technical and technical survey to more accurately determine the size and location of contamination, and to, respectively, cancel and reduce areas in which no evidence of contamination is found.

1 Email from Nataša Mateković, Assistant Director and Head of Planning and Analysis Department, CROMAC, 2 May 2017.

2 Emails from Miljenko Vahtarić, then Assistant Director for International Cooperation and Education, Croatian Mine Action Centre (CROMAC), 13 May and 24 August 2016.

3 Article 7 Report (for 2016), Form C.

4 Ibid.; CCW Protocol V Article 10 Report (for 2016), Form A; and CCW Amended Protocol II Article 13 Report (for 2016), Form B.

5 Article 7 Report (for 2016), Form C; and Statement of Croatia, Intersessional meetings, 8 June 2017.

6 Email from Nataša Mateković, CROMAC, 2 May 2017.

7 Article 7 Report (for 2016), Form C.

8 Email from Miljenko Vahtarić, CROMAC, 20 April 2015.

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10 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.

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12 "Ne pucaju mine, nego top koji plaši veprove", Dubrovački Vjesnik, 24 July 2017, at: dubrovacki.slobodnadalmacija.hr/zupanija/konavle/clanak/id/498334/ne-pucaju-mine-nego-top-koji-plasi-veprove; and email from Nataša Mateković, CROMAC, 30 August 2018.

13 Email from Nataša Mateković, CROMAC, 2 May 2017.

14 Interview with Nataša Mateković, CROMAC, Sisak, 18 May 2017.

15 Statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016; and Convention on Cluster Munitions (CCM) Article 7 Report (for 2016), Form A.

16 CROMAC, "National Mine Action Strategy of Croatia 2009–2019", Zagreb, June 2009, p. 2.

17 Interview with Nataša Mateković, CROMAC, Sisak, 29 February 2008; extract from "Law on Humanitarian Demining", National Gazette (*Narodne Novine*), No. 153/05, 28 December 2005; and interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014; and emails, 9 June 2015 and 24 August 2016.

18 Emails from Miljenko Vahtarić, CROMAC, 24 August 2016; and Nataša Mateković, CROMAC, 20 June 2017.

19 Interview with Nataša Mateković, CROMAC, Sisak, 18 May 2017.

20 Interviews with Hrvoje Debač, Acting Director, 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.

21 Interview with Dijana Pleština, Director, OMA, in Geneva, 23 May 2012 and 10 April 2014; and email from Miljenko Vahtarić, CROMAC, 4 July 2013.

22 Email from Miljenko Vahtarić, CROMAC, 3 June 2016.

23 Interview with Miljenko Vahtarić, CROMAC, in Geneva, 11 April 2013; and email, 4 July 2013.

24 Interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.

25 National Mine Action Strategy of the Republic of Croatia, 2008, at: <http://www.hcr.hr/pdf/Strategija%20eng.pdf>.

26 CCW Protocol V Article 10 Report (for 2015), Form B.

27 Email from Nataša Mateković, CROMAC, 2 May 2017.

28 CCM Article 7 Report (for 2015), Form A.

29 CCM Article 7 Report (for 2015 and 2016), Form A; and emails from Miljenko Vahtarić, CROMAC, 13 and 18 May 2016.

30 Email from Miljenko Vahtarić, CROMAC, 9 June 2015.

31 Email from Miljenko Vahtarić, CROMAC, 13 May 2016; and CCM Article 7 Report (for 2015), Form A.

- 32 Email from Miljenko Vahtarić, CROMAC, 13 May 2016; and CCM Article 7 Report (for 2016), Form A.
- 33 Interviews with Hrvoje Debač, OMA, 17 May 2017, Zagreb; Ante Brkljačić, Acting Director, CROMAC, Geneva, 9 June 2017; and Neven Karas, CROMAC, and Tomislav Ban, Assistant Director and Head of Sector for Operational Planning and Programming, CROMAC, Sisak, 18 May 2017.
- 34 Interviews with Neven Karas and Tomislav Ban, CROMAC, Sisak, 18 May 2017; and a representative of the Croatian Employers' Association (CEA), Humanitarian Demining Association, Zagreb, 17 May 2017.
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- 38 Ibid.
- 39 Ibid.; and interview with Ante Brkljačić, CROMAC, in Geneva, 9 June 2017.
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- 41 Interview with Tomislav Ban, CROMAC, Sisak, 18 May 2017.
- 42 Interview with Hrvoje Debač, OMA, Zagreb, 17 May 2017.
- 43 Interview with Tomislav Ban, CROMAC, Sisak, 18 May 2017.
- 44 Interviews with Neven Karas, and Tomislav Ban, CROMAC, Sisak, 18 May 2017; and Ante Brkljačić, CROMAC, Geneva, 9 June 2017.
- 45 Emails from Miljenko Vahtarić, CROMAC, 18 May 2016 and Nataša Mateković, CROMAC, 20 June 2017; Statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016; and CCM Article 7 Report (for 2016), Form A.
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- 49 Email from Miljenko Vahtarić, CROMAC, 24 August 2016.
- 50 Ibid.
- 51 Email from Nataša Mateković, CROMAC, 2 May 2017; and CCW Protocol V Article 10 Report (for 2016), Form A.
- 52 Email from Nataša Mateković, CROMAC, 30 August 2017.
- 53 Ibid.
- 54 Emails from Miljenko Vahtarić, CROMAC, 13 May 2016; and Nataša Mateković, CROMAC, 2 May and 20 June 2017.
- 55 Interviews with Tomislav Ban, CROMAC, Sisak, 18 May 2017 and a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.
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- 59 Emails from Nataša Mateković, CROMAC, 22 March and 2 May 2017.
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- 62 Interviews with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014; and Amira Savranovic, then Director, MUNGOS, Sisak, 14 April 2014.
- 63 Interview with Damir Magdić, Director, MUNGOS, Sisak, 18 May 2017.
- 64 Email from Miljenko Vahtarić, CROMAC, 21 October 2016; and interview with Nataša Mateković, CROMAC, Sisak, 18 May 2017.
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- 97 Email from Nataša Mateković, CROMAC, 2 May 2017; Article 7 Report (for 2016), Form C; and statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016.
- 98 Email from Nataša Mateković, CROMAC, 2 May 2017; and Article 7 Report (for 2016), Form C.
- 99 Article 7 Report (for 2016), Form C; and CCW Protocol V Article 10 Report (for 2016), Form A.
- 100 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.
- 101 Email from Nataša Mateković, CROMAC, 2 May 2017.
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- 105 Email from Nataša Mateković, CROMAC, 2 May 2017.
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