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CHALLENGES IN IMPLEMENTATION OF THE INTERNATIONAL MINE ACTION STANDARDS IN HUMANITARIAN DE-MINING IN BOSNIA AND HERZEGOVINA

Davor Kolenda, PhD,

Jelena Kolenda, PhD¹

Sveučilište Hercegovina Mostar

INTRODUCTION

Bosnia and Herzegovina is one of the world's countries with the largest number of marked and unmarked mines in mine fields, as a consequence of the 1991-1995 war in the area of former Yugoslavia.

“In the period from 1992 until the end of 2016, there were 8,379 mine victims in BiH. The total of 6,354 persons were mine-victims in the war period (1992-1995), whereas there were 1,751 mine-victims in the post-war period, thereof 612 were killed, 184 (10%) were women and 249 (14%) children. 127 deminers were injured or killed in humanitarian demining actions in BiH (51 killed).“²

After the war, Bosnia and Herzegovina was left with 4.2 km² of potentially dangerous mined area, what makes 8.2% of the country's total surface. Nowadays, after 20 years of humanitarian demining, “the potentially dangerous mined area still makes 2.2% of the country's total surface (1,091.23 km²).“³ “545,603 persons or 15% of the total population still find themselves in a direct danger.“⁴

SOME PROBLEMS OF HUMANITARIAN DEMINING IN BIH

In last 20 years, all specific activities of humanitarian demining were undertaken in BiH according to applicable technical methods, the technical

¹ Davor Kolenda, D.Sc., HO Pro Vita Mostar, BiH, Manager, e-mail: kolendadavor@hotmail.com; Jelena Kolenda, D.Sc., University of Modern Sciences-CKM Mostar, Assistant, e-mail: jelena.kolenda@hotmail.com

² BiH MAC Report 2016, p. 6

³ BiH MAC Report BiH 2016, p. 5

⁴ BiH MAC Report BiH 2016, p. 4

survey (TS) being the most frequently applied method since 2003. This specific activity is performed through combination of technical methods: demining machines, mine detection dogs and manually (metal detectors - prodders). In last 10 years the manual method won predominance in use over the machine technical method and the manual method with mine detection dogs, which was predominantly applied at the beginning to treat the entire surface defined for technical survey. The manual TS method may treat 20-30% of the total surface defined for TS, whereas the untreated surface is subjected to an analysis on the basis of the determined indications of mining. The result of the analysis is the definition of the dangerous area which will be subject of demining and area void of visible mine risks, which is then cleared of all vegetation in order to provide additional security to future land users - this is specific for BiH, considering that in other countries in the environment, such as for example Croatia, the vegetation is not removed from the safe area. The main weakness of the TS is that the borders of the action are defined according to social and economic needs of the inhabitants, instead of according to available data on danger of mines. Social and economic needs of the inhabitants should certainly have an important role in the process of setting demining priorities, however their role should not be decisive when it comes to defining the borders of the TS action. The areas without a visible risk of mines were defined on the basis of the main criterion that the land surface was disturbed or intensively bladed for at least two years without detecting any mines. The TS analysis gave the following result:

1. According to yearly BiH MAC reports, the area of 101,012,066 m², on which TS was performed in the period from 1 January to 31 December 2016, was included in the sample, thereof the area of 2,057,473 m² was allocated for demining in the same period⁵, making only 2.029% of the TS area from the sample.

2. In the aforementioned period, cca. EUR 50,506,033 was spent on TS (at the average price of EUR 0.50/m²), not including another 5% of the sampled area. The TS clearance detected 7,621 landmines and 584 anti-tank mines (39.8 mine/ha).

MINE CLEARANCE

Mine clearance in BiH was performed on the basis of the findings of both technical and non-technical survey. The mine clearance actions were defined pursuant to available reports or information obtained from the informers. In the period from 1 January 2006 to 31 December 2016, the total area of 22,262,806 m² was treated by mine clearance actions, in which 13,880 landmines and 1,114 anti-tank mines were detected (6.7 mine/ha).⁶ The conclusion of the BH MAC audit team, presented in the Performance Audit Report, is that the process of humanitarian demining will be finished in about 60 years with the so-far invested funds and if the same technical

⁵ BH MAC electronic database

⁶ BH MAC electronic database

methods continued to be applied. Similarly, comparing the area cleared of mines in the year 2015 and the funds invested in demining in the same year with the remaining uncleared area, Jelena Kolenda, D.Sc. concluded in her doctoral dissertation titled “Construction of the Education System in Bosnia and Herzegovina for Needs of Humanitarian Demining” that the “process of demining in BiH will take another 43 years.”⁷

LAND RELEASE

The „land release“⁸ concept was introduced in demining operations by IMAS 07.11, published on 10 June 2009. The concept is based on the evidence on the presence of mines in the subject area obtained by applying all reasonable efforts, until the presence of mines in the subject area is proved with required reliability. In resolving the mine-related problems, focus is placed on the process of non-technical survey with the effective information management system. All reasonable efforts are put through non-technical survey, technical survey (targeted and systematic survey) and clearance.

In December 2012, BHMACH and EU signed the project of introducing the “land release” concept in demining in BiH within the IPA 2011. The main objective of the project was to release 70 km² to the inhabitants and to define 30 km² to be treated, as well as to train the BHMACH staff for the new concept and to create the standard operating procedures (SOP) and standards. The funds in amount of EUR 500,000 were allocated for the pilot-projects. The procedure of invitation for bids was carried out for two projects (Brezičani and Lukavica-Čelić), whereas for other two projects, invitations for bids were cancelled due to objective, but to some extent also due to certain subjective reasons. The BH MAC Standards were created and adopted in March, by which the related issues were duly regulated. However, the SOP creation is behind the schedule for two years already, the reason being exclusively the resistance shown to the new working techniques on the part of BH MAC. The working group finished the draft of the SOP for non-technical survey in March 2017, but the BiH Mine Action Commission has failed to sign it so far. Nevertheless, 38 projects have been finished so far or are in process, thereof only one in Republika Srpska (RS), where the strongest resistance is shown to the new technique. “The total of 13 projects have been finished and certified so far, in which the area of 339,590 m² was cleared, the result of which was the reduced area of

⁷ Jelena Kolenda, D.Sc., doctoral dissertation „Construction of the education system in Bosnia and Herzegovina for needs of humanitarian demining”, 2017, p.121

⁸ “The term “Land Release” describes the process of applying all reasonable effort to identify, define, and remove all presence and suspicion of mines/ERW through non-technical survey, technical survey and/or clearance. The criteria for “all reasonable effort” shall be defined by the NMAA (National Mine Action Authority).“, IMAS 07.11, First Edition (Amendment 3, February 2016), p. 2

4,955,037 m² and the released area of 40,721,897 m² (in total: 45,676,934 m²).⁹ The total of 2,146 mines were detected in the finished projects (63.19 mine/ha).

An example is the development project “Koričina-Golija (MSP 020)”, area: 6.49 km². Investors: ŠGD Hercegbosanske šume-Kupres, Co-investors-contractors: Association “Pazi Mine” Vitez and HO “Pro Vita” Mostar.

The total of 25 locations were identified for the technical survey, thereof 12 for the targeted survey and 13 for the systematic survey. The project duration was 207 work days with 2.5 demining teams in average. The following resources were engaged: 6 manual teams, 52 metal detectors, 65 protection equipment, 6 sanitary vehicles, 8 people transport vehicles, 3 equipment transport vehicles and 2 explosives transport vehicles.

The estimated number of mines was 971, whereas 1,252 mines were detected.

	Expected	Detected
Landmines	776	784
Anti-tank mines	175	141
PROM	20	60
“Active mines“		985
Site of explosion		151
Evidence on removal		116
Total:		1,252

Findings expressed in form of treated area:

- Targeted survey: 12 finished - area: 90,747 m²
- Systematic survey: 13 finished - area: 274,631 m²
- Sampled: 1.894,801 m²
- 5% 94,740 m²
- Cancelled area: 4,596,409 m²
- IKK on the project 3%: 39,858 m²
- Deminer performance average per labour force: 111 m²

Planned and achieved result:

- Informators: incoming 5, additionally secured 11;
- Clearance: expected - 0.046 km² - treated - 0.097 km²
- Systematic survey: expected - 0.23 km² - treated - 0.27 km²
- Cleared of risk: expected - 3.28 km² - treated - 6.49 km²
- Average: 108 mine/ha

RESISTANCE

Even though it is absolutely clear from the evidence presented in the text above that the new concept should be given priority in use as soon as

⁹ BH MAC electronic database

possible, it has not been embraced by the BH MAC, the professional service. The resistance to the new concept most probably has a political background.

- The BHM MAC management has yet not expressed its support for the land release concept. This is the only reasonable explanation for the long delay in SOP creation and adoption.
- If the demining process were speeded up as envisaged by the new concept, 185 employees of BH MAC would be redundant.
- Clearance of mines and mine danger will create pre-conditions for return of refugees and for sustainable development in the cleared areas (free use of natural resources, building of economic infrastructure, creation of pre-conditions for sustainable return and prevention of corruption now present in all fields in BiH, including mine action), what is obviously not in interest of certain political groups.

CONCLUSION

1. The actions of humanitarian demining, undertaken in BiH in last 20 years, have obviously not exerted the expected result yet, resulting in significantly reduced inflow of donor funds.

2. The executed pilot-projects with the land-release concept (non-technical survey, technical survey with the targeted and systematic surveys) have exerted much better results than the previously applied methods of technical survey and clearance at micro-locations in potentially dangerous mine areas.

3. This field must be regulated within shortest time possible, resp., SOP of MAC BiH and SOP of the contractors are to be created and adopted and additionally, projects are to be launched which would apply the advanced techniques, which have already been tested in BiH to some extent.

4. Training of all participants of PMA-humanitarian demining in the new concept must be organised as soon as possible.

5. It is recommendable in performance of the new specific activity in the MSP projects to conduct all three phases in sequence without interruptions (non-technical survey with the purpose of determining the evidence on the presence of mines, clearance and land release to the users) in order to avoid the phases in which the mine-field is left unsupervised and available for mine-theft for terrorist purposes.

6. Donors should be informed about the positive results of the pilot-projects and the so-far finished projects of the new specific activity in order to attract donations for efficient and effective humanitarian demining.

IZAZOVI U PRIMJENI MEĐUNARODNIH STANDARDA ZA PROTUMINSKO DJELOVANJE U HUMANITARNOM RAZMINIRANJU U BOSNI I HERCEGOVINI

Dr. sc. Davor Kolenda, dr. sc. Jelena Kolenda

Bosna i Hercegovina je po broju mina u minskim poljima, kako označenim tako i neoznačenim, jedna od najzagađenijih zemalja u svijetu.

Minska polja su posljedica rata koji je trajao na području bivše Jugoslavije, a time i Bosne i Hercegovine od 1991 do 1995. godine.

Rat je u naslijeđu ostavio sumnjivu opasnu površinu na mine koja je iznosila 4,2 km² ili 8,2% ukupne površine BiH. I poslije 20 godina humanitarnog razminiranja BiH ima „minski sumnjivu površinu od 1.091,23 km² odnosno 2,2 ukupne površine BiH.“ Još uvijek je „direktno ugroženo 545.603 ljudi, što predstavlja više od 15% ukupnog stanovništva po zadnjem popisu stanovništva.

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