PERMANENT MISSION OF THE REPUBLIC OF CROATIA
TO THE UNITED NATIONS OFFICE AND
OTHER INTERNATIONAL ORGANIZATIONS
G E N E V A

No. 37/18

The Permanent Mission of the Republic of Croatia to the United Nations and other International Organizations in Geneva presents its compliments to the Implementation Support Unit of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction and has the honor to request the latter to forward the present Note Verbale to the Ambassador and Permanent Representative of Switzerland to the Conference on Disarmament, Her Excellency Sabrina Dallafior, Chair of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction Committee on Article 5 Implementation.

The Republic of Croatia has the honor to officially submit the Second Request for an extension of the deadline for completing the destruction of anti-personnel mines in mined areas in accordance with Article 5, paragraph 1 of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction.

Attached herewith is the Republic of Croatia's request for extension of the deadline, including tables, shemes, diagrams and maps.

The Republic of Croatia submits the request for extension of the deadline for the purpose of its formal consideration at the Seventeenth Meeting of the States Parties to be held in Geneva from 26th to 30th November 2018.

The Permanent Mission of the Republic of Croatia to the United Nations and other International Organizations in Geneva avails itself this opportunity to renew to the Implementation Support Unit of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction the assurances of its high consideration.

Geneva, 29 March 2018

APLC
Implementation Support Unit

11, Route de Ferney, 1202 Geneva Tel: 022/740 32 43 Fax: 022/740 30 89
e-mail : cromiss.geneva@mvep.hr

REPUBLIC OF CROATIA

2nd REQUEST
for an extension of the deadline for completing the destruction of antipersonnel mines in mined areas in accordance with Article 5, paragraph 1 of the Convention on the Prohibition of the Use, Stockpiling, Production, and Transfer of Anti-Personnel Mines and on Their Destruction

Period requested 2019-2026

Submitted to the Chair of the Committee on Article 5 Implementation

March 2018

Prepared for State Party

CONTACT INFORMATION:

Organization:	**Croatian Mine Action Centre**
Director:	**Zdravko Modrušan**
Telephone:	**+385 44 554 100**
Fax:	**+385 44 554 111**
E-mail:	**ravnatelj.HCR@hcr.hr**

TABLE OF CONTENTS

Abbreviations

APM	Anti-Personnel mines
APMBC	Anti-Personnel Mine Ban Convention
ATM	Anti-Tank mines
CHA	Confirmed Hazardous Area
CMVA	Croatian Mine Victims Association
CRC	Croatian Red Cross
CROMAC	Croatian Mine Action Center
CROMAC-CTDT	Croatian Mine Action Center - Centre for Testing, Development and Training
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EO	Explosive Ordnance
EOD	Explosive Ordnance Disposal
ERW	Explosive Remnants of War
EU	European Union
GOMA	Government Office for Mine Action
HA	Hazardous area (CHA+SHA)
ICRC	International Committee of the Red Cross
IMAS	International Mine Action Standards
MRE	Mine Risk Education
MVA	Mine Victims Assistance
NMAA	National Mine Action Authority
NMAC	National Mine Action Centre
NMAS	National Mine Action Standards
NPA	Norwegian People's Aid
QA	Quality Assurance
QC	Quality Control
SHA	Suspected Hazardous Area
SOP	Standard Operating Procedure
UNDP	United Nations Development Programme
UNDPKO	United Nations Department of Peace Keeping Operations
UNMAAP	United Nations Mine Action Assistance Programme
UNMAC	United Nations Mine Action Center
UNOPS	United Nations Office for Project Services
UNPROFOR	United Nations Protection Force
UXO	Unexploded Ordnance
VAT	Value Added Tax

I. Executive Summary

With the beginning of the Homeland War in 1991, the Republic of Croatia started facing the mine problem as one of the most difficult consequences of war operations conducted on its territory. Mine contamination caused and continues to cause humanitarian, economic, developmental, ecological, and social disturbances. During the Homeland War (1991-1995), 1,280 people were involved in 1,016 mine incidents resulting in 270 fatalities. In 1995, the largest number of casualties - 332 persons - was recorded. High numbers of casualties were also recorded in the years immediately prior to entry into force of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (hereinafter: the Convention), with another 337 casualties recorded between 1996 and 1998. Some agricultural areas, forest complexes and protected areas remain inaccessible today due to the presence or suspicion of presence of mines and explosive remnants of war (ERW).
The Republic of Croatia confirmed its resoluteness in solving the mine problem by passing the Law on Humanitarian Demining in 1996, establishing the Croatian Mine Action Centre (CROMAC) in 1998, establishing the Government Office for Mine Action (GOMA) in 2012, passing the new and comprehensive Law on Mine Action in 2015, thus fulfilling the commitments undertaken by joining the Convention. The Republic of Croatia has secured permanent and stable sources of financing in the State Budget and through European Union (EU) pre-accession, structural and cohesion (ESI) funds. Croatia also extensively used funds from public companies as well as the three World Bank loans and received substantial support from donors. Croatia ratified the Convention on 28th May 1998 and submitted its initial transparency report on 3rd September 1999, providing information on areas that contain or are suspected to contain anti-personnel mines. Croatia had a deadline until 1st March 2009 for destroying or ensuring the destruction of all anti-personnel mines emplaced within these areas. Croatia submitted the First request for the extension of the deadline for completing the destruction of all anti-personnel mines in mined areas in accordance with Article 5, paragraph 1, for period March 2009 - March 2019. In 2002, Croatia destroyed the last remaining stockpiles of anti-personnel mines except certain amount retained for testing and training purposes.

Since 2004, Croatia has precisely defined hazardous area[1] (HA), considerably reduced hazardous areas and reported a reduction of mine accidents and mine incidents which resulted in a reduction of a number of mine victims.

Over the past period, the Republic of Croatia has achieved the following results:

- Originally, hazardous area extended along the territory of 14 out of 21 Croatian counties. On 1st January 2018, it was reduced to 8 counties.
- After the Convention's entry into force, the total hazardous area was over 5,980 km². Through the application of improved survey methods this was reduced to 1,147 km² in 2005. In the period since the First extension request (1st January 2009) HA covered the territory of 954.5km². On 1st January 2018 the HA totals 411.5 km².
- Between 1998 and 2018, over 566.4km² were demined and over 857.5km² were released through technical survey and other land release methods.
- Demining operations carried out under the auspices of civilian authorities have resulted in 84,156 mines (46,385 anti-personnel mines and 37,771 anti-tank mines) and 250,060 pieces of ERW found and destroyed. At the same time, the Croatian Army destroyed 4,466 mines (anti-personnel and anti-tank mines) and 160,372 pieces of ERW on the area around military facilities. In total, Croatia has destroyed 50,851 anti-personnel mines, 40,261 anti-tank mines and 410,432 pieces of ERW.

[1] Hazardous area (HA) implies confirmed hazardous area and suspected hazardous area (CHA + SHA)

- In 2017, we recorded no mine accidents or mine incidents, and for the first time after Croatia was faced with mine and ERW contamination, there were no mine victims in a single year (the last mine victim under the age of 18 was reported in 2004 and the latest civilian casualty was reported in 2014).
- In the course of time, Croatia has developed sophisticated methods and standards for humanitarian demining, technical survey and non-technical survey and quality control. These methods and standards are based on the International Mine Action Standards (IMAS), modified in accordance with the specific conditions in Croatia and as such have been codified through the national legislative framework for humanitarian demining. In addition, Croatia has established its own method for cancelling the area from HA providing high level of assurance that the former HA should no longer be considered dangerous.
- Croatia has marked HA with almost 13,600 mine warning signs in total. In addition, it is estimated that approx. 1,000,000 persons have undergone some form of mine risk education since the Convention's entry into force. Mine risk education (MRE) activities continue to be conducted through public and targeted lectures and presentations, exhibitions, TV videos and radio jingles, theatre plays, art workshops, as well as one-time special activities such as selling demining coupons, opening of children's playgrounds near hazardous areas, collecting waste paper, distribution of educational notebooks to all first-grade pupils of elementary schools and other projects at the state and local level.
- Since the Convention had entered into force, an amount of over €727.3 million has been invested in humanitarian demining activities in Croatia. Overall, Croatia has obtained more than €153.7 million from international donors and EU funds. Nevertheless, it should be emphasised that Croatia itself has provided majority of fundings for the purpose of Article 5 implementation, with over €417 million having been obtained from Croatia's State Budget. In addition, Croatia has been ahead in using funds for demining from the World Bank, state companies and the EU funds.
  As noted, the estimated HA remains 411.5 km². This includes areas that have been identified through non-technical survey operations and areas in and around military facilities, reported as HA by the Croatian Army.

The circumstances that continue to impede Croatia from complying with the Article 5 obligations twenty years after the Convention's entry into force are as follows:

- Remaining challenge: In 1996, the United Nations Mine Action Centre (UNMAC) estimated that there were over 13,000 km² of potentially dangerous area in Croatia. By 2018, Croatia reduced the hazardous area to 411.5 km² through demining and the application of improved survey methods[2].
- Humanitarian, economic, social and environmental implications: Entry into force of the Convention occurred 2,5 years after the end of the Homeland War. War damage was enormous, with cities and villages levelled, communication and utility infrastructure destroyed and industrial plants unusable. Humanitarian activities were only part of the broader set of reconstruction efforts that had to be undertaken. The Homeland War resulted in minefields that were not marked and with few useful records of their placement retained. The borders of minefields were not marked and data from minefield records were inaccurate and incomplete. The number of mines was unknown. In addition, mines have been moved further away from their initial place due to weather conditions and soil erosion. Environmental challenges: Minefields are uneven and cluttered with barriers due to the nature of the terrain (mountains, rocky terrains, river banks used as demarcation lines during the war operations). Furthermore, heavy vegetation has been a major circumstance impeding more rapid progress. Many minefields are placed in hot and wet environment that stimulates rapid growth of foliage.

[2]Improved survey methods (non-techical and technical survey). The CROMAC has applied the aerial survey as a qualitative upgrade to the non-technical survey.

In terms of humanitarian, economic, social and environmental implications, the effort to implement the Convention to date and to more generally address the problems associated with explosive remnants of war (ERW) in Croatia has resulted in decrease of the number of new victims, facilitated the return of displaced persons, and freed land for socio-economic gains. However, humanitarian, economic, social and environmental implications remain and it is expected that these will be addressed during the extension period:

- HA continue to be found in 59 municipalities in 8 out of 21 Croatian counties. A total of 488,984 inhabitants – 11.3% of the population of Croatia – continue to live in the vicinity of HA.
- Mined agricultural areas and forest areas represent a significant problem for the economy. According to the Croatian Forests Ltd. calculation, total loss because of mined agricultural areas (in fact, mostly forested areas) and the value of forest wealth that can not be used (because of mines) is approximately €13.5 million. Additional losses come out of the inability to maintain and renew the existing forests.
- While Croatia has placed a priority on creating safe conditions for tourism, some subsectors continue to be affected, particularly hunting tourism given the nature of the remaining HA.
- HA account for nearly 45.5 square kilometres of national parks or nature reserves.

Croatia is requesting a 7 year extension of its deadline for completing the destruction of all anti-personnel mines in mined areas (i.e. until 1st March 2026) on the basis that this is a realistic but not unambitious amount of time given the extent of the remaining problem and the human, material and financial resources available or expected, and the demining and survey capacities currently available. In the first six years, all known minefields would be cleared, and in the remaining one year period, entire hazardous area would be released (as shown in tables no. 14, 15, 16 and 17).

Croatia has a credible plan for fulfilling its obligations by 1st March 2026 with some of the main features as follows:

- Croatia has prioritised the remaining HA according to: those which affect safety, those which pose barriers to the socio-economic development and those which affect the ecology in other ways. While priorities at the operative level will be elaborated in the annual demining plans, Croatia's goals are to clear all areas intended for agriculture until the end of 2018 and to demine all known minefields until 2024.
- Croatia's future projections forsee that the 253.4 square kilometres of confirmed hazardous area (CHA) will be released by demining and 133.9 square kilometres of suspected hazardous area (SHA) will be released through non-technical and technical survey. Croatia has developed annual timelines for the land release according to each method. These annual milestones will provide a benchmarks for Croatia to report to the States Parties about the progress made in implementing the commitments under the Article 5 during the extension period.
- In the period of the realisation of the Article 5 implementation efforts during the extension period, Croatia will continue to comply with its obligations under the Article 5, paragraph 2, by maintaining marking of the entire HA, replacing existing mine danger markings or placing additional markings as required and providing the entire population living in HA with MRE activities.

It is estimated that the fulfilment of the Article 5 obligations in the Republic of Croatia will cost a total of €459 million. Annual projections for funding needs are based on sound formulas regarding extensive experience Croatia has had with the actual costs of land release through the full range of methods (e.g., demining, technical survey and non-technical survey). It is expected that the Croatian State Budget will continue to finance the majority of demining activities, as well as the European Union (EU) funds which will be complemented by funds provided by other government bodies, state companies, and on the micro level, from domestic and foreign donors.

II. Detailed Narrative - Croatia's 2nd request for an extension

1. Introduction

In this Request for extension of deadline, it will be explained in detail why Croatia failed to comply with the Article 5 obligations within twenty years of the Convention's entry into force.
Also, results and progress made so far as well as reasons for the 2nd Extension and assumptions for successful execution of obligations in the next seven year period will be present.

Through the analysis submitted in this request, the period 2008-2019 is presented in order to ensure continuity of the First extension request analysis.

2. Origin of the Article 5 implementation challenge

Anti-personnel mines (and other mines) were placed throughout the Croatian territory during the Homeland War that took place in the period 1991-1995. During these four years, mines were placed by all warring parties along the confrontation lines which were frequently changed. Mines were also placed in areas of strategic importance, including railway lines, power stations, gas and oil pipelines and military installations.

The use of anti-personnel mines along with the general consequences of war resulted in the presence of significant numbers of other ERW and left Croatia severely contaminated. This contamination, originally located in 14 out of 21 counties, has caused and still causes economic, developmental and social obstructions and affects human safety. Large agricultural areas, parts of infrastructure facilities, forest areas and river banks were made inaccessible due to the known or suspected placement of landmines and the presence of other ERW.

Croatia signed the Anti-Personnel Mine Ban Convention (APMBC) on 4th December 1997 and ratified it on 28th May 1998. The Convention entered into force for Croatia on 1st March 1999. On 3rd September 1999, Croatia submitted its initial transparency report in accordance with the Article 7, paragraph 1 of the Convention. In this report information on "mined areas that contain, or are suspected to contain, anti-personnel mines under its jurisdiction or control" were provided. Thus, Croatia signaled to the other States Parties that it had an obligation under the Article 5, paragraph 2, "to destroy or ensure the destruction of all anti-personnel mines in mined areas under its jurisdiction or control, as soon as possible…" and that its deadline for fulfilling this obligation is 1st March 2009.

New deadline for the fulfillment of commitments stated above according to the First extension request is 1st March 2019.

3. Nature and extent of the Article 5 challenge at the beginning of the previous request

Since the beginning of efforts to address the problems caused by mines and other ERW, Croatia has been facing challenges in terms of defining the HA. In the period March 1996 - June 1998 the UNMAC Office in Croatia played a leading role in collecting data on contaminated areas. UNMAC assessments resulted in an estimate stating that approximately 13,000 km^2 of Croatian territory was suspected to contain mines[3]. This was considered to be a gross overestimation of the actual size of potentially dangerous areas.

[3] The estimate was based on the safety zone several km wide on both sides of the former confrontation line, drawn by the UN.

In 1996, the Croatian Parliament passed the Law on Demining. In 1998, the Croatian Mine Action Centre (CROMAC) was established and amendments were made to the Law on Demining. Following these events, funding of humanitarian demining activities increased dramatically as did the efforts to develop a more precise estimate of areas suspected to contain mines and information on areas known to contain mines. When Croatia submitted its initial transparency report on 3rd September 1999, it was able to reduce the original UNMAC estimate of a total of 13,000 km^2 of potentially dangerous area to a total of 5,980 km²[4]. This included the total area represented by 11,228 minefield records obtained by the CROMAC and with potentially dangerous or confirmed dangerous areas located in 14 out of 21 counties. This was further reduced to 4,000 km^2 in 2001.

As the result of non-technical and technical surveys and the systematic removal of the illogical data of the potentially dangerous area from the data base (potentially dangerous area included cities close to the confrontation line, rivers, lakes etc.), at the beginning of 2002, potentially dangerous area was estimated to the total of 1,700 km². This included the total area represented by 8,620 minefield records obtained by the CROMAC with potentially dangerous or confirmed dangerous areas remaining in 14 out of 21 counties.[5]

It should be noted that obtaining clarity regarding the exact size and location of both, areas suspected to contain mines and areas known to contain mines, particularly in the case of a country like Croatia, which experienced such widespread mine use, is necessarily an on-going task. In 2003, Croatia developed National Mine ActionStandards (NMAS) based on the International Mine Action Standards (IMAS). This included the establishment of Standard Operating Procedures (SOPs) for undertaking non-technicala nd technical survey operations and for verifying such operations in order to develop more precise estimates and increase relevant knowledge. During 2003 and 2004, the entire territory of the Republic of Croatia was surveyed based on above-mentioned SOPs resulting in defining the total of 1,174 km^2 of HA by the end of 2004. Continuous surveys were undertaken during the 2005 and 2006 that resulted in the additional reduction of the HA to the total size of the 1,044 km^2 at the beginning of the 2007.

In the period 1998–2007, almost 226.6km² were demined and over 583.2km² were released through non-technical and technical survey.

4. Nature and extent of progress made: Decisions and Recommendations of States Parties in granting the request

On 2 June 2008, Croatia submitted a request to extend its mine clearance deadline. The request was granted at the Ninth Meeting of the States Parties to the APMBC and a new deadline set for 1st March 2019.

Main features of fulfilling its obligations by 1st March 2019 were as follows:

- 410 km² of HA would be released by demining, 210 km² through non-technical survey and 377 km² through technical survey;
- Projections of annual increase in the amount of HA to be released by demining (from 44 km² in 2008 to 56 km² in 2010);
- Significant amount of forest HA were expected to be resolved through determination that it is indeed not a “mined area” as defined by the Convention;

[4] The reduction was made by using non-technical survey methods and through analysis of the data handed over by the UN.

[5] It should be noted that some records do or may overlap. This is taken into account in calculating total area figure.

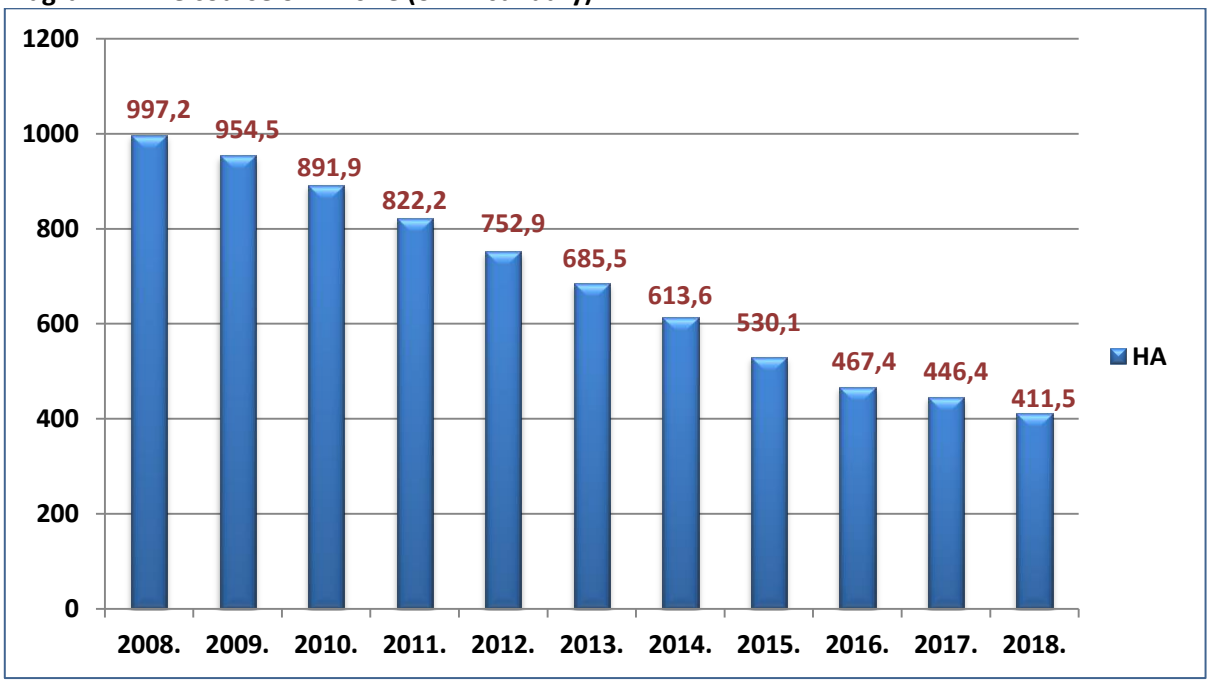
- Continuation to comply with its obligations under the Article 5, paragraph 2, by maintaining marking of the entire HA, replacing existing mine danger markings or placing additional markings,
- Expected fulfilment costs of the Article 5 obligations were approx. €740 million;
- It was expected that the Croatian State Budget will continue to finance the majority of humanitarian demining activities. The projection was that the State Budget funds will increase over time accompanied by the increase of funds from other sources.

In addition to the direct humanitarian impact of mines, Croatia suffered from a multitude of socio-economic impacts. The first priority from the beginning of the systematic process of demining was clearance of land for the reconstruction of houses and clearance of transport infrastructure, power lines and water supply system. **Now, in 2018, this problem is solved in a sense that there is no HA near houses, house yards, close to the vital roads and infrastructure of any kind.**

The next priority was to demine all destinations important for tourism which is one of the main economic activities in Croatia. In order to do that, areas along the tourist road communications were demined. In this way, HA has been moved away from the above-mentioned road communications that made it possible for tourists to safely travel to their destinations. Parts of national parks and parks of nature have also been demined. The problem which continental counties are now facing is HA that had been used, prior to the war, for hunting tourism because it was one of the most important sources of income for certain towns and municipalities. Out of total demined areas in the period from the APMBC entrance into force, 1/3 of demining activities took place in the four tourist counties along the coast of the Adriatic Sea.

Demining of agricultural areas was also a priority from the viewpoint of a sustainable return of war-affected people. However, in the early years, due to limited and insufficient funds, the emphasis was put on the above-mentioned priorities. In the last years, the share of agricultural areas in the total realization of planned demining operations increased and now agricultural land participates with 9,9% in the entire HA. The Plan is to clear all agricultural hazardous areas until the end of 2018.

Diagram 1: The course of HA size (on 1st January)



5. Nature and extent of progress made: quantitative aspects

In the period 1991-1997 approx. 40 km² of the territory of the Republic of Croatia was demined. Demining was conducted by the Croatian Army, Special Police, Civil Protection, UN engineering troops, state-owned demining company AKD Mungos and private companies registered in the sector East. No quality control over these operations, in terms of implementation of humanitarian demining standards, was preformed which resulted in an inclusion of certain areas to the HA during the non-technical survey execution due to considerable probability for the existence of residual mines.

In the period 1998-2007, registered private demining companies demined 226.5 km². Quality control of demined areas was carried out and corresponding demining certificates were issued.

The most extensive demining activities were conducted in the period 2002-2004 due to the project of rapid Zagreb-Split highway construction. The largest part of the highway route passes through mine suspected areas in the Ličko-senjska County, Zadarska County and Šibensko-kninska County. In those years, apart from the State Budget, the Croatian Highways, the state-owned company responsible for highway construction, allocated the largest demining funds. Another big investment projects in the sphere of infrastructure reconstruction started in 2002 such as, for instance, the reconstruction of Ernestinovo transformer station (the transformer station that links the South East Europe to the shared electro-energetic system of Europe, the reconstruction of electro-energetic network, Zagreb-Split railway, embankments and canals in Eastern Slavonia etc.).
At the beginning, the emphasis was put on demining in the Zagrebačka County and, a year later, in the Bjelovarsko-bilogorska County as well.

In the period 2008-2017, by demining companies and non-technical and technical survey carried out by the CROMAC, 614.1 km² were released (cleared, reduced andc anceled). Corresponding certificates were issued by the CROMAC for each of these activities (demining and/or technical and non-technical survey).

The most extensive demining activities, in the period 2008-2017, were conducted in the Virovitičko-podravska County (completely cleared by the end of 2013), Dubrovačko-neretvanska County (completely cleared bythe end of 2014) and Vukovarsko-srijemska County (completely cleared by the end of 2015). Also, in terms of the size of demined area through this ten-year period, most of the work was done in the Osječko-baranjska, Sisačko-moslavačka and Ličko-senjska County.

Table 1: Cleared area per County and per year (m^2)

COUNTY	YEAR											TOTAL (2008 - 2017)
	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.	Plan for 2018.	
Bjelovarsko-bilogorska	0	0	68.202	0	0	0	0	0	0	0	0	**68.202**
Brodsko-posavska	2.622.250	1.112.338	824.077	1.354.554	878.766	1.455.178	2.939.118	2.554.991	2.968.327	1.989.567	232.977[6]	**18.699.166**
Dubrovačko-neretvanska	987.372	1.740.867	540.765	274.128	119.790	676.185	3.086.712	0	0	0	0	**7.425.819**
Karlovačka	2.321.675	2.206.834	2.012.923	2.468.641	2.721.411	4.493.678	489.447	3.562.916	3.187.691	1.014.153	2.637.989	**24.479.369**
Ličko-senjska	3.774.394	2.774.430	4.344.587	4.146.617	3.088.207	1.473.795	5.161.091	318.129	8.916.285	4.444.258	11.340.829	**38.441.793**
Osječko-baranjska	7.508.934	10.524.763	8.265.486	5.893.798	6.908.797	9.311.030	5.614.274	4.699.461	2.418.861	2.743.869	11.243.826	**63.889.273**
Požeško-slavonska	1.044.216	1.408.384	1.476.348	931.685	705.515	1.819.480	1.208.010	1.270.717	3.925.785	3.353.769	2.101.020	**17.143.909**
Splitsko-dalmatinska	620.449	612.831	404.743	175.342	199.294	245.358	213.980	960.895	1.242.660	1.840.573	868.824	**6.516.125**
Sisačko-moslavačka	3.051.362	3.792.689	3.739.645	3.481.975	3.798.160	3.054.120	4.626.789	12.221.947	9.768.077	6.167.458	6.020.045	**53.702.222**
Šibensko-kninska	1.756.927	3.096.151	1.609.479	1.841.665	2.956.263	2.090.442	2.902.800	2.157.497	2.097.698	3.029.902	3.009.065	**23.538.824**
Virovitičko-podravska	813.043	617.951	457.246	934.104	296.915	2.136.477	0	0	0	0	0	**5.255.736**
Vukovarsko-srijemska	5.759.922	5.755.429	4.896.157	4.512.780	5.768.331	2.531.526	6.320.105	11.297.120	0	0	0	**46.841.370**
Zadarska	2.849.435	4.226.753	3.172.284	1.649.971	3.050.006	3.055.855	5.186.541	1.560.334	3.738.596	5.301.518	2.375.156	**33.791.293**
Zagrebačka	0	0	0	0	0	0	0	0	0	0	0	**0**
TOTAL	**33.109.979**	**37.869.420**	**31.811.942**	**27.665.260**	**30.491.455**	**32.343.124**	**37.748.867**	**40.604.007**	**38.263.980**	**29.885.067**	**39.829.731**	**339.793.101**

[6]Area is included in HA on 15 January 2018 and it will be cleared in this year according to the Annual Demining Plan.

Table 2: Area reduced with the Non-Technical and Technical Survey methods (km^2)

COUNTY	YEAR											TOTAL
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Plan for 2018.	
Bjelovarsko-bilogorska	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	**0,0**
Brodsko-posavska	0,0	0,0	1,7	2,0	4,5	1,5	4,8	4,7	0,0	0,0	0,0	**19,2**
Dubrovačko-neretvanska	0,0	0,0	0,0	0,4	0,1	0,6	1,0	0,0	0,0	0,0	0,0	**2,1**
Karlovačka	0,0	0,0	6,7	1,3	0,5	1,5	1,1	1,4	0,0	0,2	0,8	**12,7**
Ličko-senjska	4,4	4,2	16,5	-0,7	0,8	1,5	-0,1	1,9	0,1	-3,7	0,2	**24,9**
Osječko-baranjska	0,0	9,4	8,1	9,5	10,4	14,3	10,4	6,2	1,7	2,1	6,9	**72,1**
Požeško-slavonska	0,0	1,1	0,0	9,8	4,6	7,5	1,0	0,5	0,2	2,7	2,8	**27,4**
Splitsko-dalmatinska	0,0	0,5	0,0	0,3	0,0	0,0	2,0	0,8	0,0	0,0	0,0	**3,6**
Sisačko-moslavačka	0,0	0,8	1,2	12,0	10,1	5,9	7,4	4,1	0,0	1,9	0,1	**43,4**
Šibensko-kninska	0,0	0,2	0,2	1,4	2,0	5,1	3,7	0,5	0,3	2,0	1,4	**15,4**
Virovitičko-podravska	0,0	0,0	0,5	0,6	0,1	0,0	7,9	0,0	0,0	0,0	0,0	**9,1**
Vukovarsko-srijemska	0,0	8,2	3,7	3,7	1,4	1,3	6,3	3,4	0,0	0,0	0,0	**28,0**
Zadarska	5,0	0,3	-0,4	2,3	2,3	0,3	0,7	3,6	1,0	1,4	4,4	**16,5**
Zagrebačka	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	**0,0**
TOTAL	**9,4**	**24,7**	**38,2**	**42,6**	**36,8**	**39,5**	**46,2**	**27,1**	**3,3**	**6,6**	**16,6**	**274,4**

In the period 2008-2017, through technical and non-technical survey, 274.4 square kilometres of HA were determined safe for further use.

Through the ''CROMAC Mine Information System (MIS) portal'', available to all Internet users, one can get detailed insight into HA and locations of mine danger signs, searchable by counties, municipalities, towns or settlements. This kind of HA display through web application is unique in the world.

During the execution of demining operations, in the period 1998-2017, there were 84,156 mines detected and destroyed out of which 46,835 anti-personnel mines and 37,771 anti-tank mines and 250,060 miscellanous unexploded ordnances (UXO). At the same time, the Croatian Army destroyed 4,466 mines (1,976 anti-personnel mines, 2,490 anti-tank mines) and 160,372 pieces of UXO on the area around military barracks, polygons and facilities.

In period 2008–2017, there were 37,726 mines detected and destroyed out of which 19,815 anti-personnel mines and 17,911 anti-tank mines and 47,894 miscellanous UXO.

Table 3: Number of mines and ERW destroyed in the period 2008-2017

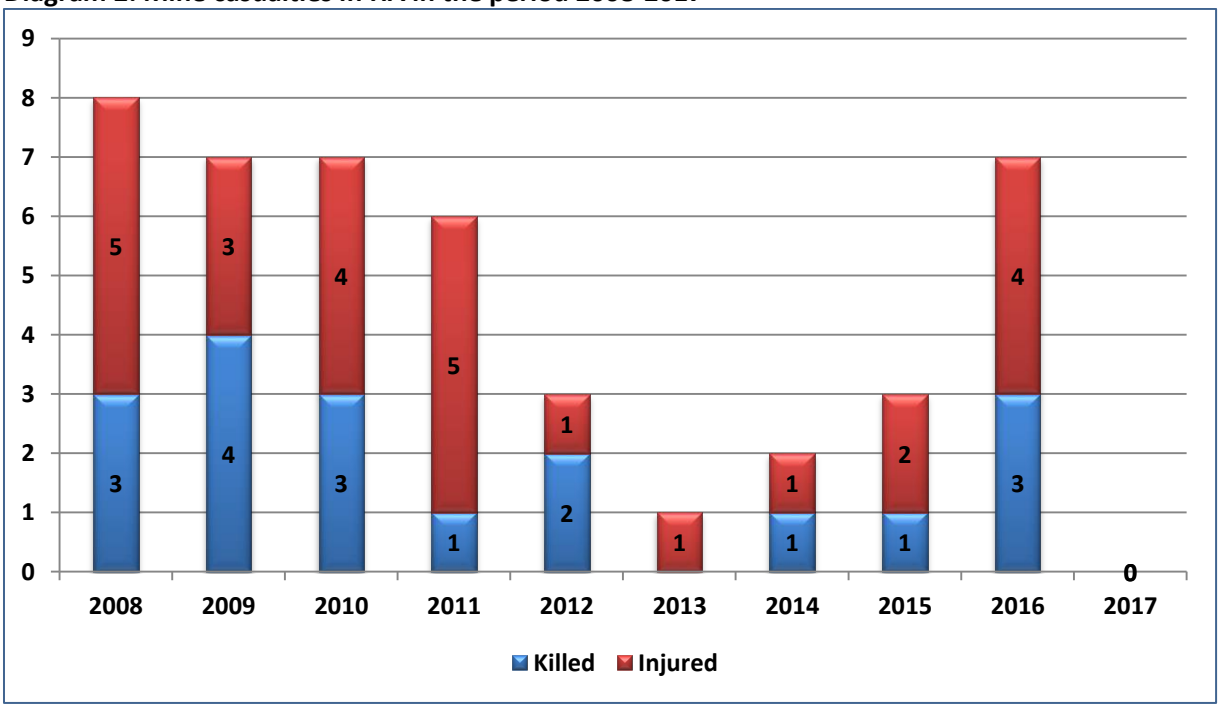
Year	Anti-personnel mines	Antitank mines	ERW
2008	1.805	2.617	3.402
2009	3.395	5.276	1.186
2010	1.809	1.803	2.859
2011	1.995	2.421	10.479
2012	2.150	2.331	4.371
2013	1.771	775	19.412
2014	1.842	1.507	1.984
2015	2.435	658	1.708
2016	1.342	505	1.974
2017	1.271	18	519
Total	**19.815**	**17.911**	**47.894**

6. Nature and extent of progress made: qualitative aspects

Efforts to implement the Article 5 of the Convention and otherwise address the problems caused by mines and other explosive hazards have produced significant humanitarian, social and economic results; annual casualty rates have been gradually reduced and have dropped dramatically compared to the period prior to the entry into force of the Convention.

This is depicted in Diagram 2 below. A further breakdown of mine casualties can be seen in Annexes (Tables 5).

Diagram 2: Mine casualties in HA in the period 2008-2017



The number of mine victims decreased every year as a result of demining of the priorities related to return of displaced persons, precise and extensive marking of the entire HA (nearly 13,600 big warning signs are placed along the borders of the HA) and the systematic program of mine risk education (the last mine victim under the age of 18 was reported in 2004 and the latest civilian casualty was reported in 2014).

Until now, mine danger has been entirely removed from the areas intended for reconstruction of houses and existing infrastructure at the local and national level (canals, ditches, transmission lines, oil pipeline etc.).

In the period 2006-2009, State Budget funds increased while donor and investor funds slightly decreased. Since 2010, another decrease of State Budget funds as well as investor and donor funds has been registered (except funds from the Croatian Forests and Croatian Waters), but also the increase of funds from the EU pre-accession funds.
Donation decrease occurred due to the global economic crisis, new critical points, natural and humanitarian disasters and, after 2013, because of Croatia's accession to the EU.

EU funds are used as planned. The CROMAC has so far nominated demining projects each year. In co-operation with the Central Finance and Contracting Agency (CFCA) it was agreed that, funds which could not be contracted by the ultimate deadline for project completion, shall be contracted with the CROMAC for the purpose of financing demining operations. Up until now, the EU has financed mine action, particularly humanitarian demining, through different programs in the amount of over €74 million out of which nearly €28 million from the pre-accession programs for Croatia.

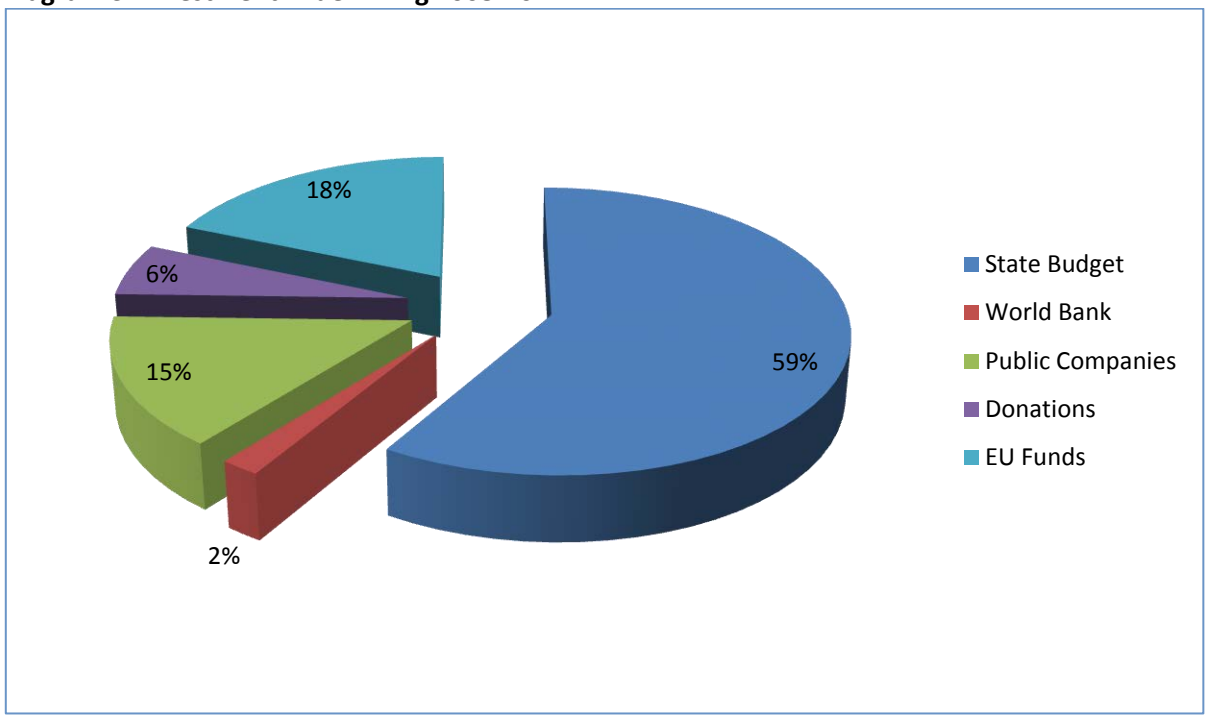
The joint project of the Government Office for Mine Action, Croatian Mine Action Centre and Croatian Forests entitled ''Mine Clearance, Regeneration and Protection of Forests and Forest Land in Protected Areas and Natura 2000 Sitesd in the Danube-Drava Region - NATURAVITA'' is in the final phase of preparation and it is expected that demining activities will start in 2018. The project will cover HA in the Osječko-baranjska County, on the territory of the Nature Park Kopački rit and forest area along the river Drava. The project is worth €49.9 million in total out of which €25 million refers to demining.

As was presented before, through information and data (diagrams and tables), the National Mine Action Programme has been realised halfly of what was initially planned. The main cause of such situation were insufficient demining funds. With currently available capacities, Croatia is capable of demining 50-56 km² of HA per year.

Resources made available to achieve progress made up to date

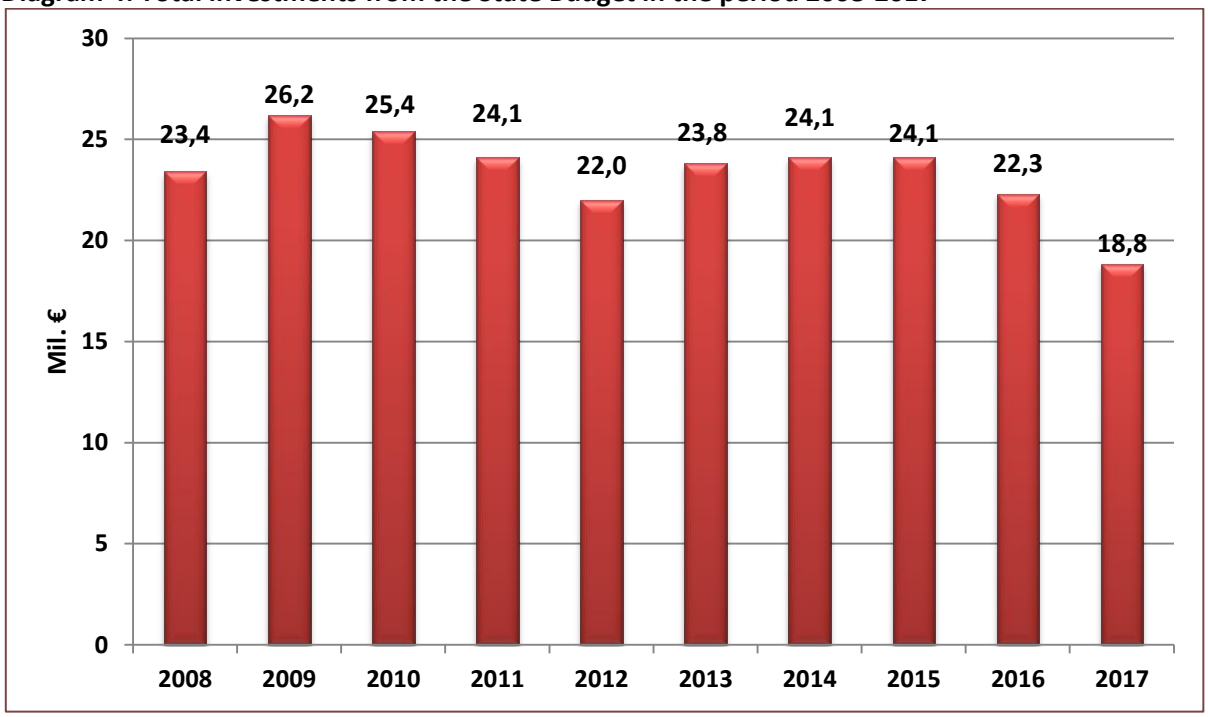
Financing of mine action in Croatia has been derived from the following sources: the State Budget, the World Bank loans, public companies and other legal entities, international and domestic donors and in the last few years, continuously since 2012, significant financial resources are withdrawn from the EU funds. Regarding Croatia's accession to the EU in 2013, it should be noted that the European Commission (EC) at the very beginning did not recognize mine clearance as the issue that could be financed through the EU funds but after Croatia in 2014 presented arguments set out in the GOMA's document "Concept Note – Mine Action and Integrated Development in the Republic of Croatia", the EC gave its support and approval for mine action (humanitarian demining) to be accepted as a pre-condition for economic and social development of the Republic of Croatia and as such included in the Operational Programs (the Competitiveness and Cohesion Program and Program for Agriculture and Rural Development of the Republic of Croatia).

Diagram 3: Investment in demining 2008-2017



The Republic of Croatia's State Budget has been the most important source of financing of demining in Croatia. In period 2008-2017, State Budget funds for demining have totalled €234 million.

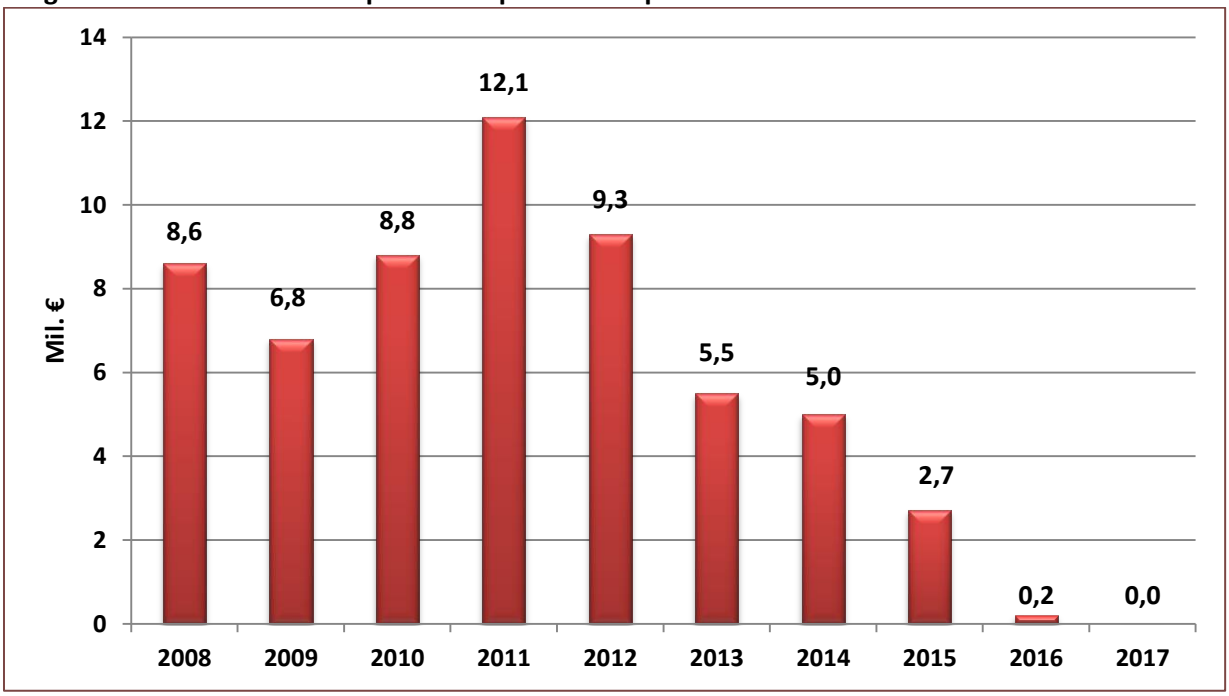
Diagram 4: Total investments from the State Budget in the period 2008-2017



The 2009 was the year with the largest contribution of the State Budget according to the CROMAC`s plan as stipulated in the National Mine Action Strategy and also direct transfer of the funds Croatian Government had obligation to insure as the contribution of the Republic of Croatia in the World Bank Loans in years 2008, 2009 and smaller amount in 2010. In the years to come, the CROMAC is planning to start with significant withdrawal of funds from the EU pre-association funds.

Also, one of the most important sources of funding were public companies and private investors who financed demining of their own infrastructure. Public companies and private investors have so far invested €122.3 million for demining in the period 1998-2017, mostly during the period 2008-2012. Until 2012 most of the public companies/investors have resolved the problem of demining of their own infrastructure and their investments have subsequently declined.

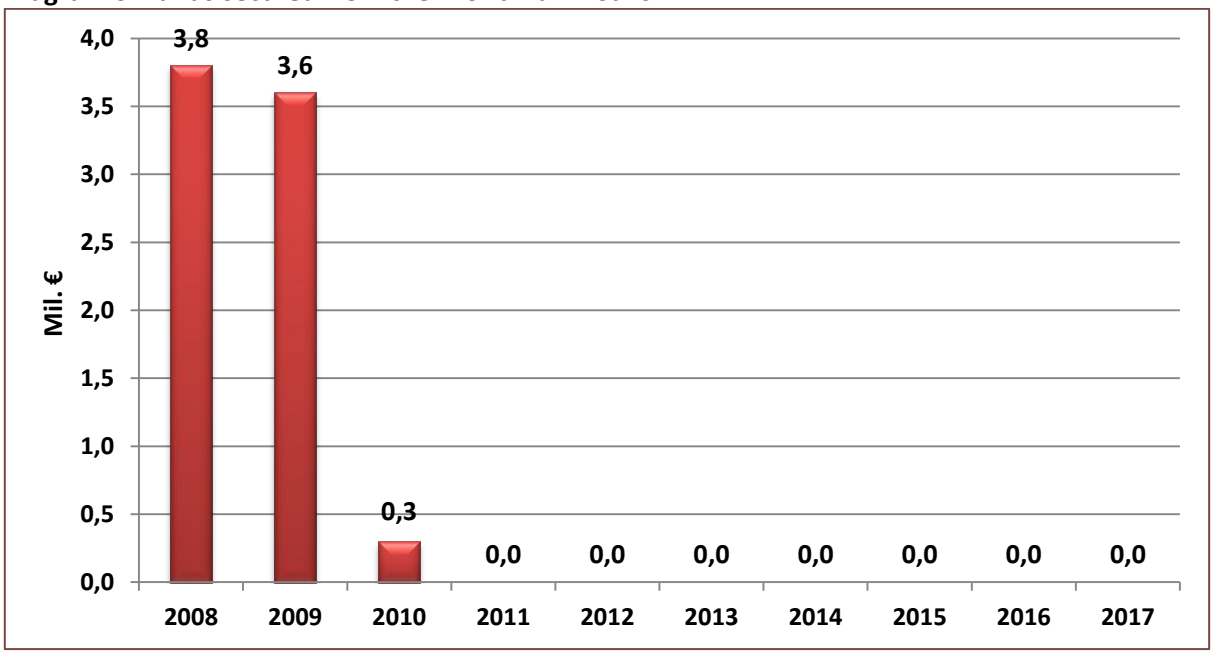
Diagram 5: Investments from public and private companies



The significant investment from the public and private companies started in 2002 with the beginning of the large infrastructural projects such as the construction of the highway Zagreb-Split, reconstruction of the Lika railway etc.
In the following years the biggest investor is "Croatian Forests" company that will, because of the fact that the largest HA is in the forest area, continue to invest in demining until the end of the demining programme in Croatia.
On 4th December 1996, the Agreement on the Loan for the Emergency Transport and Demining Project was signed between the Republic of Croatia and the International Bank for Reconstruction and Development (IBRD). Of the total €65 million, €15.5 million was allocated for demining operations. The loan was approved by the Croatian Parliament on 7th February 1997. In addition, a new loan for Reconstruction of the Eastern Slavonia, Baranja and Western Srijem was approved on 1st June 1999. The implementing agency was the public company "Croatian Waters" and a part of the loan ($ 10 million) was intended for demining of canals and dikes in the Eastern Croatia.

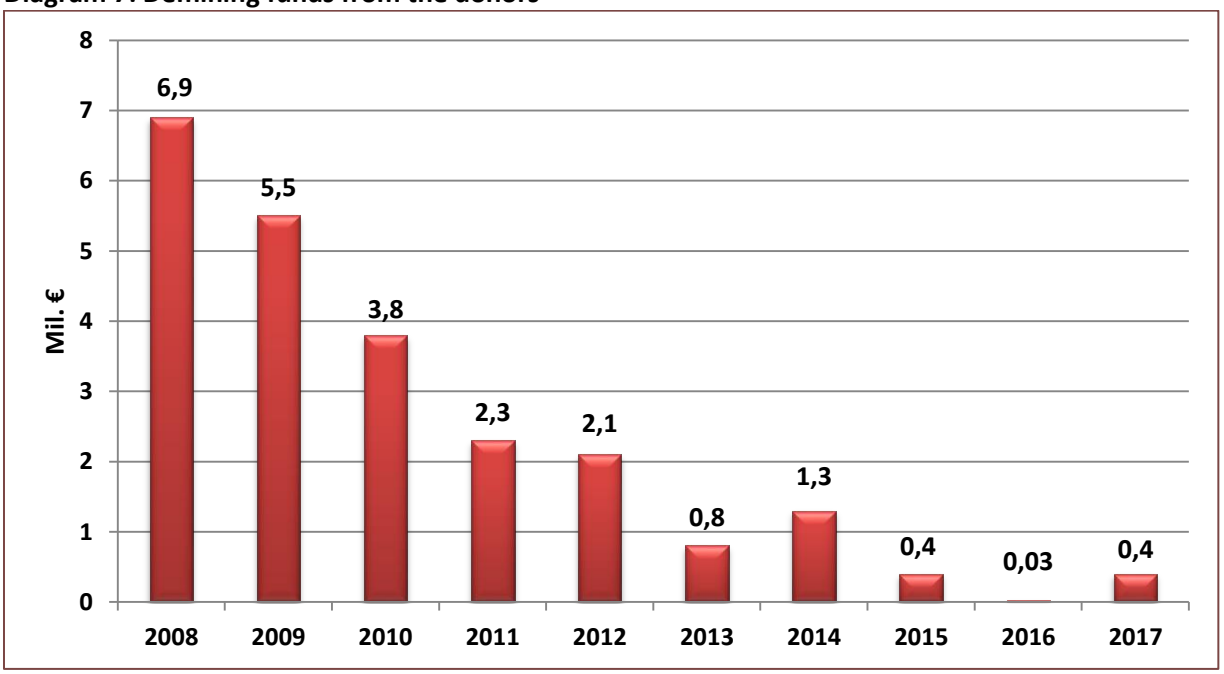
In total, €27.8 million in World Bank financing was received in the period 1998-2003. In May 2005, the loan for the Project of Socio-economic Recovery of the Area of Special State Concern was signed. The part for the demining totalled €7.5 million. Demining financed from the World Bank loan finished in 2010.

Diagram 6: Funds secured from the World Bank loans



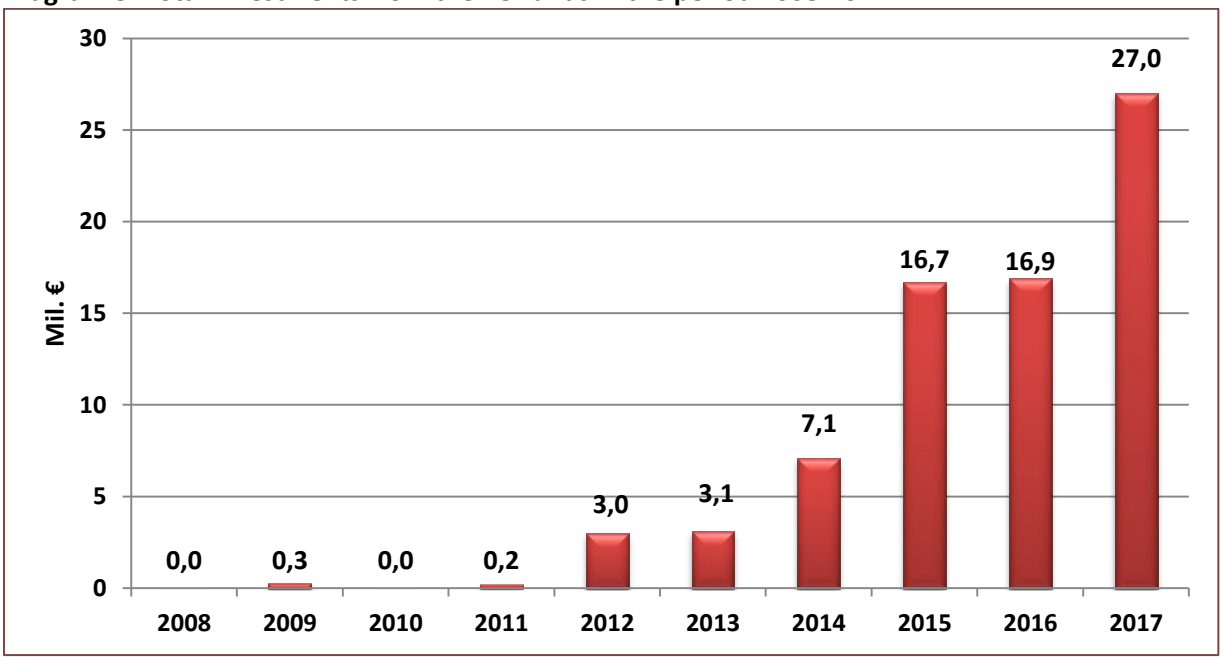
Donor funding was important source for demining in Croatia. In the period 1998-2017, €79.4 million have been obtained from donors, primarily from foreign governments but also from Croatian non-governmental sources. Donation decrease occurred due to the global economic crisis, new critical points, natural and humanitarian disasters and, after 2013, because of Croatia's accession to the EU.

Diagram 7: Demining funds from the donors



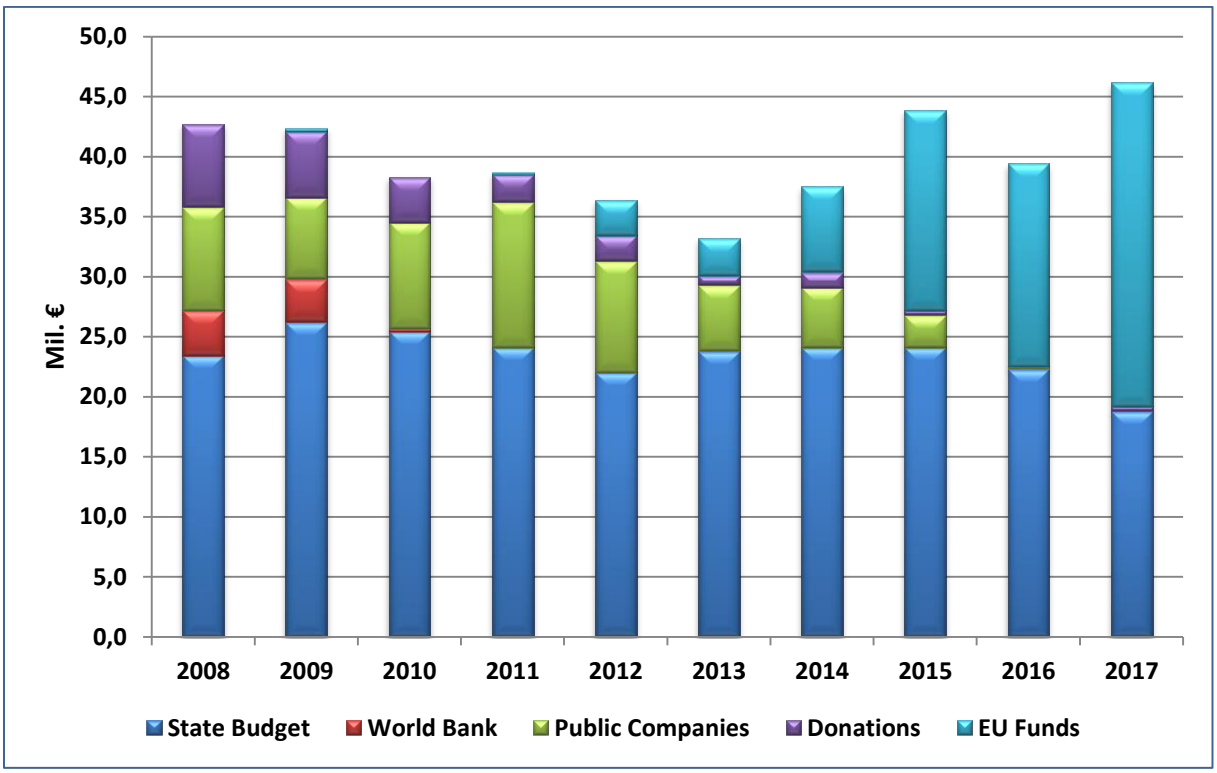
The EU funds are currently the most significant source of funding for demining in Croatia.
Also, from the European Agricultural Fund for Rural Development, the CROMAC contracted demining of 48.6 km² of agricultural area worth €46.5million.

Diagram 8: Total investments from the EU funds in the period 2008-2017



In total, €727.3 million have been invested in demining in Croatia since 1998. As it can be seen in Diagram 9 below, a majority of the funds invested in demining came from the Croatian State Budget and in past few years from the EU funds, from which fundings have steadily increased over time.

Diagram 9: Investments in demining in Croatia 1998–2017

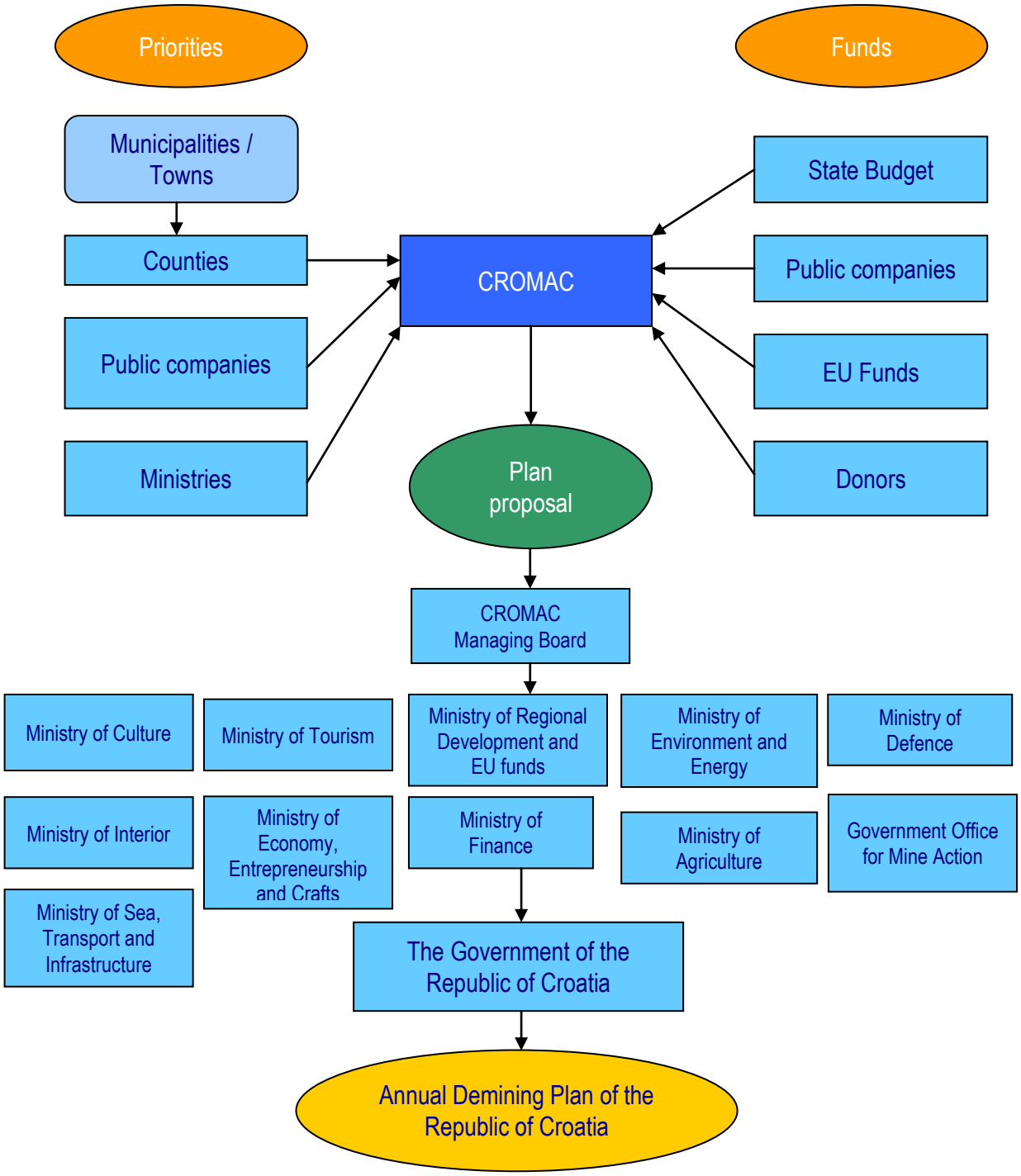


National demining structures

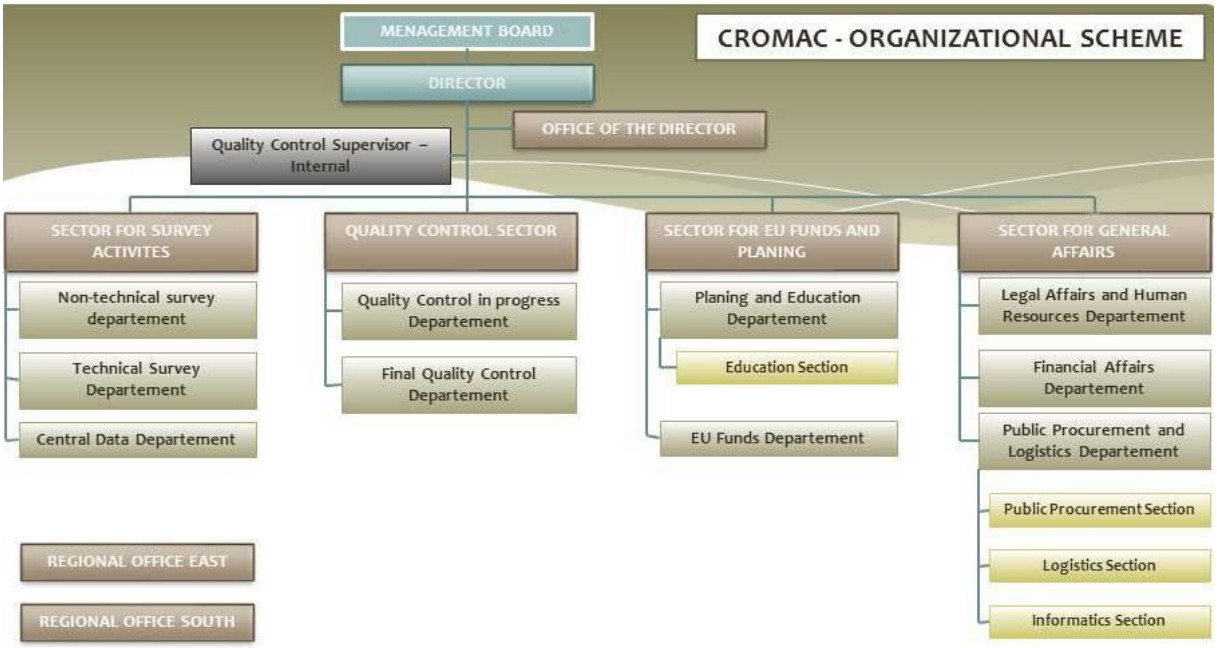
Planning of mine action in the Republic of Croatia is conducted according to:

- Law on Mine Action (National Gazette no. 110/15), came into force in October 2015;
- Book of Rules and Regulations on the Method of Conducting Humanitarian Demining Operations 2016 (National Gazette no. 45-13) came into force in May 2016);
- Book of Rules and Regulations on Personal Supervisory Booklet, Humanitarian Demining Identification Card and Keeping the Register 2016 (National Gazette no. 57), came into force in June 2016);
- State Budget Act (National Gazette no. 87/08, 136/12, 15/15);
- Act on State Budget Execution (passed every year); and
- Other sub-acts stipulating conducting humanitarian demining and financing of the same.

Scheme 1: The scheme of demining operations planning in the Republic of Croatia



Scheme 2: Organizational scheme of the Croatian Mine Action Centre



Demining during the war period was carried out by the Croatian Army engineers and the Civilian Protection branch of the Ministry of Interior. In December 1995, the United Nations Protection Forces (UNPROFOR) Command established a mine action centre with the aim of supporting UNPROFOR operations but it was not authorised to establish a humanitarian demining program. This organization was soon dissolved. The United Nations Department for Humanitarian Affairs (DHA) took over responsibility for the mine action centre (UNMAC) from the UN Department for Peace Keeping Operations (DPKO) in June 1996. The UNMAC headquarters were located in Zagreb, with international staff filling the positions of a Programme Manager, Quality Assurance Officer, and Regional Officers in Vukovar, Knin, Karlovac and Daruvar, supported by seven national staff members. The role of the UNMAC was to co-ordinate international assistance to the Croatian mine clearance programme and to provide specialist advice and assistance in order to develop Croatia's mine clearance capacity and an effective mine awareness training programme. In addition, UNMAC was to support the operations of UN agencies, international development organisations and non-governmental organisations.

In the summer of 1995, first contacts were established with international financial institutions and with representatives of different international humanitarian organizations, including with the IBRD (World Bank). As a result of these contacts with the World Bank, in March 1996 the Croatian Parliament passed the Law on Humanitarian Demining. The Law stipulated that the Ministry of Interior would implement a Demining Plan, with demining to be carried out by a commercial company established by the Croatian Government. In accordance with the law, quality assurance (QA) would be carried out only by persons authorized by the Ministry of Interior. On June 1st 1996 the Croatian Government established the commercial company – AKD MUNGOS - to carry out demining in Croatia. It was planned that the company would employ around 2000 deminers, primarily former Croatian Army soldiers.

On the basis of the Law on Demining, the Ministry of Interior passed regulations regarding the: carrying out of demining activities; criteria establishing mental, physical and medical capability of deminers; training courses and exams for deminers; testing deminers' knowledge and abilities; and, licensing of deminers and the identification of QA officers. On December 19th 1996 the Croatian Government established the Committee for demining issues as an advisory body whose basic task was to harmonise, manage and improve the demining system.

In February 1998, the Croatian Government passed a decree on establishing the Croatian Mine Action Centre (CROMAC) responsible for managing all mine action operations in Croatia. The need for UN assistance was however reaffirmed, and the UN Mine Action Service (UNMAS) of the DPKO designated UNOPS as the executing agency by signing a Memorandum of Agreement for the provision of management services in respect to the project "Support to the Mine Action in Croatia". On 1st January 1999, in recognition of the existence of a functioning CROMAC, the UN program changed its name to the UN Mine Action Assistance Programme (UNMAAP) and continued to work with the CROMAC to build up its capacity. Later in 1999, a memorandum of understanding was signed between the Croatian Government and the DPKO outlining the intention of the UN to transfer the responsibility for the project to the United Nations Development Programme (UNDP) during the course of 2000. On July 22nd 2000 UNMAAP was officially transferred to the UNDP and a project document was signed between the Croatian Government and the UNDP. The UNOPS was kept as an executing agency for this UNDP Project. Since 2003, this program operates independently without the help of the UNDP.

From the outset, the UN and the CROMAC worked together to develop a functioning operational body. The programme was successful in fostering a close relationship with the CROMAC and in providing important technical advice with regard to developing the CROMAC's capacity to undertake technical surveys and quality assurance. In addition, the project enabled the launch of mine risk education activities in 1999, later adopted and further elaborated by the CROMAC. Finally, the project was able to mobilize resources for many mine clearance projects.

The establishment of the CROMAC in 1998 marked the beginning of a systematic and integrated approach to mine problem.
CROMAC tasks, according to the Law on Mine Action, are as follows:
- collecting and processing data on areas and buildings suspected of being contaminated with mines, ERW and their parts;
- keeping records of area and/or building clearance, of HA and found and destroyed mines, ERW and their parts;
- marking areas and/or buildings suspected of mine contamination;
- non-technical survey – analysis and supplementary non-technical survey of HA;
- drafting the Basic Demining Plan and Implementation Plan for the technical survey;
- perform quality control for clearance at the worksite;
- issuing the Certificate on the exclusion of a demined area and/or building from HA.

CROMAC also performs the following activities:
- technical survey of suspected hazardous areas and/or buildings by applying approved methods;
- provides expert assistance and necessary data to authorized bodies about the dangers of mines, ERW and their parts;
- conducts education and information of the general population about the dangers of mines, ERW and their parts and takes measures for the protection and rescue of residents in cooperation with the National Protection and Rescue Directorate;
- cooperates with international subjects in humanitarian demining.

The Croatian Mine Action Centre is liable to the Government of the Republic of Croatia through the Managing Board (former CROMAC Council) whose members are representatives of the relevant ministries and other stakeholders and as such are appointed by the Government. The CROMAC Managing Board thus acts as a mediator between the Government of the Republic of Croatia and ministries dealing with mine problem as part of their scope of activities and the CROMAC.

In the Republic of Croatia, planning is conducted according to the *National Mine Action Strategy 2009-2019* (hereinafter: the Strategy). The Strategy is drafted by the CROMAC with the agreement of the Ministry of Interior, the Ministry of Defence, the Ministry of Finance, the Ministry of the Sea, Transport and Infrastructure, the Ministry of Regional Development and EU funds, the Ministry of Culture, the Ministry of Environment and Energy, the Ministry of Tourism, the Ministry of Economy, Entrepreneurship and Crafts and the Ministry of Agriculture, the GOMA, the National Protection and Rescue Directorate and local administration and self-administration bodies with hazardous areas. The Strategy was adopted by the Croatian Parliament.

Based on the approved funding, the CROMAC drafts a proposal of the Mine Action Plan (hereinafter: the Plan) for a one-year period and submits the Plan to the responsible ministries, the GOMA and other state bodies for comments and approval.

Funds for implementing the Plan are earmarked in the State Budget of the Republic of Croatia and other sources.

Based on the comments and inputs of relevant institutions, the CROMAC submits a proposal of the Plan to the Government of the Republic of Croatia. The proposal of the Plan for the upcoming one-year period contains information about:

- planned activities for mine action for the upcoming one-year period;
- areas and/or buildings for which the CROMAC drafts the basic demining plans and the implementation plans for the technical survey for the upcoming one-year period;
- areas and/or buildings for which the CROMAC plans to conduct non-technical survey-analysis of HA and supplementary non-technical survey for the upcoming one-year period;
- name, size (surface area), type of activities (demining, technical survey) and the estimated value of the area and/or building;
- information on the overall status of HA;
- deadlines within which the Plan will be implemented;
- the order of demining and other mine action activities in quarterly, semi-annual and annual periods;
- the necessary funding for implementing the Plan.

The Government of the Republic of Croatia adopts the Plan for annual period. The Annual Plan is adopted no later than the end of February of the year in which the Plan is implemented. Special part of the Plan is the Plan of the Ministry of Defence for clearance of military properties and properties planned for conversion as well as the planned funding for their clearance. The Ministry of Defence submits the demining plan of military properties to the CROMAC no later than the end of November for the following year.

The CROMAC contractually assigns authorized legal entities and/or tradesmen for demining, mechanical surface preparation and surface inspection using mine detection dogs in accordance with regulations governing public procurement procedures.

Activities that are assigned must be determined by the Plan. In exceptional circumstances, activities that are not determined by the Plan can be assigned when they are justified by urgent reasons of

public safety, protection of health, life, the environment and property, when there is a donor or investor for the construction of infrastructure or economic development, and when funds allow for expansion of the Plan.

The CROMAC is obliged to notify the Ministry of Interior and the GOMA regarding these *exceptional* activities and activities that are assigned in the negotiation procedure without prior notice.

The CROMAC ensures implementation of the Plan and drafts an annual Report on the Realisation of the Annual Mine Action Plan, which is submitted to the CROMAC Managing Board, relevant ministries, the GOMA and other state bodies following the same procedure as for preparation of annual plan. Upon receiving their approval, the Government of the Republic of Croatia adopts the Report and submits it to the Croatian Parliament for adoption.

Out of 21 counties, 8 counties are affected by mine problem i.e. 59 towns and municipalities inhabitedby 11.3% of the total population of the Republic of Croatia. Total mine suspected area of the Republic of Croatia at the beginning of the 2018 comes to 411.5 km^2. Starting point for planning are towns and municipalities as basic organizational units of the county.

Towns and municipalities with the mine problem are divided into polygons that make logical geographical entireties in order to ease planning of tasks. According to proposed polygons of the municipality or town, counties make the list of priorities per municipalities and polygons. The Plan also defines the time schedule of activities. Considering geographical and climatological conditions, demining operations in the Republic of Croatia are conducted during the entire year. In the continental part of the country, operations are conducted in spring, summer and autumn. In the south, operations are conducted during late autumn, winter and spring.

The 1996 the Law on Demining introduced the market model to demining in Croatia rendering the establishment of closed commercial companies for conducting demining operations possible as a precondition for the realization of the World Bank loan and opening of the market to foreign companies. By the end of 1998, 4 legal entities were accredited for conducting humanitarian demining, by the end of 1999 there were 12 entities accredited. In 2000, there were 13 accredited entities, in 2001, 23 entities, in 2002 the number increased to 39, in 2003 to 48.

On 1st January 2018, 40 legal entities are accredited for conducting demining operations out of which all 40 are commercial companies and there are no non-governmental organizations/operators (like Norwegian People's Aid - NPA) in Croatia any more. These legal entities, accredited for conducting demining operations, are currently conducting mine search and demining operations and they employ over 676 deminers who dispose 99 mine detection dogs, 45 demining machines and over 700 metal detectors.

Methods used to release areas known or suspected to contain anti-personnel mines

Following methods were used to release areas known or suspected to contain anti-personnel mines:

Non-technical survey – analysis of HA defines the areas and/or buildings contaminated with mines, ERW and their parts, and is performed by the CROMAC.

Non-technical survey – analysis of HA, the CROMAC must gather and verify information in the field, analyse and update previously gathered information on HA stored in CROMAC's mine-information system, analyse documentation and records created during the war and post-war activities, analyse

records created during the technical survey and demining activities, based on which information indicating suspicious areas contaminated with mines, ERW and their parts is gathered.

The CROMAC, while performing the non-technical survey – analysis of HA, is required to:
- establish SHA boundaries;
- establish the spatial size of HA;
- implement reconstruction of the mine obstacles;
- assess the type and number of mines, ERW and their parts;
- implement categorization of areas within HA in the areas for technical survey or demining;
- mark HA with warning signs for mines, ERW and their parts.

Technical survey is a procedure in which the CROMAC deminers independently or with authorized legal entities and tradesmen, in accordance with the Law on Mine Action, based on the Implementation Plan of the technical survey and the use of a prescribed method, enter into HA, determine the accuracy of the collected information from the general survey – analysis HA regarding the area's features and determine the contamination of an area and/or building with mines, ERW and their parts.
If the technical survey determines contamination with mines, ERW and their parts of areas and/or buildings determined by the Implementation Plan of the technical survey, the CROMAC will draft the Basic Demining Plan for those areas and/or buildings.
If the technical survey determines the absence of contamination with mines, ERW and their parts of areas and/or buildings determined by the Implementation Plan of the technical survey, the CROMAC reduces such an area and/or building from HA.
While conducting the technical survey, the CROMAC worksite manager is required to record the found mines, ERW and their parts in the CROMAC worksite manager's log.
After conducting technical survey, authorized legal entities and/or tradesmen provide the CROMAC with the Statement of the performed activities and the particular method used in the technical survey, which guarantees that the activities were performed in accordance with the Implementation Plan of the technical survey.
After the technical survey, in the event of an area and/or building being reduced from HA, the CROMAC director shall issue a Certificate of the exclusion of an area and/or building from HA.

Using methods of Non-technical and Technical Survey in the period 1998-2018, HA in Croatia was cancelled and reduced for more than 857 km^2.

Demining - the procedure of finding and marking, as well as incapacitating and destroying mines and ERW at the worksite.

The tasks of mine clearance were performed using the following methods:
- Manual mine detection;
- Clearance by demining machines;
- Mine detection dogs;
- and combination of above mentioned methods according to the Law on Mine Action.

By using all methods (demining and survey), approx. 1.424 square kilometres of hazardous area was cleared, cancelled and reduced in the period 1998-2018 in the Republic of Croatia.

Methods and standards of quality control and quality assurance

The CROMAC performs quality control operations prescribed by the Law on Mine Action through the Quality Control Department. Quality control procedure did not exist until the establishment of the

CROMAC. It is important to emphasize that the entire legislation on demining from 1996 until today do not allow the use of demined surface area without quality assurance and quality control over executed demining activities and without certificate of clearance completion issued.

Quality control during demining activities is performed by the CROMAC deminers for quality control and quality control supervisors (according to the Law on Mine Action from 2015). Quality control is conducted in two phases:

- quality control during demining operations, and
- final quality control, when the company has reported completion of demining operations.

During demining operations deminers and supervisors are required to perform quality control on each worksite, no later than 3 working days from the last conducted quality control, by using control samples to search at least 5 % of the total demined surface area from the previous working days, for each polygon of the worksite and for each demining group.

The final quality control of conducted demining activities is carried out by the Commission for final quality control by using control samples to at least 1 % of the total demined surface area for each unit of the worksite. The Commission consists of two CROMAC representatives, of which one is the President of the Commission, and a Ministry of Interior's inspector as the third member.

Based on the signed Record on the final quality control, the President of the Commission proposes the following to the CROMAC director:

- issuing a Certificate of exclusion of an area and/or building from HA if it is determined that the prescribed quality of activities is achieved or
- repeating activities on the surface in accordance with the determined situation from the Commission's Record on the final quality assurance.

Depending on the results of the final quality assurance, the CROMAC shall issue a Certificate of the exclusion of an area and/or building from HA or it shall order to repeat demining on the part of the worksite for which the Commission finds not to be carried out in accordance with the provisions of the Law on Mine Action and bylaws.

The Ministry of Interior does not only participate in the implementation of the final quality control, but conforms to the Law, carries out administrative oversight over the implementation of the Law on Mine Action and inspection supervision over demining companies and the CROMAC.

The process of quality control and final quality control is clearly defined by the Law on Mine Action and conducted by CROMAC.

The existing Law on Mine Action has considerably changed the method of conduting Quality Assurance and Quality Control operations when compared to the 1996 Law on Humanitarian Demining. Quality Control is conducted by CROMAC and Quality Assurance operations are performed by the Ministry of Interior.
Quality Control has also been arranged quite differently from the previous institute of Supervision (e.g. CROMAC QC Officers must control a minimum of 5 % of the demined area using the sampling method every three days at least) which has considerably increased the surface area which is the subject of quality control, in comparison with the 1996 Law on Humanitarian Demining.

The final quality control of conducted demining activities is carried out by the Commission for final quality control by using control samples to at least 1 % of the total demined surface area for each unit of the worksite.

This is one of the reasons why Croatia is submitting this request because, due to the increase in the areas where quality control is needed, it was necessary to reorganize the CROMAC's work, which had negative impacts on the implementation of the plans.

7. Efforts undertaken to ensure the effective exclusion of civilians from mined areas

Article 5, paragraph 2 of the Convention requires each State Party to "ensure as soon as possible that all anti-personnel mines in mined areas under its jurisdiction or control are perimeter-marked, monitored and protected by fencing or other means, to ensure the effective exclusion of civilians, until all anti-personnel mines contained therein have been destroyed."

Mine contamination in the Republic of Croatia causes economical and social hindrances in the communities, especially along the former confrontation zones. These areas were the first priorities for demining, and consist of waste agricultural areas, infrastructure networks, forests, river banks. These areas are not only important for their economic significance, but their clearance enabled freedom of movement to the most endangered population groups: farmers, herders, hunters, fishermen, public companies employees, and children.

Taking into consideration that humanitarian demining is a time consuming process, it is important to focus on the constant risk that threatens the population living in the mine/ERW contaminated areas. Learning how to live and work as well as how to alleviate the suffering caused by mines is a process that goes along with demining activities.

The activites to mitigate the threat of mines/ERW consist of:

1) Marking of HA
2) Mine/ERW risk education programs
3) An integrated approach to the mine problem
4) Promotional activities
5) Media campaign
6) Mine victims assistance

As the fulfilment of the obligation to destroy or ensure the destruction of all anti-personnel mines in mined areas will take a considerable amount of time, through systematic marking activity of HA, intensively conducted since 2000, the CROMAC and other relevant stakeholders also provide significant support to MRE efforts, its goals and purpose.

On December 31st 2017 all HA is marked with warning signs and the CROMAC continuously works to maintain such marking situation.

Table 4: Marking of HA

COUNTY	Number of mine warning signs per year									
	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.
Bjelovarsko-bilogorska		0	0	0	0	0	0	0	0	0
Brodsko-posavska		352	422	433	387	347	325	294	116	32
Dubrovačko-neretvanska		118	122	102	78	77	0	0	0	0
Karlovačka		925	1.075	1.073	1.061	787	967	1.163	1.186	1.019
Ličko-senjska		1.381	1.718	1.908	1.870	1.851	1.862	2.182	2.442	2.629
Osječko-baranjska		4.769	4.233	3.958	3.027	2.820	2.195	2.848	3.123	3.008
Požeško-slavonska		731	712	757	659	565	576	679	919	871
Splitsko-dalmatinska		236	234	231	219	195	179	209	252	419
Sisačko-moslavačka		2.483	2.366	2.773	2.605	2.700	3.255	3.664	3.757	3.610
Šibensko-kninska		907	1.107	1.198	1.108	996	897	930	1.010	909
Virovitičko-podravska		200	194	194	121	114	0	0	0	0
Vukovarsko-srijemska		2.333	1.772	1.416	1.141	870	576	0	0	0
Zadarska		1.592	1.711	1.818	1.624	1.530	1.239	1.305	1.283	1.066
Zagrebačka		0	0	0	0	0	0	0	0	0
TOTAL	**14.986***	**16.027**	**15.666**	**15.861**	**13.900**	**12.852**	**12.071**	**13.274**	**14.088**	**13.563**

*In 2008 CROMAC did not keep records of marking signs by counties

In addition, MRE efforts have been undertaken going back before entry into force of the Convention. Mine risk education until 1999 was conducted by the Croatian Red Cross (CRC) and the International Committee of the Red Cross (ICRC), and from 1998 by the CROMAC, the Ministry of Interior, the Ministry of Science, Education and Sports and non-governmental organizations such as the Croatian Mine Victims Association (CMVA), Association ''Mine Aid'', the Coordination of Associations of Croatian Civilian Victims of the Homeland War, Norwegian People's Aid, MINES Association, RECOBOT, Trust Fund ''Croatia without Mines'', Association ''Croatia Helps'', Association of Mine Victims of the Karlovac County, SOROPTIMIST, "DASKA" Theatre and "BEMBO and Friends". **It is estimated that approx. 1,000,000 persons have undergone some form of MRE since 1999.**

An integrated approach to the mine problem attempts to facilitate coordinated and joint action in order to systematically solve the mine problem. Activities like advocacy for the APMBC goals; demining, mine victims assistance and mine risk education are complementary parts of an integrated approach to the mine problem. The Croatian model of coordination of all subjects involved in resolving the mine problem is the one used by the GOMA and the CROMAC to implement the APMBC commitments with more speed and efficiency through the coordination of all mine action activities, as well as to reduce the risk which prevents normal and safe living of the population.

Local community involvement in resolving the mine problem ensures better and context-adapted MRE programs, precise definition of target groups, tailor-made programs. This demands maximum media support which means reporting and creating programmes for the informative and educational channel. As it can be seen, special attention is given to public relations and the role of media in mine action.

A variety of MRE activities, such as marking of HA, possibility of getting an insight into mine situation through submission of HA maps and CDs as well as using the CROMAC web portal have a positive effect on the prevention of mine incidents, but also require additional activities of informing the public and media with mine action aspects.

The CROMAC coordinated all MRE programs until the end of 2015 (according to the Law on Mine Action, coordination of MRE activities is now conducted by the GOMA), encouraged interested NGOs to develop their own MRE programs and tried to involve as many organizations as possible in active participation in mine action.Through continuous lectures and presentations, citizens were educated, with majority of them being kindergarten and elementary school children. Special education was given to the members of hunting associations, the Croatian Mountain Rescue Service, hikers, farmers and tourists. Education was provided in the Capital of Zagreb and 14 other counties.

The largest number of activities related to the education about dangers of mines and ERW were done in cooperation with the Ministry of Interior and the relevant police departments through the "Less arms, less tragedy"[7] campaign. The cooperation was also achieved with: Croatian Hunting Federation, Croatian Red Cross, “Lions club” Beli Manastir, Disability Volleyball Club Zagreb, county, city and municipal governments and other non-governmental organizations and associations. All actions and activities in mine action in Croatia and worldwide are duly presented on the web pages of the CROMAC and the GOMA.

Since 1998, but especially after 2008, the number of mine/ERW victims has been significantly reduced thanks to MRE programs and projects, promotional activities, media follow-up of the mine problem, marking of HA and demining activities that have been conducted (Diagram 3).

In 2017, there were NO MINE VICTIMS.

8. Nature and extent of the remaining Article 5 challenge: quantitative aspects

On the basis of technical and non-technical survey operations and demining, untilDecember 31st 2017 it was possible to define with great precision that the total of 411.5km² of area in the Republic of Croatia (i.e., 0.73% of the entire land territory of Croatia) is or may be dangerous due to mines/ERW.

The Ministry of Defence reported that the size of the mined area under their jurisdiction is 32 km^2 and covers military barracks, training grounds, technical warehouses, radar stations and air fields.

Eight counties continue to contain areas which are potentially dangerous with 59 towns or municipalities (i.e., 10.6% of all towns and municipalities in Croatia) and over 485.537 individuals (i.e., 11.3% population of Croatia) live in towns or municipalities still affected by the presence or suspected presence of mines.

Based on the analysis of all information and mine contamination data available, executed analytic estimates and technical and non-technical Survey of the entire area of towns and municipalities contaminated with explosive ordnance (EO) carried out, the following was defined:

- Size and distribution of HA per municipalities, towns and counties;
- Data on minefields placed;
- Structure of HA according to intended use of stated areas.

[7] According to the UNDP’s assessment, this campaign is the most successful UN-initiated campaign of its kind.

See Table 5 for an overview of the remaining challenge per county in terms of total remaining HA.

Table 5: HA size and distribution per counties

COUNTY	County area - km²	County HA	County HAin relation to the HAof the entire state %	County HAin relation to the county area %
Karlovačka	3.622	49,8	0,1	1,4
Ličko-senjska	5.351	138,2	0,2	2,6
Osječko-baranjska	4.152	55,7	0,1	1,3
Požeško-slavonska	1.821	24,0	0,0	1,3
Splitsko-dalmatinska	4.572	20,1	0,0	0,4
Sisačko-moslavačka	4.463	70,6	0,1	1,6
Šibensko-kninska	2.994	22,2	0,0	0,7
Zadarska	3.642	30,9	0,1	0,8
TOTAL	**32.651**	**411,5**	**0,7**	**1,3**

According to the size of HA of the counties, Ličko-senjska, Sisačko-moslavačka, Osječko-baranjska and Karlovačka County, are classified as the most mine contaminated counties.

Comparing the relation between the county size and the size of its HA, the most mine contaminated counties are: Ličko-senjska, Sisačko-moslavačka and Karlovačka County.

See Table 6 for an overview of the remaining minefield records per county.

Table 6: Mine situation according to the types of minefields placed

County	Minefield record no.	Number of mines		
		AP mines	AT mines	Total
Karlovačka	114	1.546	42	1.588
Ličko-Senjska	534	11.390	1.663	13.053
Osječko-Baranjska	164	1.643	4.362	6.005
Požeško-slavonska	199	923	40	963
Splitsko-dalmatinska	67	1.182	0	1.182
Sisačko-moslavačka	377	12.741	75	12.816
Šibensko-kninska	82	1.929	10	1.939
Zadarska	138	1.476	249	1.725
TOTAL	**1.675**	**32.830**	**6.441**	**39.271**

Total number of minefield records in mine affected counties is 1,675. This equals a reduction in the number of minefield records for 5,572 from the total number in 2007.

Taking into consideration the demining activities carried out in the previous period, 1,675 minefields with 39,271 mines out of which 6,441 anti-tank and 32,830 anti-personnel mines have been registered so far in the mine-information system of the CROMAC.

The biggest number of mines is registered in Ličko-senjska County (13,053), Sisačko-moslavačka County (12,816) and Osječko-baranjska County (6,005).

Almost 65.9% of mines (25,869) out of the total number of mines are placed in Ličko-senjska and Sisačko-moslavačka County.

The biggest number of anti-tank mines is registered in Osječko-baranjska County (4,362) and Ličko-senjska County (1,663) what makes 93.5% of the total number of anti-tank mines.

The biggest number of anti-personnel mines is placed in Sisačko-moslavačka County (12,741) and Ličko-senjska County (11,390), what makes 73.5% of the total number of anti-personnel mines placed.

Besides the above-mentioned types and number of minefields placed, mine situation is also characterized by the following facts:

- In most cases, minefields are not placed according to adopted military systems of minefield placing and international standards (standards for marking, maintenance and keeping minefield records);
- Frequent relocation of minefields as well as their non-registered multiple supplementation, construction of false minefields etc.;
- Existence of a certain number of minefields for which there are no minefield records;
- Areas under mines overgrown for a long time;
- Dispersal of UXO on wider areas of the battle area and zone of separation of forces whose removal and destruction requires additional procedures and considerable financial means;
- Dispersal of UXO on a large number of micro locations as a consequence of explosions of military storages or leaving them during the retreat or abandoning the positions.

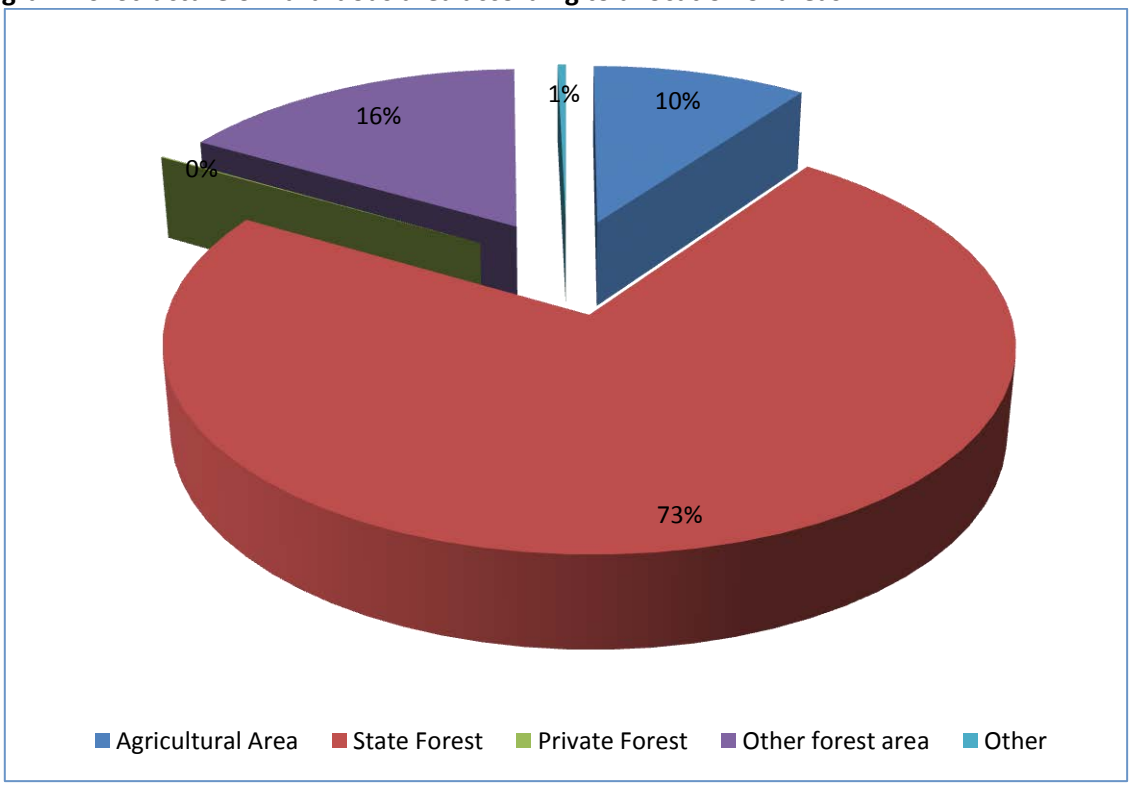
9. Nature and extent of the remaining Article 5 challenge: qualitative aspects

As a result of the systematic Technical and Non-technical Survey activities the CROMAC was able to present the structure of HA according to intended use of stated areas. This information was very useful from the aspect of setting priorities and determining actual size of the mine impact on the safety of people and socio-economic implications of mine problem and as such serves as the basis for the preparation of the demining plans on the county and state level.

Table 7: Structure of HA according to allocation of areas

COUNTY	TOTAL HA(km²)	Agricultural area	%	Forests								Other	%
				State Forest	%	Private Forest	%	Other forest land	%	TOTAL Forest area	%		
Karlovačka	49,8	0,4	0,8	38,5	77,3	0,0	0,0	10,7	21,5	49,2	98,8	0,1	0,2
Ličko-senjska	138,2	25,9	18,7	85,0	61,5	0,2	0,2	26,4	19,1	111,6	80,8	0,7	0,5
Osječko-baranjska	55,7	2,7	4,8	52,1	93,5	0,0	0,0	0,7	1,3	52,8	94,8	0,3	0,5
Požeško-slavonska	24,0	3,6	15,1	16,4	68,3	0,0	0,0	3,9	16,3	20,3	84,6	0,0	0,1
Splitsko-dalmatinska	20,1	1,0	5,2	18,4	91,5	0,0	0,0	0,6	3,0	19,0	94,5	0,1	0,4
Sisačko-moslavačka	70,6	6,6	9,3	42,3	59,9	0,0	0,1	21,3	30,2	63,6	90,1	0,4	0,6
Šibensko-kninska	22,2	0,5	2,3	19,1	86,0	0,0	0,0	2,6	11,7	21,7	97,7	0,0	0,1
Zadarska	30,9	0,2	0,6	30,1	97,4	0,1	0,3	0,5	1,6	30,7	99,3	0,0	0,0
TOTAL	**411,5**	**40,9**	**9,9**	**301,9**	**73,4**	**0,4**	**0,1**	**66,7**	**16,2**	**369,0**	**89,7**	**1,6**	**0,4**

Diagram 10: Structure of hazardous area according to allocation of areas



Forest areas with 369 km^2 or 89% of the total HA have the largest portion in HA of the Republic of Croatia. Agricultural arable areas cover 40.9 km^2 or 10% of the total HA and other areas with 1.6 km^2 or 1% of the total HA.

Counties with largest portion of forest areas in HA are Ličko-senjska County with 111.6 km^2 or 80.8%, Sisačko-moslavačka County with 63.6 km^2 or 90,1%, Osječko-baranjska County with 52.8 km^2 or 94.8%, and Karlovačka County with 49.4 km² or 98.8%

Counties with the largest portion of agricultural areas in HA are Ličko-senjska County with 25.9 km² or 18.7%, Sisačko-moslavačka County with 6.6 km^2 or 9.3% and Požeško-slavonska County with 3.6 km² or 15.1%.

10. Circumstances that impeded compliance during previous extension period

The main task for the Republic of Croatia between signing of the APMBC and the First extension request for completing the destruction of all known anti-personnel mines in mined areas in accordance with the Article 5, was to demine priority areas and to determine the actual size of mine contamination. On the basis of the collected data and the actual size of mine contamination that equalled with 997 km² at the beginning of 2008, it was estimated that the complete demining of the Republic of Croatia will cost approximately €740.0 million.

In the period 2008–2017, by demining companies and with non-technical and technical survey carried out by the CROMAC, 614.1 km² were released from HA.

Primary reasons for the second extension request:

- In the First request for extension from 2008, it was expected that the Croatian State Budget will continue to finance the majority of humanitarian demining activities, with projection that State funds will increase over time accompanied with other sources increase which did not happen.
- Realization 2008–2017 is almost 43% less than what was initially planned. The main cause of such situation was insufficient demining funds, especially in the period 2010–2014, which have reduced the efficiency and expected results in some of the corresponding years.The reason for this was the global economic crisis which Croatia was also faced with.

Secondary reasons for the second extension request:

- Too ambitious plans regarding the 2008 Request claim: "Significant amount of the forest HA was expected to be resolved through the determination that it is indeed not a "mined area" as defined by the Convention". One of the most important reasons for this is that the capacity for the survey were directed towards the survey of agricultural land (especially in the period 2013-2015), for applying to the European Agricultural Fund for Rural Development (EAFRD) and demining of agricultural area in whole (the plan for 2018 is to clear all remaining agricultural area from mine threat until the end of 2018)
- Difference also appeared in reduction of HA: 281 km² of HA reduced by non-technical or technical survey is missing in comparison to 2008 extension request due to the fact that this area was not declared as "mine free" as defined by the Convention. Non-execution of demining resulted in the inability to conduct systematic technical surveys of forest HA. Reasons for this were insufficient capacities in the CROMAC.
- Parts of forests are for exploitation but larger area is under certain level of the protection. National parks, Parks of Nature or Natura 2000 area[8] confine the efficiency of demining methods. This is especially emphasized for EU funds.
- Insufficient capacities, especially in Quality Control after the new Law on Mine Action enactment in 2015.
- Also, a different form of implementation of the projects funded by the European Structural and Investment Funds (ESI) – CROMAC is no longer Beneficiary of the funds (CROMAC can be Partner, Technical Assistant, etc.).
- Based on new information and documents collected in the period 2008-2017, new areas have been included in HA (surface size 91.3 km²), which is an additional reason for not fulfilling our obligations in time set for completion.

With currently available capacities, the Republic of Croatia is capable of clearing HA (by demining, non-technical and/or technical survey) in the size of 56 km² per year which can be done in the period of next 7 years (until 1st March 2026). Also, apart from continuous funding from the State Budget, in the plast few years funds from the EU have steadily increased and the CROMAC is already in the final phase of conducting new projects which will also be funded from the ESI funds, which in return gives us certainty in the implementation of the goals set by the Second Request.

[8]Natura 2000 is an ecological network consisting of areas important for the conservation of endangered species and habitat types of the European Union.

11. Humanitarian, economic, social and environmental implications of remaining mined areas

A population of 485,537 inhabitants live in HA of the Republic of Croatia, covering the area of 8 counties, ie. 59 towns and municipalities, and is directly exposed to mine threat. That makes 33% of the total population living in counties with HA problem i.e. 11.3% of the total population of the Republic of Croatia.

Table 12: Number of inhabitants in towns and municipalities with HA

COUNTY	No. of towns and municipalities with HA	No. of inhabitants in towns and municipalites with HA	No. of inhabitants of the County	% of inhabitants in towns and municipalities with HA in relation to the total no. of inhabitants of the County
Karlovačka	8	17.691	128.899	13,7
Ličko-senjska	9	39.165	50.927	76,9
Osječko-baranjska	12	167.013	305.032	54,8
Požeško-slavonska	2	14.630	78.034	18,7
Splitsko-dalmatinska	3	30.620	454.798	6,7
Sisačko-moslavačka	10	116.599	172.439	67,6
Šibensko-kninska	7	69.496	109.375	63,5
Zadarska	8	30.323	170.017	17,8
TOTAL	**59**	**485.537**	**1.469.521**	**33,0**

Source: List of inhabitants from 2011.

The above-presented data undoubtedly indicate that a considerable number of inhabitants of the Republic of Croatia are exposed to the danger on a daily basis and at the same time set one of the most important mine action priorities in the upcoming period for the Republic of Croatia.

In the period so far, demining priorities have been the reconstruction of houses, traffic and utility infrastructure, canals, embankments and areas in the close vicinity of settlements. Based on the analysis of HA structure, the remaining HA consists of agricultural areas (9.9%), forest areas (89.7%) and other areas (0.4%) and still represents the biggest problem for the economy ("value lost" from inability of economic exploitation). Total loss because of mined agricultural areas and value of wood wealth that can not be used (because of mines/ERW) is estimated to €13.5 million. Indirect loss is inability of maintaining and renewal of forests.

A significant part of hazardous agricultural area is state-owned and was demined in the last 2.5 years (50.4 km² financed from the EAFRD) and remaining agricultural area (9.9%) is planned to be demined until the end of 2018. Main goal is to improve the agricultural production on state-owned lands (plantations of wine grape, olive trees, fruit trees and other agricultural products) in accordance with the defined EU quotas. The share of agricultural area in the total HA in the affected counties comes to 9.9% i.e. 0.9% of the total agricultural area in the Republic of Croatia.

Most of the remaining hazardousarea is forests (89.7%), mostly in state ownership and inability of maintaining and renewing them is resulting in "lost value" from wood wealth that can not be used.

Table 13: Agricultural area in the HA (km²)

COUNTY	Total agricultural area	Agricultural area inside the HA	%
Brodsko-posavska	573,6	0,0	0,0
Karlovačka	614,7	0,4	0,1
Ličko-senjska	352,2	25,9	7,4
Osječko-baranjska	1.040,3	2,7	0,3
Požeško-slavonska	383,7	3,6	0,9
Splitsko-dalmatinska	393,7	1,0	0,3
Sisačko-moslavačka	879,9	6,6	0,8
Šibensko-kninska	193,2	0,5	0,3
Zadarska	271,0	0,2	0,1
TOTAL	**4.702,3**	**40,9**	**0,9**

At the beginning of mine clearance process, one of the priorities was to create conditions for safe stay of tourists in the Republic of Croatia. In order to do that, areas along the tourist road communications were demined. In this way, HA has been moved away from the above-mentioned road communications that made it possible for tourists to safely travel to their destinations. Parts of national parks and parks of nature have also been cleared. The problem continental counties are now facing is hazardous area that had been used, prior to the war, for hunting tourism because it was one of the most important sources of income for certain towns and municipalities. Most of this hazardous area is now cleared but there is still over 45 km² of national parks and parks of nature that needs to be cleared (Annexes: Table 6: Environmental implications).

In previous request period, all priorities are cleared (HA in and near settlements, roads, communication roads, fire protection roads, parts of nature parks, nearly 90% of agricultural area, etc.) and there is no direct threat to the safety of the citizens of the Republic of Croatia and tourists and visitors as well. For all remaining HA, the CROMAC in cooperation with municipalities and counties prepares priorities for Annual demining plans. Croatia's estimation, according to this 2nd extension request, to solve the mine threat problem in full, is 1st March 2026.

III. The remaining challenge

1. Amount of time being requested

In line with the Article 5, paragraph 1, the Republic of Croatia requests an extension of deadline for the implementation of the Convention for 7 years (1st March 2026).

The remaining HA, covered by this extension request, covers 387.3 km² and consists of:
- Demining of all known mine fields (CHA), surface size 173.9 km²;
- Demining of all remaining area that is not in mine field records (CHA), surface size 79.5 km²;
- Areas to be reduced by survey methods (SHA), surface size 133.9 km².

2. Rationale for the time requested

The main reasons for requesting the extension of the deadline are as follows:

- **Size of hazardous area (HA)**

Although a lot has been done since the first estimates in 1996 until today (31st December 2017) in the sense of reduction and demining of hazardous area (from 13,000 km² the area has been reduced to 411.5 km², i.e. 31 times), there are still parts of the Republic of Croatia that are mine suspected. Non-existence of precise mine contamination data due to the fact that the Republic of Croatia was affected by the Homeland War during which mines were being placed without drafting minefield records or keeping any records at all is the biggest problem. However, there are enough indicators and information gathered by non-technical survey for the remaining part confirming the doubt in the existence of mine danger, but for which there are no records of any kind. At the moment, there are no methodologies developed that would enable additional area reduction to the size of the actual problem. That primarily refers to the forest area of the Republic of Croatia participating with 89.7% in the total HA structure.

- **Available financial resources**

In the following years (during the requested extension period) Croatia is expecting continuous flow of funds for mine action activities, an assessment that is primarily based on the positive trends from the last few years. Apart from constant State Budget funds, funds from the EU have steadily increased and the CROMAC is already in the final phase of conducting new projects which will also be funded from the ESI funds (Structural and Cohesion funds, Cross border cooperation fund, etc.), which gives us certainty in the implementation of the set goals from the Second Request. Also, expected source of funding is the public company “Croatian Forests” (State Budget of forest management positions) and main reason for that is HA of state forest (73%).

- **Demining and survey capacities**

Demining and survey capacities in the Republic of Croatia (according to the table 4 (a, b, c, d) are able to follow the realization of this programme because in the last ten years, they were professionally prepared and trained and have thus acquired significant experience (domestic and international). And, unlike ten years ago, Croatia now has enough mine action capacities for completion of the clearing of HA on its territory i.e. fulfilment of commitments from the Convention.

3. Assumptions

For all the above-mentioned reasons:
1. Defined HA;
2. Available financial resources (State Budget and different ESI funds);
3. Professional and experienced deminers and personnel in mine action system;
4. Licensed demining equipment.

we believe the requested deadline of 7 years is justified and that the Republic of Croatia will fulfill its commitments undertaken by signing the Convention in the stated period.

4. Risk factor of mitigating response for the requested period

With currently available capacities, Croatia is capable of clearing HA (by demining, non-technicaland/or technical survey) 56 km² per year and that can be done in period of next 7 years (until 1st March 2026). Assumption for this conviction is not only constant State Budget funding but also steady funding from different ESI funds (Structural and Cohesion funds, Cross border cooperation fund). CROMAC is already in the final phase of conducting new projects, also funded from the ESI funds, which gives us certainty in the implementation of the set goals from Second Request.

IV. Detailed work plan for the period of the requested extension

Based on the analysis of the size and structure of mine problem in the Republic of Croatia, the analysis of use of the existing demining capacities and other relevant factors, in the period 2019-2026, the following goals will be realized:

1. To completely remove mine danger from agricultural areas, meadows, pastures and forests.
To completely remove mine danger from agricultural areas, meadows and pastures as well as forests. This goal will be realized through direct co-operation with the authorized state administration bodies (Ministry of Agriculture, Ministry of Environment and Energy, and Ministry of Regional Development and EU funds), local administration and self-administration. By the end of 2018, mine danger should be completely removed from the agricultural areas and by the 1st March 2026, all hazardous area in Croatia.

2. To maintain marking of HA until completion of clearance.
During the realization of this Program, the CROMAC will maintain marking of HA and, if needed, at the request of local administration and self-administration bodies, police, forestry, hunting societies and other, execute additional marking and replace destroyed or for any other reason missing mine warning signs.

3. To continue mine risk education programs that cover the entire population living and/or working in HA or are oriented towards them.
In co-operation with the GOMA, authorized state administration bodies / ministries, local administration and self-administration, public companies and non-governmental organizations (such as the CRC) will continue the process of conducting mine risk education programs and adjust the programs to the most endangered groups of population.

4. **To continue providing care and rehabilitation including psycho-social rehabilitation and economic reintegration to all mine victims.**

This task will be coordinated by the GOMA and performed primarily by the state administration bodies responsible for health, social care, veterans (Ministry of Health and Ministry of Croatian War Veterans etc.) and other state bodies, local administration and non-governmental organizations to ensure that mine victims are fully-fledged members of their communities and society as a whole.

5. **To maintain cooperation and provide assistance to international partners regarding mine action topics**

Over the past twenty years, Croatia has developed a reputable and internationally recognized mine action system with technical resources which compare favorably on the global scale and an educated, well-trained and motivated staff. The CROMAC and the GOMA together with relevant Croatian institutions / organizations will continue offering and sharing our unique experience in mine action and humanitarian demining with all countries and international stakeholders interested.

Table 14: Total area to be reduced by demining and survey methods per year in period 2019-2026 (including MoD)

Republic of Croatia	HA in the Republic of Croatia (km²) - CHA+SHA								
	Planned	Areas to be reduced by demining (CHA) and survey (SHA) per year							
		2019	2020	2021	2022	2023	2024	2025	1.3.2026.
TOTAL	355,3	49,4	48,7	50,5	51,2	52,6	53,2	49,7	0,0
MoD areas	*32,0*	*5,0*	*5,0*	*5,0*	*6,0*	*6,0*	*5,0*	*0,0*	*0,0*
TOTAL (with MoD)	**387,3**	**54,4**	**53,7**	**55,5**	**57,2**	**58,6**	**58,2**	**49,7**	**0,0**

Demining of all known mine fields

By using demining methods in period 2019 – 2024, the plan is to clear all known mine fields (demining per year and county is presented in table 15). Demining will be conducted by the authorized demining companies and areas around and in vicinity of military basis and facilities by the Croatian Army.

Table 15: Demining of all known mine fields in period 2019-2024

County	HA in the Republic of Croatia (km²)						
	Planned	Demining of all known mine fields (CHA)					
		2019	2020	2021	2022	2023	2024
Karlovačka	11,5	2,5	2,0	2,0	2,0	2,0	1,0
Ličko-senjska	65,1	12,0	12,0	12,0	12,0	12,0	5,1
Osječko-baranjska	11,4	4,0	4,0	3,4	0,0	0,0	0,0
Požeško-slavonska	8,9	2,0	2,0	2,0	1,9	1,0	0,0
Sisačko-moslavačka	33,4	5,5	5,5	6,0	7,0	5,5	3,9
Splitsko-dalmatinska	1,8	0,5	0,5	0,5	0,3	0,0	0,0
Šibensko-kninska	3,3	1,2	1,2	0,9	0,0	0,0	0,0
Zadarska	6,5	1,7	1,5	1,5	1,5	0,3	0,0
TOTAL:	**141,9**	**29,4**	**28,7**	**28,3**	**24,7**	**20,8**	**10,0**
MoD areas	**32,0**	**5,0**	**5,0**	**5,0**	**6,0**	**6,0**	**5,0**
ALTOGETHER:	**173,9**	**34,4**	**33,7**	**33,3**	**30,7**	**26,8**	**15,0**

Demining of all remaining area that is not in mine field records

Also using demining methods, plan is to clear all remaining area that is not in Mine field records but is classified as HA due to the fact that the CROMAC has other direct evidence (based on non-technical survey) of mine / ERW threat. Demining of these areas is planned for period 2019–2026 as presented in table 16. Demining will be done by the authorized demining companies (based on public procurement procedures).

Table 16: Demining of all remaining area that is not in mine field records in the period 2019-2026

County	Planned	Areas to be cleared by demining per year and per County CHA (km^2)							
		2019	2020	2021	2022	2023	2024	2025	1.3.2026.
Karlovačka	3,5	0,0	0,0	0,0	0,0	2,0	1,0	0,5	0,0
Ličko-senjska	29,4	1,5	1,5	2,0	6,5	6,5	7,0	4,4	0,0
Osječko-baranjska	6,7	3,0	3,0	0,7	0,0	0,0	0,0	0,0	0,0
Požeško-slavonska	9,7	0,0	0,0	0,0	2,0	2,0	4,0	1,7	0,0
Sisačko-moslavačka	2,8	0,0	0,0	0,0	0,5	0,5	0,5	1,3	0,0
Splitsko-dalmatinska	14,1	0,0	0,0	1,0	2,0	3,0	5,0	3,1	0,0
Šibensko-kninska	8,8	1,5	1,5	0,5	1,0	2,3	2,0	0,0	0,0
Zadarska	4,5	0,0	0,0	4,0	0,5	0,0	0,0	0,0	0,0
TOTAL:	**79,5**	**6,0**	**6,0**	**8,2**	**12,5**	**16,3**	**19,5**	**11,0**	**0,0**

Areas to be reduced by survey methods

By using survey methods (non-technical and technical survey), plan is to additionally reduce SHA in the period 2019-2026. Time table, per counties and years, is presented in table 17. Survey methods will be conducted in accordance with the Law on Mine Action.

Table 17: Areas to be reduced by survey methods in the period 2019-2026

County	Planned	Areas to be reduced by survey per year and per county SHA (km^2)							
		2019	2020	2021	2022	2023	2024	2025	1.3.2026.
Karlovačka	31,4	2,0	2,0	2,0	2,0	2,0	10,0	11,4	0,0
Ličko-senjska	32,1	2,0	2,0	3,0	3,0	4,0	4,0	14,1	0,0
Osječko-baranjska	19,5	8,0	8,0	3,5	0,0	0,0	0,0	0,0	0,0
Požeško-slavonska	0,5	0,0	0,0	0,0	0,0	0,0	0,0	0,5	0,0
Sisačko-moslavačka	28,3	1,0	1,0	4,0	4,0	5,0	5,0	8,3	0,0
Splitsko-dalmatinska	3,3	0,0	0,0	0,0	0,0	0,0	1,0	2,3	0,0
Šibensko-kninska	5,7	0,5	0,5	1,0	1,0	1,0	1,7	0,0	0,0
Zadarska	13,1	0,5	0,5	0,5	4,0	3,5	2,0	2,1	0,0
TOTAL:	**133,9**	**14,0**	**14,0**	**14,0**	**14,0**	**15,5**	**23,7**	**38,7**	**0,0**

1. Institutional, human resource and material capacity available

Capacities

Currently 40 authorised demining companies are taking part in mine search and clearance operations in the Republic of Croatia. Non-technical and Technical survey operations are conducted according to the Law on Mine Action (as described in chapter 6.). Also, demining of military facilities is conducted by special unit of the Croatian Army (mine clearance battalion) according to special plan made by the Ministry of Defence. Demining capacities are defined by the procedure of accreditation of the authorised legal entities for conducting demining operations carried out by Ministry of Interior.

Table 18: Demining capacities in Croatia on 1st January 2018

CAPACITY		CURRENT SITUATION
Total number of deminers		**676**
Deminers	Worksite leaders	121
	Quality assurance - deminer	28
	Quality assurance officers	11
	Operative	516
Total number of auxiliary workers		101
Metal detectors		796
Mine detection dogs		99
Demining machines		45
Demining machines	Heavy	11
	Medium	13
	Light	19
	Excavators	2

The capacity of deminers is presented as the total capacity that also includes dog handlers and machine operators because they can perform deminer tasks when they are unable to work with mine detection dog or demining machine. Demining machines are classified according to the types in line with prescribed categorization. The capacity of mine detection dogs represents the total number of dogs registered in the CTRO – Center for Testing, Development and Training Ltd. in the process of establishing the level of competence and that underwent the prescribed testing. The team consists of a handler and two mine detection dogs. The number of metal detectors shows that each deminer disposes of a detector for whose proper usage they have been trained for in order to use them in mine search and demining operations.

Potentialities of Current Capacities

From the analysis of previous years and categorization of the terrain, demining projects were conducted by using demining machines and supporting machines – vehicles in mine search and demining operations as the first method on almost 85% of the total area.

Considering the fact that remaining HA according to categorization is mostly forest (89.7%), it is expected to significantly reduce the use of demining machines, especially medium and heavy machines. The use of demining machines will be limited to small, mobile machines that can be efficiently transported and used in such areas. By reducing use of mechanical demining, the proportion of manual method will increase, which reduces the safety of deminers, reduces productivity and increases the cost of demining and technical survey. Under these conditions, significant role in demining, and especially in the technical survey, will be the use of mine detection dogs. Therefore, in the future, it is necessary to develop methods and techniques for the use of dogs for mine detection in forests on mountain terrain.

With current capacities, type of terrain and structure of remaining HA, Croatia is capable of clearing 56 km² of HA per year:

- Demining 40 km² per year;
- Non-technical and Technical Survey 16 km² per year.

Table 19: Capacities needed to achieve goals in the period 2019 - 2026

Capacities	Required per year							
	2019	2020	2021	2022	2023	2024	2025	2026
Deminers	676	676	676	676	676	676	550	0
Demining machines	45	45	45	45	45	40	30	0
Mine Detection Dogs	100	100	100	100	100	100	80	0

2. Financial / Institutional Capacities

One of the basic preconditions for the realization of the stated scope of operations and annual dynamics is securing necessary financial resources. In line with planned annual realization, it is required to secure €459 million for this purpose.

Current average price of demining per square meter is 1.02 €/m^2.
By the end of 2017, Croatia demined all area around houses, near settlements; area intended for reconstruction, etc. which represented most expensive demining works. From 2013, the majority of the demining activities were on agricultural lands and meadows that were more suitable for mechanical demining and thus cheaper. Also projects are contracted on public procurement basis which also leads to price reduction per m^2.

In the following years, and considering the fact that remaining HA according to categorization is mostly forest (89.7%), it is expected to significantly reduce the use of demining machines and the proportion of manual method will increase, which reduces the safety of deminers, reduces productivity and increases the cost of demining and technical survey. This means that we can expect higher prices of “demining activities” per square meter (again, depending on the market situation).

Funding sources through which the realization of this program will be ensured:

Table 20: Funding sources

Source of Funds	Funds (mil. €)
STATE BUDGET	240
State budget of forest management positions	47
EU/ESI funds	100
EU/Cross border cooperation with Bosnia and Herzegovina	70
Donations	2
T O T A L:	**459**

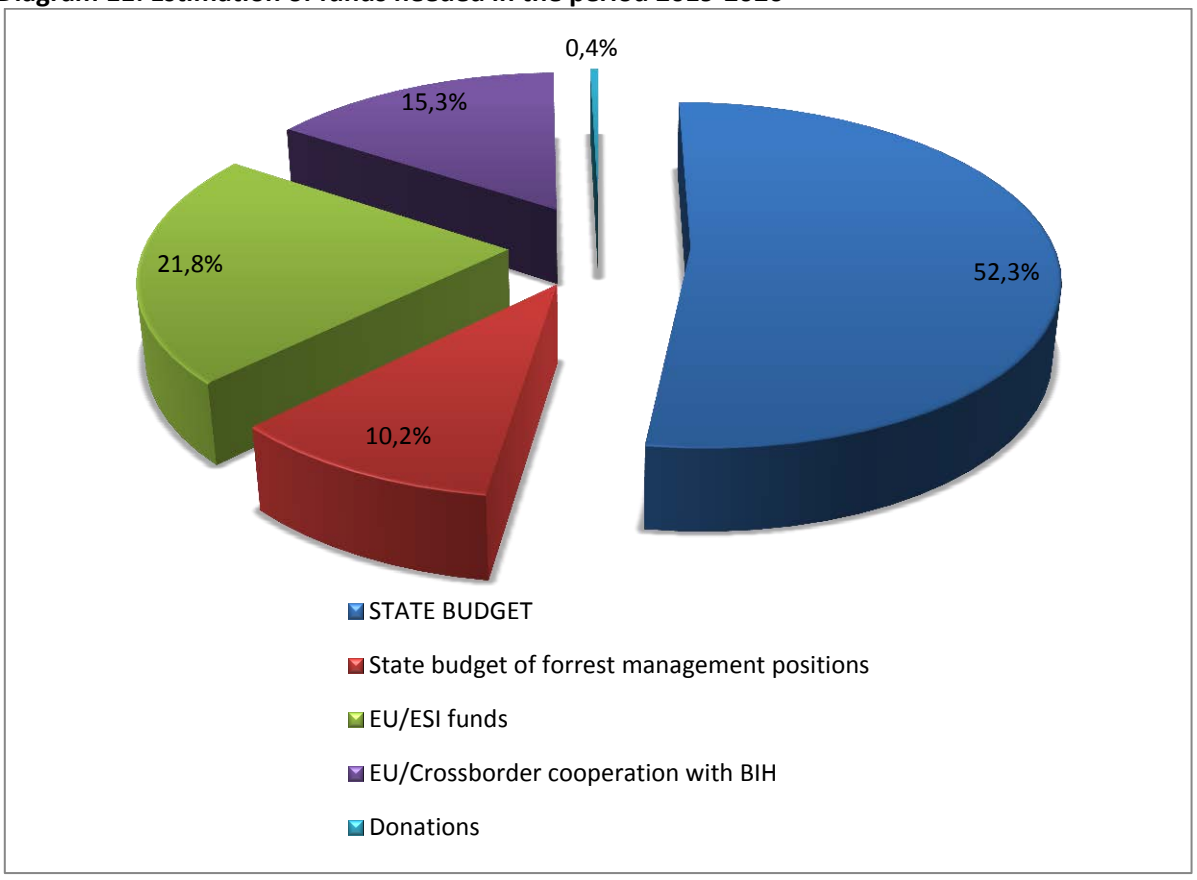
Just like in the previous period, the State Budget should bear the biggest brunt of financing mine action. The continuation of financing demining operations from the budget funds of local administration and self-administration units in Karlovačka and Ličko-senjska County is expected (Natura 2000 projects) but also joining others to the projects of interest for the county, towns and municipalities.

Due to the fact that over 89% of HA is covered by forests, the public company "Croatian Forests" will have to increase their allocations for demining in the forthcoming period in order to create safe conditions for the exploitation of wood and management of woodland resources.

In the last few years steady funding from different pre-accession EU funds exceeded funding from the State budget (almost 60% of financial means is from EU funds) and due to the fact that the CROMAC is already in the final phase of conducting new projects (as a technical advisor and/or partnerin project), also funded from the ESI funds (Structural and Cohesion funds, Cross border cooperation fund, etc.) gives us hope that we can implement the EU funds as planned in Table 20.

Project that is in final phase of preparation is "Naturavita" and it will cover HA in Osječko-baranjska County, on the territory of the Nature park "Kopački rit" and forest area along the river Drava. Total project is worth €49.9 mil., out of which €25 mil. refers to demining.
Also, based on this project, the CROMAC in cooperation with Ličko-senjska and Karlovačka County, is planning to prepare similar projects of demining county area which is part of Natura 2000.

Diagram 11: Estimation of funds needed in the period 2019-2026



Risk factors in funding this plan

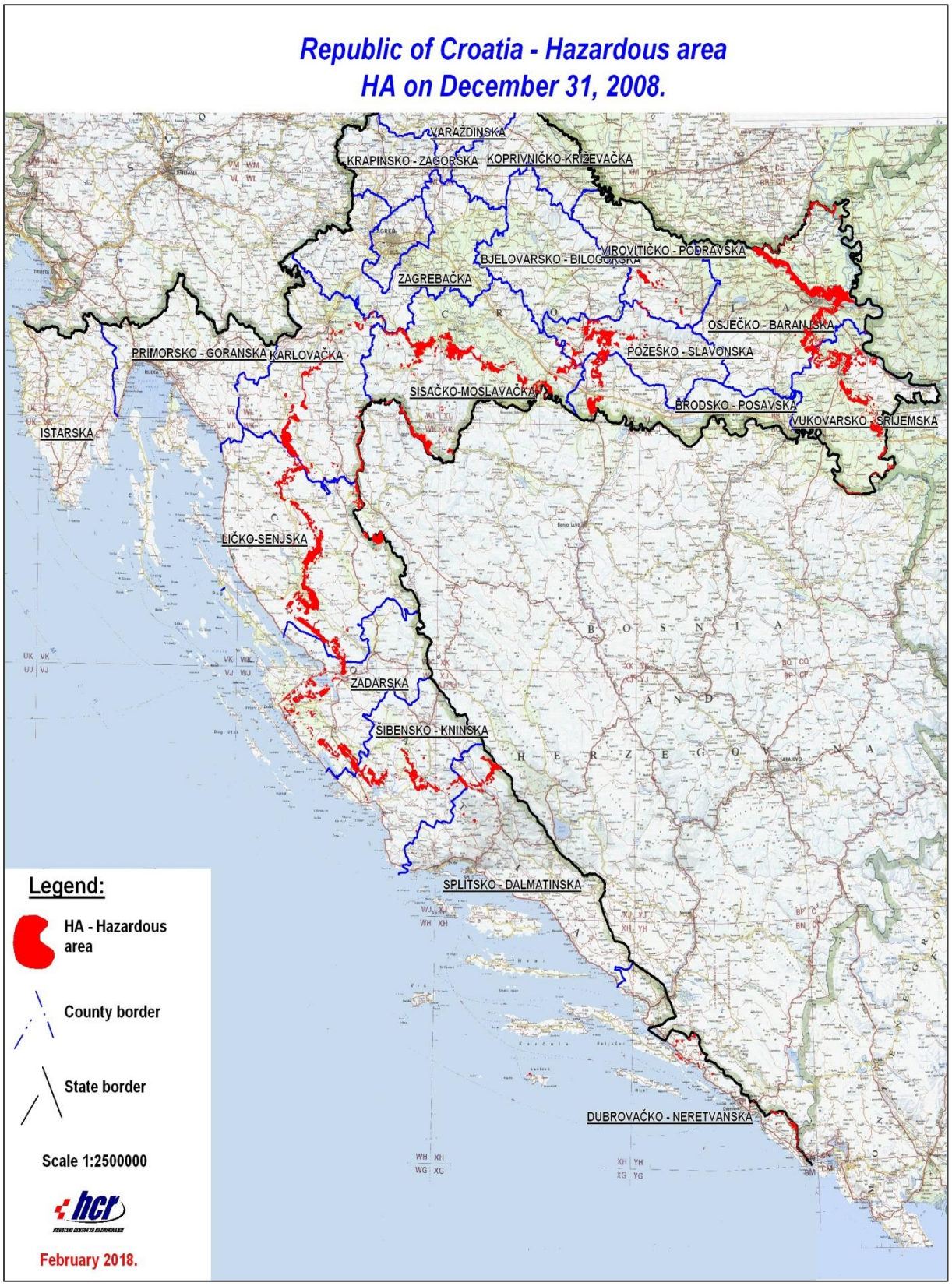
Due to the fact that the CROMAC is already in the final phase of conducting new projects (as a technical advisor and/or partner in project) funded from the ESI funds (Structural and Cohesion funds, Cross border cooperation fund, etc.) gives us hope that we can implement EU funds as planed for “mine action” activities. The only risk factor in funding this plan is inability to withdraw ESI funds as planned.

V. Other considerations

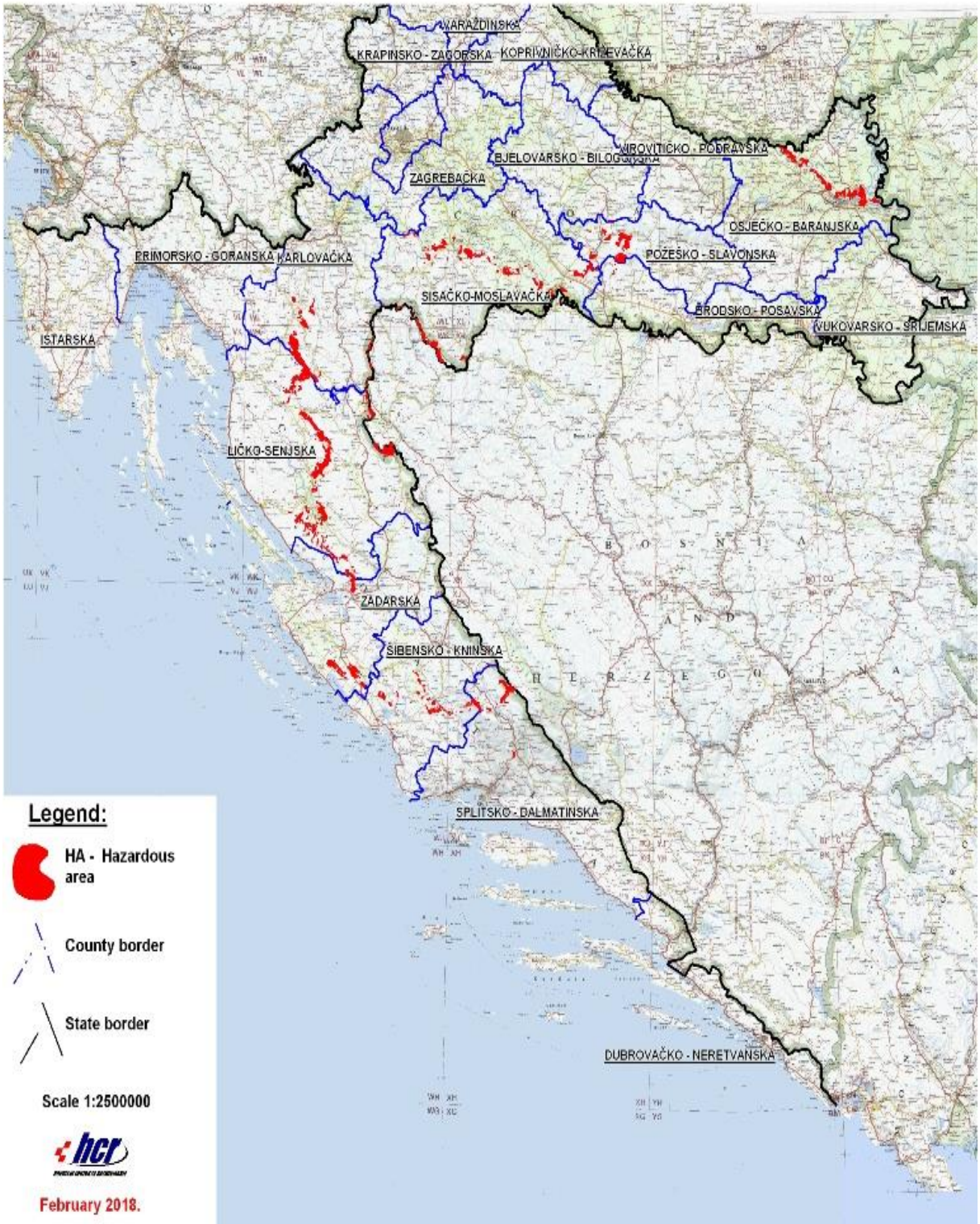
n/a

VI. Annexes

1. Map(s) of areas declared completed, areas to be addressed by region / minefield



Republic of Croatia
Hazardous area on December 31, 2017



2. Detailed tables, (1) Tables showing progress made by State / Province / District, (2) Remaining challenge, (3) Milestones

Table 1. Size of Hazardous Area

NO	PROVINCE / COUNTY	Longitude	Latitude	County area - km²	No. of towns and municipalities with HA	County HA	County HA in relation to the HA of the entire state %	County HA in relation to the county area %
1.	Karlovačka	15° 34' 59 E	45° 19' 59 N	3.622	8	49,8	0,1	1,4
2.	Ličko-senjska	15° 25' 0 E	44° 40' 0 N	5.351	9	138,2	0,2	2,6
3.	Osječko-baranjska	18° 25' 0 E	45° 30' 0 N	4.152	12	55,7	0,1	1,3
4.	Požeško-slavonska	17° 40' 0 E	45° 25' 0 N	1.821	2	24,0	0,0	1,3
5.	Splitsko-dalmatinska	16° 30' 0 E	43° 10' 0 N	4.572	3	20,1	0,0	0,4
6.	Sisačko-moslavačka	16° 30' 0 E	45° 25' 0 N	4.463	10	70,6	0,1	1,6
7.	Šibensko-kninska	15° 55' 0 E	43° 49' 59 N	2.994	7	22,2	0,0	0,7
8.	Zadarska	15° 19' 59 E	44° 4' 59 N	3.642	8	30,9	0,1	0,8
TOTAL				**32.651**	**59**	**411,5**	**0,7**	**1,3**

Table 2. Progress made - Areas cleared during the previous extension request

Record number	PROVINCE / COUNTY	Longitude	Latitude	Cancelled area (m²)	Reduced area by Technical Survey (m²)	Cleared area (m²)	TOTAL AREA RELEASED M² (2008 - 2017)	Number of anti-personnel mines destroyed	Number of anti-tankmines destroyed	Number of other explosive items destroyed (ERW)
1.	Bjelovarsko-bilogorska	17° 0' 0 E	45° 40' 0 N	0	0	0	**0**			
2.	Brodsko-posavska	17° 45' 0 E	45° 10' 0 N	15.489.001	3.637.118	68.202	**19.194.321**			
3.	Dubrovačko-neretvanska	18° 5' 40 E	42° 39' 12 N	1.679.242	357.671	18.699.166	**20.736.079**			
4.	Karlovačka	15° 34' 59 E	45° 19' 59 N	11.039.765	1.838.220	7.425.819	**20.303.804**			
5.	Ličko-senjska	15° 25' 0 E	44° 40' 0 N	21.861.470	2.840.060	24.479.369	**49.180.899**			
6.	Osječko-baranjska	18° 25' 0 E	45° 30' 0 N	63.863.549	8.194.212	38.441.793	**110.499.554**			
7.	Požeško-slavonska	17° 40' 0 E	45° 25' 0 N	24.493.902	2.987.280	63.889.273	**91.370.455**			
8.	Splitsko-dalmatinska	16° 30' 0 E	43° 10' 0 N	3.273.464	293.165	17.143.909	**20.710.538**			
9.	Sisačko-moslavačka	16° 30' 0 E	45° 25' 0 N	41.406.105	2.084.770	6.516.125	**50.007.000**			
10.	Šibensko-kninska	15° 55' 0 E	43° 49' 59 N	7.340.873	8.076.757	53.702.222	**69.119.852**			
11.	Virovitičko-podravska	17° 34' 59 E	45° 45' 0 N	8.020.668	1.175.351	23.538.824	**32.734.843**			
12.	Vukovarsko-srijemska	18° 55' 0 E	45° 10' 0 N	21.813.626	6.076.388	5.255.636	**33.145.650**			
13.	Zadarska	15° 19' 59 E	44° 4' 59 N	12.016.941	4.408.798	46.841.370	**63.267.109**			
14.	Zagrebačka	16° 4' 59 E	45° 45' 0 N	0	0	33.791.293	**33.791.293**			
TOTAL				**232.298.606**	**41.969.790**	**339.793.001**	**614.061.397**	**19.815**	**17.911**	**47.894**

Remarks:

CROMAC did not have database of destroyed mines and ERW sorted by Counties until 2011 and it is impossible to give information that is relevant. Total number of destroyed anti-personnel mines, anti-tank mines and ERW is correct and stated in our Annual reports.

Table 3. Remaining challenge: Areas known and suspected to contain anti-personnel mines as of December 31st 2017, and estimated date of completion

NO	PROVINCE / COUNTY	Longitude	Latitude	Area known to contain anti-personnel mines (km²)	Area suspected to contain anti-personnel mines (km²)	Type and quantity of anti-personnel mines	Estimated period when mine were emplaced	Estimated date of completition (year - end)
1.	Karlovačka	15° 34' 59 E	45° 19' 59 N	11,5	35	1.588	**1991 - 1995**	**2026**
2.	Ličko-senjska	15° 25' 0 E	44° 40' 0 N	65,1	62	13.053	**1991 - 1995**	**2026**
3.	Osječko-baranjska	18° 25' 0 E	45° 30' 0 N	11,4	26	6.005	**1991 - 1995**	**2026**
4.	Požeško-slavonska	17° 40' 0 E	45° 25' 0 N	8,9	10	963	**1991 - 1995**	**2026**
5.	Splitsko-dalmatinska	16° 30' 0 E	43° 10' 0 N	33,4	31	1.182	**1991 - 1995**	**2026**
6.	Sisačko-moslavačka	16° 30' 0 E	45° 25' 0 N	1,8	17	12.816	**1991 - 1995**	**2026**
7.	Šibensko-kninska	15° 55' 0 E	43° 49' 59 N	3,3	15	1.939	**1991 - 1995**	**2026**
8.	Zadarska	15° 19' 59 E	44° 4' 59 N	6,5	18	1.725	**1991 - 1995**	**2026**
9	Areas and objects under Ministry of Defense (MoD) jurisdiction			32	0		**1991 - 1995**	**2026**
TOTAL				**173,9**	**213,4**	**39.271**		

Table 4. Demining capacities in Croatia

a) Protective equipment

No	Type of equipment	Total per year									
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1.	Bulletproof vest	674	761	874	862	878	867	842	820	825	685
2.	Protective helmets	678	823	850	864	830	796	819	863	861	752

Remarks:
All protective equipment has to meet the standards stipulated by the Law on Mine Action (National Gazette no. 110/15) and the Book of Rules and Regulations on the Method of Conducting Humanitarian Demining Operations 2016 (National Gazette no. 45 – May 13 2016.)

b) Metal detectors

No	Detector type held	Total per Year									
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1.	Vallon ML-1620 C	102	87	34					1	1	
2.	Vallon ML-1620 B	13	12	9							
3.	Vallon VMH-1	23	26	11	15	16	9			2	
4.	Vallon VMH-2.1	49	30	17	17	10	5	5	4	4	
5.	Vallon VMH-2	19	20	21	15	11	11	9	8	1	
6.	Vallon VMH-3	113	159	164	172	184	179	217	247	245	264
7.	Vallon VMH-3 H		10	6	8	7	8	8	7	7	7
8.	Vallon VMH-3 CS	269	304	442	498	515	519	570	558	599	502
9.	Vallon VMM-2	3					1				
10.	Vallon VMM-3	5					4				
11.	Vallon VMW-1									2	
12.	CIEA MIL-1	25	29	30							
13.	FOERSTER MINEX 2FD	55	38	34	53	54	16		49	51	
14.	FOERSTER 2FD 4.500						30	20			9
15.	FOERSTER 2FD 4.530							30			14
16.	SCHIEBEL ATMID	24	22	21	10	4					
17.	SCHIEBEL AN 19/2	2									
18.	EBINGER EBEX 420 PBD	11	10	8							
19.	MINE LAB F3L		1								
20.	EBINGER 130 B									1	
21.	EBINGER UWEX 725 K									4	
22.	SCHONSTED GA 72 CD									1	
TOTAL		**713**	**748**	**797**	**788**	**801**	**782**	**859**	**874**	**918**	**796**

Remarks:

Prior to the use of metal detectors, there is a testing of metal detector performed and issuance of a certificate for the deminer confirming his competence for the work with metal detector he is responsible for. Metal detectors have to meet standards stipulated by the Book of Rules and Regulations on the Method of Conducting Humanitarian Demining Operations 2016 (National Gazette no. 45 – May 13 2016.)

c) Demining machines

No	Machine model	Type of machine	Certified number per year									
			2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1.	BOŽENA-3	Light machine								1		
2.	BOŽENA-4	Light machine	3	4	3	2		2	1	2	2	1
3.	BOŽENA-5	Medium heavy machine	1	1	1	1	1	1	1	1	1	1
4.	BIG LINE 450	Medium heavy machine					1		1	1	1	
5.	DALMATINO	Medium heavy machine		1	1	1	1	1	1	1	1	1
6.	DIGGER D-3	Medium heavy machine		1	1							
7.	FREELAND 3.000	Medium heavy machine			1							
8.	GASPER-SMT-01	Medium heavy machine	1	1	1	1	1		1			
9.	GSV SENEBOGEN 15C	Excavators	1		1							
10.	HYDREMA 910 MCV	Medium heavy machine	2	2	1				2		1	
11.	HYDREMA - WEIMAR M-1000	Excavators								1		
12.	HYDREMA - WEIMAR M-1520	Excavators	3	2	3	3	2	2	1	2	1	
13.	HYDREMA - WEIMAR M-900	Excavators	1		1				1			
14.	LAUS	Excavators										1
15.	MAMUT	Excavators						1	1	1		
16.	M-FV-2500/770	Medium heavy machine	2	1	1	1	2	2	2	1		
17.	MINE WOLF	Heavy machine	4	4	2	4	4	5	3	6	3	2
18.	MINI MINE WOLF	Medium heavy machine	2	2	3	4	4	5	5	5	5	3
19.	MT-01	Excavators	1	1	1	1	1					
20.	MV-10	Medium heavy machine	2	4	3	3	4	4	3	4	4	4
21.	MV-20	Heavy machine	1	1	1		1			1		
22.	MV-4	Light machine	15	19	17	16	18	18	17	16	16	18
23.	MVB-005	Excavators	1	1	1	1	1	1				
24.	MVB-006	Excavators	1			1		1	1		1	
25.	ORACLE	Heavy machine	1	1	1	1	1		1	1		1

26.	ORKA	Excavators	1	2		2	2	2	1	1		
27.	PT-300	Medium heavy machine					1			2		
28.	PT-400	Heavy machine			1	1	1			1	1	
29.	RHINO-2	Heavy machine	1	1								
30.	RM-03	Heavy machine			1	1	1	2	1	1	1	1
31.	RM-KA 01	Medium heavy machine	1		1		1					
32.	RM-KA 02	Medium heavy machine	6	3	3	3	2	1	2	2	2	1
33.	RUM-CAT	Excavators					1	1	1	1	1	1
34.	SAMSON 160	Medium heavy machine	1		1	1						
35.	SAMSON 300	Medium heavy machine	1		1	1	1	1	1		1	
36.	SCANJACK 3.500	Heavy machine	1		1	1		1	1	1	1	
37.	TORNADO GX 500	Heavy machine									1	1
38.	VF-001	Medium heavy machine		2	1	3	2	2	4	2	3	3
39.	VF-100	Heavy machine			2	2	4	5	5	5	5	5
40.	ZEUS-1	Heavy machine	2	2	2	3	3	3	3	3	2	1
41.	ZNB-01	Excavators	1	1	1							
TOTAL			**57**	**57**	**59**	**58**	**61**	**61**	**61**	**63**	**54**	**45**

Remarks:
All demining machines have to be tested and certified at the CTDT – Center for Testing, Development and Training Ltd., to confirm their capacity and effect in real conditions. All demining machines are subject to annual inspection of demining machine features.

d) Mine detection dogs (MDD)

Total number of MDDs in use	Per year									
	2008.	2009.	2010.	2011.	2012.	2013.	2014.	2015.	2016.	2017.
	104	59	43	43	28	36	55	64	108	99

Remarks:
MDDs that do not pass the test cannot be used in demining operations.

Table 5. The humanitarian, social, economic, and environmental implications of the 1st extension period

Table 5A: Mine & ERW victims – type/sex, 2008-2017

CATEGORY	2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		Total by type
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
civilans injured	3	0	1	0	3	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	11
civilians killed	2	0	3	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	8
deminers injured	2	0	2	0	1	0	3	0	1	0	0	0	0	0	2	0	4	0	0	0	15
deminers killed	1	0	1	0	2	0	1	0	1	0	0	0	0	0	1	0	3	0	0	0	10
soldiers/police injured	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
soldiers/police killed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
subtotal by sex	8	0	**7**	0	7	0	**6**	0	3	0	**1**	**0**	**2**	**0**	**3**	**0**	**7**	**0**	**0**	**0**	
Total	**8**		**7**		**7**		**6**		**3**		**1**		**2**		**3**		**7**		**0**		**44**

Table 5B: Civilian casualties by munitions type by county, 2008-2017

COUNTY	2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		Total
	AP mine	Other	AP mine	Other	AP mine	Other	AP mine	Other	AP mine	Other	AP mine	Other	AP mine	Other	AP mine	Other	AP mine	Other	AP mine	Other	
Bjelovarsko-bilogorska	0	0	0	0	o	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
Brodsko-posavska	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	**1**
Dubrovačko-neretvanska	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Karlovačka	1	0	0	0	o	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	**4**
Ličko-senjska	1	0	1	0	5	0	0	0	0	0	0	0	0	0	2	0	4	0	0	0	**13**
Osječko-baranjska	2	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**6**
Požeško-slavonska	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Splitsko-dalmatinska	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Sisačko-moslavačka	0	0	5	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**7**
Šibensko-kninska	0	0	0	0	o	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	**3**
Virovitičko-podravska	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Vukovarsko-srijemska	1	2	0	0	o	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Zadarska	0	0	0	0	o	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	**2**
Zagrebačka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Subtotal munitions	5	3	7	0	6	1	3	3	3	0	1	0	0	2	3	0	7	0	0	0	**44**
TOTAL	**8**		**7**		**7**		**6**		**3**		**1**		**2**		**3**		**7**		**0**		**44**

Review of incidents by years – from 2008 - 2017.

Mine victims in 2008.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
7	1	3	4	**8**	5	3	8	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
22.02.2008.	OB	Valpovo	Anti-personnel	PROM-1	52	M	Civilian	Heavily injured
22.02.2008.	OB	Valpovo	Anti-personnel	PROM-1	62	M	Civilian	Killed
03.03.2008.	KA	Karlovac	Anti-personnel	PMA-2	32	M	Deminer	Heavily injured
03.04.2008.	LS	Pl.Jezera	Anti-personnel	PROM-1	50	M	Civilian	Killed
03.06.2008.	OB	Osijek	Anti-tank	TMA-3	32	M	Civilian	Heavily injured
03.09.2008.	VS	Vinkovci	Anti-tank	TMM-1	41	M	Deminer	Killed
08.10.2008.	VS	Bogdanovci	Anti-tank	TMM-1	N/a	M	Civilian	Lightly injured
12.12.2008.	VS	Nuštar	Anti-personnel	PROM-1	31	M	Deminer	Heavily injured

Mine victims in 2009.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
6	1	4	2	**7**	4	3	7	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
31.01.2009.	SM	Petrinja	Anti-personnel	PROM-1	19	M	Civilian	Killed
17.02.2009.	OB	Osijek	Anti-personnel	PMA-3	43	M	Civilian	Heavily injured
28.07.2009.	SM	Petrinja	Anti-personnel	PROM-1	34	M	Deminer	Lightly injured
23.08.2009.	SM	Petrinja	Anti-personnel	PROM-1	37	M	Deminer	Lightly injured
23.08.2009.	SM	Petrinja	Anti-personnel	PROM-1	34	M	Demine	Killed
03.09.2009.	SM	Sisak	Anti-personnel	PROM-1	33	M	Civilian	Killed
31.10.2009.	LS	Pl.Jezera	Anti-personnel	PROM-1	37	M	Civilian	Killed

Mine victims in 2010.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	**Total**	**Civilians**	**Deminers**	**Men**	**Women**
6	3	3	1	**7**	5	2	7	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
13.1.2010.	SM	Petrinja	Anti-personnel	PROM-1	39	M	Deminer	Killed
27.6.2010	LS	Otočac	Anti-personnel	PROM-1	29	M	Civilian	Killed
27.6.2010	LS	Otočac	Anti-personnel	PROM-1	30	M	Civilian	Heavily injured
27.6.2010	LS	Otočac	Anti-personnel	PROM-1	25	M	Civilian	Lightly injured
27.6.2010	LS	Otočac	Anti-personnel	PROM-1	46	M	Civilian	Lightly injured
22.7.2010	SM	PETRINJA	Anti-personnel	PROM-1	48	M	Civilian	Without injury
9.8.2010	OB	OSIJEK	N/a	N/a	47	M	Deminer	Lightly injured
14.9.2010	LS	OTOČAC	Anti-personnel	PROM-1	37	M	Deminer	Killed
14.10.2010	SM	PETRINJA	N/a	N/a	22	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	44	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	30	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	29	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	45	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	24	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	58	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	40	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	32	M	Civilian	Without injury
14.10.2010	SM	PETRINJA	N/a	N/a	45	M	Civilian	Without injury

Mine victims in 2011.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
5	3	1	2	**6**	2	4	6	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
24.03.2011	ZA	Obrovac	ERW N/a	Unknown	59	M	Civilian	Lightly injured
03.05.2011	KA	Josipdol	Anti-personnel	PROM-1	33	M	Deminer	Lightly injured
10.05.2011	VS	VUKOVAR	ERW	Unknown	52	M	Civilian	Heavily injured
13.09.2011	VS	Markušica	Anti-tank	TMM-1	47	M	Deminer	Heavily injured
12.10.2011	VS	Vrbanja	Anti-personnel	PROM-1	32	M	Deminer	Lightly injured
12.10.2011	VS	Vrbanja	Anti-personnel	PROM-1	48	M	Deminer	Killed

Mine victims in 2012.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
3	1	2	0	**3**	1	2	3	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
11.01.2012	OB	Osijek	Anti-personnel	PROM-1	49	M	Deminer	Killed
02.04.2012	SM	Petrinja	Anti-personnel	PROM-1	47	M	Civilian	Killed
28.11.2012	ŠK	Drniš	Anti-personnel	PMA-2	45	M	Deminer	Lightly injured

Mine victims in 2013.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
1	1	0	0	**1**	1	0	1	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
17.03.2013.	OB	Šodolovci	Anti-personnel	PMA-3	56	M	Civilian	Lightly injured

Mine victims in 2014.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
1	0	1	1	**2**	2	0	2	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
14.2.2014	KA	Josipdol	ERW HE Shell 130 mm		54	M	Civilian	Heavily injured
14.2.2014	KA	Josipdol	ERW HE Shell 130 mm		35	M	Civilian	Killed

Mine victims in 2015.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
2		1	2	**3**	0	3	3	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
17.2.2015	ŠK	Ružić	Anti-personnel	PMA-2	36	M	Deminer	Heavily injured
14.9.2015	KA	Josipdol	Anti-personnel	PROM-1	37	M	Deminer	Heavily injured
14.9.2015	KA	Josipdol	Anti-personnel	PROM-1	26	M	Deminer	Killed

Mine victims in 2016.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
5	4	3	0	**7**	0	7	7	0

Date	*County*	*Municipality*	*Type of ERW*	*Type of mine*	*Age*	*Sex*	*Injured person*	*Incident level*
24.1.2016	ŠK	VODICE	Anti-personnel	PROM-1	54	M	Deminer	Lightly injured
15.4.2016	LS	GOSPIĆ	Anti-personnel	PROM-1	36	M	Deminer	Lightly injured
15.4.2016	LS	GOSPIĆ	Anti-personnel	PROM-1	36	M	Deminer	Lightly injured
15.4.2016	LS	GOSPIĆ	Anti-personnel	PROM-1	39	M	Deminer	Killed
9.6.2016	LS	Plitvička jezera	Anti-personnel	PMA-3	Un	M	Deminer	Lightly injured
5.10.2016	BP	Okučani	Anti-personnel	PROM-1	42	M	Deminer	Killed
19.12.2016	ZA	Zemunik Donji	Anti-personnel	PROM-1	60	M	Deminer	Killed

Mine victims in 2017.

Number of incidents	*Lightly injured*	*Killed*	*Heavily injured*	Total	Civilians	Deminers	Men	Women
0	0	0	0	**0**	0	0	0	0

Table 6: Environmental implications

Name	Suspected hazardous area	Implications	Supplementary information
National park Paklenica	1.941.357 m^2	In HA there is a part of the area of fire fighting roads and underbrush, and mountain meadows and lawns	Every year, Park is visited by more then 120.000 alpinists, bikers and scientists who watche birds and research caves
Park of Nature Lonjsko polje	2.761.595 m^2	Protection of biological and landscape diversity of the Park is still endangered, but significantly improved in the last 10 years	This is one of the largest moor protected area in the Danube river basin and one of the largest habitat of the swamp birds. Area is well known as large stork habitat. Park is on the list of important ornithological areas – IBA (Important Bird Area)
National Park Krka	25.272 m^2	HA in the park refers to low vegetation and karst, fire fighting roads etc .	The national park is a vast and primarily unaltered area of exceptional natural value, including one or more preserved or insignificantly altered ecosystems. The purpose of the park is primarily to serve science, culture, education and recreation, while tourism activities have also been introduced for its visitors through travertine waterfalls of the Krka River as the fundamental phenomenon of this river.Every year, Park is visited by more then 950.000 visitors.
Park of Nature Kopački rit	16.853.802 m^2	South-eastern part of the Park of Nature toward the Drava and Danube river is HA, and monitoring of birds is dimmed, and that way prevention of bird flu is harder to maintain, and the risk of fire is much higher.	Park of Nature is on the list of internationally significant swamps, according to Ramsar convention. Park is on the list of important ornithological areas – IBA (Important Bird Area). Park is visited by more then 40,000 visitors per year
Park of Nature Velebit	23.898.915 m^2	HA covers the southeast part of the Park of Nature on the border with National park Paklenica. Sheep pasture is dimmed. Before the war shepherds guided sheep to the mountains during the summer months. There is potential danger for the numerous alpinists who are using 500km of the forest paths.	The area is well known after botanical reservations with endemic plants. The most famous is Velebitska degenija, which is on the coin of 0,50 HRK. There are numerous caves there.

3. Detailed Budget

Table 7. Financial resources required and/or available to conduct work under national demining programs during the period covered by the extension request in EUR

Source of Funds	Year / EUR								TOTAL (EUR)
	2019	2020	2021	2022	2023	2024	2025	2026	
STATE BUDGET	35,0	35,0	35,0	35,0	35,0	35,0	30,0	0,0	**240,0**
State budget of forrest management positions	10,6	10,6	5,2	5,2	5,2	5,2	5,0	0,0	**47,0**
EU/ESI funds	22,0	20,0	15,0	15,0	11,0	10,0	7,0	0,0	**100,0**
EU/Crossborder cooperation with Bosnia and Herzegovina	0,0	7,5	12,5	12,5	12,5	12,5	12,5	0,0	**70,0**
Donations	0,5	0,5	0,3	0,3	0,2	0,2	0,0	0,0	**2,0**
TOTAL:	**68,1**	**73,6**	**68,0**	**68,0**	**63,9**	**62,9**	**54,5**	**0,0**	**459,0**

4. Relevant updated / reviewed and/or new National Mine Action Strategies

https://narodne-novine.nn.hr/clanci/sluzbeni/2009_10_120_2959.html

5. Updated / reviewed and / or new National Mine Action Standards

https://www.hcr.hr/en/sop.asp

6. Book of maps with HA (Republic of Croatia – counties/towns/municipalities)

7. Literature

- Law on Mine Action (National Gazette no. 110/15)
- Law on Humanitarian Demining (National Gazette 153/05)
- The Changes and Amendments to the Law on Humanitarian Demining 2008 (National Gazette 152/08)
- The Changes and Amendments to the Law on Humanitarian Demining 2007 (National Gazette 63/07)National Mine Action Strategy 2010-2019
- Book of Rules and Regulations on the Method of Conducting Humanitarian Demining Operations 2016 (National Gazette no. 45 - 13. May 2016.)
- Book of Rules and Regulations on Personal Supervisory Booklet, Humanitarian Demining Identification Card and Keeping the Register 2016 (National Gazette no. 57 - 8. June 2016)
- SOP 01.01. General Survey– CROMAC July 2007
- SOP 04.01. Quality Assurance and Quality Control of Technical Survey and Demining – CROMAC September 2007
- Brochure „Mine Action in the Republic of Croatia“ – 2008
- Guidelines for the preparation of the State Budget for period 2016-2018 – Ministry of Finance of the Republic of Croatia – September 2016
- CROMAC's yearly Reports on the implementation of the Humanitarian Demining Plans and resources spent for the period 2008 - 2016
- CROMAC's yearly Plans for the Humanitarian demining for the period 2008 - 2017
- Reporting Formats for Article 7 of the Convention – Ministry of Defense 2008 - 2016