|                                 | -  |                  |
|---------------------------------|--|------------------|
| - hcr>                          | STANDARD OPERATING PROCEDURE                   | SOP              |
| HRVATSKI CENTAR ZA RAZMINIRANJE | SURVEY OF MINE SUSPECTED AREA AND/OR BUILDINGS | 01.              |
|                                 | AREA REDUCTION IN MSA                          | 01.04            |
|                                 | HUMANITARIAN DEMINING                          | TO 523           |
|                                 |  |                  |
|                                 | FIELD OF APPLICATION                           |                  |
| •                               | PROCESS OF AREA REDUCTION IN MSA               |                  |
| -                               | SPECIAL CONDITIONS FOR AREA REDUCTION IN MSA   |                  |
|                                 | REPORT AND COMPARATIVE ANALYSIS                |                  |
|                                 | EXCLUSION OF AREAS FROM MSA                    |                  |
|                                 |  |                  |
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|                                 |  |                  |
|                                 | DIRECTOR of CROMAC: Otto Jungwirth             | November<br>2009 |

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### **References to Legal Acts, Books of Regulations and SOPs**

Standard Operating Procedure "Area Reduction in MSA" is based on the Law on Humanitarian Demining (NN (National Gazette) 153/05, NN63/07 and 148/08), the Book of Regulations on conduction of humanitarian demining operations NN 53/07 and 111/07, IMAS (International Mine Action Standards) and the following Standard Operating Procedures of CROMAC: "General Survey", "Marking of Mine Suspected Area", "Technical Survey", Quality Assurance and Quality Control of Mine Search and/or Demining" including other provisions that regulate the field of demining in the Republic of Croatia. It is coherent with other standard operating procedures of CROMAC.

#### Introduction

Mine contamination in the Republic of Croatia causes a range of economic, ecological and social disturbances, and it mainly causes safety problems to population that lives in the area stricken by war activities. Vast agricultural areas, forests, border areas and parts of river shores are inaccessible due to mines or suspicion of mine existence, thus it is a strategic task to make mine suspected areas available to end users (see: National Mine Action Strategy of the Republic of Croatia for the period 2009 – 2019).

The reduction of areas in MSA defined by this SOP takes on a new approach to rationalization and is more efficient way of releasing areas and/or buildings for use, using the comprehensive analysis approach of all data in CROMAC's Mine Information System (CROMAC MIS). It relates primarily to MSA areas that are sorted by survey categories.

Based on "National Mine Action Strategy of the Republic of Croatia" and "Three Year Humanitarian Demining Plan" the selection and comprehensive analysis of area "P" is conducted for certain county, municipality or town in order to reduce the area "P" or MSA using practices and methods that are regulated by SOP.

The area reduction in defined MSA is based on fulfilment of mutually related criteria listed in SOPs "General Survey", "Quality Assurance and Quality Control of Mine Search and/or Demining" and criteria defined by this SOP.

# 1 Field of Application

Standard operating procedures "Area Reduction in MSA" define the conditions for selection of area "P" and for conducting comprehensive information analysis in MIS, additional control and collection of new information during the reduction process of a part or whole MSA at municipality/town level.

Planning of areas "P" for reduction is conducted in accordance to the contamination/non-contamination level of the areas for future use (risk assessment of human lives and animals, economy or infrastructure objects, etc.) and is based on carried-out general survey that indicated not all preconditions were met to declare a certain area safe for usage.

The comprehensive data analysis in MIS is conducted at the regional office level as basic analysis and as supporting analysis at the Operations Division level based on the delivered report. Exponent of the whole preparation for the area "P" reduction is Head of Regional Office with its colleagues.

Additional control and collection of new relevant data is carried out by working group at the regional office level in accordance with prescribed standard operating procedures of "General Survey" and "Marking of Mine Suspected Area".

Based on the results of the comprehensive data analysis in MIS yielded by the working group at the regional office and the results of the parallel/comparative analysis of the Operations Division, the conclusion on area exclusion from MSA proposal is reached. The Regional Office, based on reached conclusion on completion of special criteria, elaborates the Proposal on area exclusion out of MSA and forwards it for verification to Operations Division or takes further steps in MSA reduction process according to SOP 01.04.

# 2 Terms and Definitions

Terms and definitions in SOP are compatible with international standards, which define terms and abbreviations in mine action (IMAS 04.10), and they are listed in SOP "General Survey" and "Technical Survey" and in the draft of the Original Croatian Standard, HRN 1129, *Humanitarian demining – Glossary – Terms and definitions.* 

# **3** Process of Area reduction in MSA

The process of area reduction in MSA will be carried out through following phases:

- 1. Planning of area reduction in MSA,
- 2. Preparation for reduction and comprehensive data analysis in MIS,
- 3. Creation of report and proposal for exclusion of areas and/or buildings out of MSA elaboration by the reporting party
- 4. Parallel/comparative analysis of the Report conducted by the Operations Division,
- 5. The Main Discussion on results of comprehensive analysis held and conclusions on results of comprehensive analysis reached of the area "P",
- 6. Additional control of data and collection of possible new data if it is assumed that data in MIS are not sufficient for reaching the final conclusion on the state of MSA,
- 7. Proposals for exclusion of areas and/or buildings in MSA and demining in function of reduction,
- 8. Certificate on exclusion of areas and buildings from MSA is issued

After selection of area "P" for reduction, a systematic data analysis in MIS is completed at two levels: **basic** regional office level and **comparative** based on delivered report at the Operations Division level.

# Parallel analysis (comparative analysis) at the Operations Division level is conducted in order to detect similarities and differences between analysis of the Head of the Regional Office and analysis of the "Department for Organisation and Analysis of General and Technical Survey".

After conducting mentioned analysis the Assistant Director for Operations convokes the Main Discussion in order to conciliate the analysis results, adopt the conclusion and guidelines for further work, or decision on reduction of the whole area in question or just a part of area "P" according to this SOP and SOP-u 0.1.01 (General Survey).

Based on conducted demining activities with function of reduction and additional analysis after completion of demining, the Head of the Regional Office adopts conclusion on the state of the area in question. The regional office elaborates the proposal to exclude the areas and/or buildings out of MSA or the demining project (mark: PR-RED-...).

By issuing Certificate on exclusion from MSA, in accordance with this SOP and SOP 01.01, the process of reduction in MSA ends and the local community is informed in writing on the new state of MSA within municipality and/or township.

#### Planning of Reduction in MSA

Planning of the reduction in MSA is based on the National Mine Action Strategy of the Republic of Croatia and Three Year Humanitarian Demining Plan (in further text referred to as Three Year Plan) that are the basis for the execution of mine action in certain period in the Republic of Croatia.

The Plan and Analysis Department based on Three Year Plan proposes to the CROMAC Director areas "P" for reduction in MSA in accordance with criteria for polygon category definition (Point 3.3.1 of this SOP). The Head of Plan and Analysis Department cooperates with Assistant Director for Operations, Head of Quality Assurance and Quality Control Department and with Heads of CROMAC Branch Offices.

After consultations and definition of plan of reduction, the CROMAC Director makes a Decision that adopts the Three Year Reduction Plan and delivers it to Operations Division and to the Head of the Branch Office that has jurisdiction over the MSA in question.

#### **Reduction Preparation and Comprehensive Data Analysis in MIS**

Activities and procedures necessary for realisation of reduction of the "P" area in MSA are as follows:

- Defining and choosing "P" area in MSA according to point 3.1 of this SOP
- Comprehensive analysis of the data in MIS,
- Drafting report,
- Comparative analysis for verification of the report and decision of the working group
- Main Discussion and adopting conclusions for further work

Complete preparation for reduction of "P" area and comprehensive analysis of the data in MIS for "P" area is conducted at the level of regional office and all the collected information for "P" area are consolidated with the aim to link mutually conditioned activities and data analysis.

Exponent of all the activities connected to reduction of "P" area is Head of the Regional Office and he compiles the result of the comprehensive analysis in a **Report** delivered to the Operations Division (Annex A of this SOP).

Based on the delivered **Report** of the regional office, Operations Division conducts **comparative analysis** and involves Department for Quality Assurance and Quality Control and internal supervisor from Director's office if required (Annex B).

Besides participation of employees of Department for Quality Assurance and Quality Control and internal supervisor from Director's office, the Main Discussion on comprehensive analysis and conclusions on results of comprehensive analysis of the area "P" in MIS, can convoke external experts for combat operations and persons who are familiar with the area in question.

During the **Main Discussion**, representatives of working teams – report results of comprehensive analysis of data from MIS for area to be reduced from MSA. Discussion is noted in official minutes (Annex E) and conclusion is adopted on reduction of "P"area.

Based on adopted conclusions on entire "P" area to be proposed for reduction or its parts including proposal for additional demining or/and survey in the function of reduction, the regional office continues with further activities according to this SOP and SOP 01.01.

Areas and buildings that fulfil criteria for reduction in MSA listed in this SOP and SOP "General Survey" should have precisely defined boundaries and area size with explanations on non-existence of mines.

#### Defining and Choosing "P" area for Reduction in MSA

Trough comprehensive inquiry in MIS, CROMAC's Plan and Analysis Department in cooperation with the regional offices, Operations Division and Department for Quality Assurance and Quality Control chooses "P" areas in MSA and categorises the areas. Priority areas for reduction in MSA are listed in Three Year Plan and are categorized as class A and class B. The rest of the areas are planned for reduction only as a part of extra task plan verified by the meeting of CROMAC's heads through Operative Activity Plan.

Based on the Three Year Plan, Plan and Analysis Department (Plan, Analysis and Sector Division), proposes to the Director of CROMAC "P" areas for reduction in MSA according to criteria mentioned in this point.

"P" area for reduction is divided in two main classes:

#### 1. Polygon of Class A

Polygons in MSA that fulfil the following criteria fall under this category:

- a) The frontline, or operational formation within which polygons are located was not relocated during war times;
- b) Polygon was categorized for survey during general survey;
- c) No data exists on mine contamination of the area, demining activities, or records on mine fields;
- d) Within the polygon there are no buildings (infrastructure facilities, construction buildings) that had to be defended;

- e) There are no records that mine incidents occurred involving people or animals on the polygon;
- According to tactics of war deployed-mine contamination in wider area is not plausible or mine contamination on the polygon is not very probable (no strategic reasons exist for the MSA to be mine contaminated);
- g) No demining or mine search activities were conducted on the polygon, its parts were not excluded from MSA because they were not set as priorities;
- h) Polygon is found in the Three Year Plan or borders it.

#### 2. Polygon of Class B

Polygons in MSA, which fulfil the following criteria, fall under this category:

- a) The frontline, or operational formation within which polygons are located, was not significantly relocated during war times;
- b) No data exists on mine contamination of the area, demining activities, or records on mine fields;
- c) There are no records that mine incidents occurred involving people or animals on the polygon;
- According to tactics of war deployed mine contamination in wider area is not plausible or mine contamination on the polygon is not very probable (no strategic reasons exist for the MSA to be mine contaminated);
- e) Polygon is partially searched for mines, excluded form MSA or/and transacted with demined roads, electric and telecommunication lines, forest clearings, houses, infields and agricultural land;
- f) In the searched areas of polygon there is no visible proof of existence of UXO;
- g) Minefields that had been completely removed were found in demined areas; on the borders of polygon in the radius of 50 meters, there is no reliable information on mine contamination.
- h) Polygon is found in the Three Year Plan or borders it.

During defining and choosing areas in the MSA for reduction in relevant municipality or town, the criteria of distance of the polygon from the line of trenches – line of operational formation - should be applied for more precision:

- 1. Polygons of first priority are those within 400 meters and more distance from the line of trenches
- 2. Polygons of second priority are those within 400-200 meters from the line of trenches
- 3. Polygons of third priority are those within 200-30 meters from the line of trenches
- 4. Polygons of fourth priority are those within 30-0 meters from the line of trenches

#### Comprehensive Analysis of the MIS Data

Comprehensive analysis of the MIS data for the area defined for reduction in the MSA is conducted at the level of regional office. It comprises all collected information for the relevant "P" areas with the aim of interlinking the mutually conditioned activities and data analysis.

Comprehensive analysis contains qualitative in depth analysis of collected data in order to define the areas for demining and reduction anew.

Comprehensive analysis refers to the following segments:

- Analysis of the war scene on the wider "P" area for reduction in MSA and placement of military formations (communication with commanding officers from the war and engineering officers)
- b) Analysis of the combat activities and placement of mine obstacles (terrain conditions and weather conditions) and technical equipment of sides at war
- c) Analysis of the entire mine situation, containing all the records of mine planting
- d) Analysis of the mine incidents in the wider area of the reduction project
- e) Analysis of all previous reports connected to the revision of the MSA, additional general surveys, and surveys for project preparations,
- f) Analysis of results of implemented demining projects and mine search which contain all records on demining
- g) Analysis of military topographic maps and
- h) Analysis of data collected trough interview with contact persons.

Head of Regional Office with his associates analyses overlapping of placements and activities, for relevant "P" area. They interlink and interpret data and reconstruct units of combat schedule and deployment of military formations taking in consideration the assessment and the status of mine records before and after demining or mine search activities.

All the relevant data collected during all surveys and final analysis are reviewed trough particularities of existing relevant documents, categorised and linked into logical information whole. Also, it involves observation of the terrain configuration and vegetation (inaccessible mountain and forest areas) in the service of tactics and logic used during placement of mine obstacles, in order to detect exact location of mine obstacles, and form conclusion whether the area in question is mine-contaminated or not.

Comprehensive analysis should draw information from the experiences acquired on the field, professional opinion and understanding information sources and area in which data were collected. Expert assessment of the precise positioning of mine records in real space (use of DOFP2 and 3D technology) is very important.

All the mentioned data are compared to previously known or unreliable data, taking in consideration analysis of mine records assessing of the state of mine records after activities of mine search and demining have been conducted.

Comprehensive analysis gives special attention to assessing the status of mine records after demining activities have been conducted in cooperation with Department for Quality Assessment and Quality Control.

#### Analysis of Topographic Characteristics

Reporter prepares comprehensive analysis of the type of terrain and soil, waterways and water surfaces, infrastructure, roads, paths, tracks and activities on the relevant area based on its understanding of the terrain and studying of natural and constructed objects on the topographic maps and ortophoto cartographic maps scale S 1:2 000 (DOP2-3D).

Analysis should include terrain and vegetation characteristics of the MSA, especially on the area of mountains, karst and river coasts that served as front lines of the parties at war.

#### Analysis of the War Scene on the Reduction Area in MSA

During analysis of the area to be reduced in MSA, the following analysis should be undertaken:

• Analysis of chronology of war activities and relocation of front lines;

- Analysis of front lines and objects in the function of defence operative placement of military formation
- Analysis of data collected trough interview with contact persons
- Analysis of engineer safeguard of military deployment
- Analysis of topographic military maps with schemes of and records of mine explosive obstacle of before and after war activities
- Analysis of topographic military maps using procedure of overlapping positions, placements and events

#### Analysis of Data on Mine Contamination and Demining

Result of analysis of collected information on mine contamination and demining is a clear and complete concept of the state on mine contamination and demining on the subject location (municipality, town, settlement, village, agricultural area, etc.) which clearly defines following elements:

- Status of records on mine explosive obstacles
- Status of records on mine explosive obstacles after demining
- Status of records on mine incidents
- Assessment of number of mines on the wider area of polygon for reduction
- Detected mine-explosive ordnance which were identified by general survey
- Detected mine-explosive ordnance which were not identified by general survey
- No evidence of mine incidents involving people or animals
- Using areas in MSA at own risk
- Mine removal by local population
- Removal of mines by representatives of Ministry of Internal Affairs
- Explosions of mines and other UXO while areas were on fire
- Other

#### Additional Data Control and Collecting New Information

Comprehensive analysis of data in MIS for reduction of area "P" in MSA can show that available data do not allow process of reduction to be continued, so that further field work is required as well as additional control of data and collection of potential new information.

Head of Regional Office organises additional control and collection of new information. Should a change of state in MSA occur (re-categorisation or inclusion of new area) relevant documentation has to be prepared according to SOP 01.01. and delivered to Operations Division for verification.

If ambiguities concerning the MSA still exist, upon request of Head of Regional Office, Assistant Director for Operations calls for Additional Discussion on state of affairs to reach conclusion for further work in order for the process of reduction of area "P" to be completed according to this SOP and SOP 01.01.

#### 4. Criteria for Reduction of Areas in MSA

Criteria for defining areas for reduction are confirmed trough procedure of analysis of all the relevant data collected in MIS of CROMAC. Trough interlinking data, conclusions are reached that no additional control of data is required.

"P" areas can be declared safe and reduced from the MSA without procedure of demining and additional control of data if the following criteria are fulfilled:

- 1. No records exist on mine fields, no information exist on mine incidents involving people or animals and there was no additional inclusions of areas in MSA;
- 2. No mine-explosive ordnances were detected and there is no proof of existence of mines (e.g. sticks for trip-wire activated mine, wire of trip-wire activated mine, parts of package, igniters, remains of explosive, etc.) on searched areas;
- 3. There are no fortification objects nor barricades that would indicate existence of mine-explosive ordnances;
- 4. On parts of polygon where targeted demining was conducted no mine-explosive ordnances were detected, and known m/p on border polygons are completely removed;

or

Trough systematic analysis and linking scanned topographic military maps using procedure of overlapping of position placements and events and there is no proof that area was in the midst of war activities.

or

Trough observation of the terrain configuration and vegetation (inaccessible mountainous and forest areas) in the service of tactics and logic used during placement of mines, it is concluded that there was no need to place mine obstacles and no signs of mine contamination exist. The same is applied to swamp areas and wetlands.

**or** Analysis of all information on mine contamination and demining and insight into status of records on mine-explosive obstacles eliminated suspicion on existence of mine danger.

### 5. Demining in Function of Reduction

Demining of areas in function of reduction in MSA, presents targeted examination of a part of an area defined as "P" in the relevant MSA of municipality/town.

Based on conclusion of working group, which contains final model of resolving mine situation of the MSA in question, relevant regional office fills in conclusions in MIS and GIS of CROMAC and creates project of demining in function of reduction.

Analysis, control and verification of the created project of reduction are completed by Operations Division according to SOP 02. "Designing - Elaboration of Designing Documentation" with mark: PR-RED- ... - ... - ... -

#### 5.1 Additional Analysis After Demining

After activities of demining were completed for the purpose of collecting additional information and based on obtained results (record on final analysis – created by Quality Control and Quality Assurance Department), regional office conducts additional analysis that aims to eliminate suspicion on existence of mines on the remaining part of "P" area for reduction in MSA.

Head of Regional Office makes final conclusion on remaining area for reduction with the following status:

- area for exclusion from MSA
- area for demining

When suspicion on existence of mines on the remaining part of "P" area for reduction in MSA is eliminated, regional office creates a proposal for exclusion of areas from MSA according to SOP 01.01. and sends it to Operations Division for verification.

According to point 1. and 2. in the Annex A of this SOP and SOP 01.01. Head of Regional Office proposes areas "P" for exclusion and/or demining in his report.

# 6. Exclusion and Inclusion of Areas from MSA and Issuing Certificate on Exclusion of Areas and Buildings from MSA

Reduction of areas in MSA of municipalities or cities is the next step after verification of proposal for exclusion delivered by the regional office. Operations Division verifies proposal, according to procedure established in SOP 01.01.

In the case when report and comparative analysis of data in MIS for area "P" prove no additional control of data is required (fieldwork), as specific criteria for defining areas for reduction according to point 4. of this SOP have been fulfilled, proposal for exclusion is being prepared on the level of regional office and sent for verification to Operations Division according to procedure established in SOP 01.01.

In the case when report and comparative analysis of data in MIS for area "P" prove additional control of data is required (fieldwork), because specific criteria for defining areas for reduction according to point 4. of this SOP have not been fulfilled, Head of Regional Office organises additional control and collection of new information. Should a change of state in MSA occur (re-categorisation or inclusion of new area) relevant documentation has to be prepared according to SOP 01.01. and delivered to Operations Division for verification. After priority demining works have been completed for reduction of "P" area in MSA and additional analysis completed, report and proposal are created for exclusion of "P" area from MSA on the level of regional office and sent or verification (comparative analysis) to Operations Division according to this SOP and SOP 01.01.

Exclusion and inclusion of areas from MSA and issuing Certificate on exclusion of areas from MSA is conducted according to Law on Humanitarian Demining (NN (National Gazette) 153/05, NN63/07 and 148/08), Book of Regulations on conduction of humanitarian demining operations NN 53/07 and 111/07 and SOP 01.01 "General Survey".

Support Division prepares CROMAC Certificates according to article 17. paragraph 2. Law on Humanitarian Demining (NN (National Gazette) 153/05, NN63/07 and 148/08) and timely informs municipalities and towns about it.

Issuing Certificate on exclusion of areas and buildings from MSA makes process of reduction of "P" area in MSA completed.

7. Annexes

Annex A



**REPUBLIC OF CROATIA** 

CROATIAN MINE ACTION CENTRE OPERATIONS DIVISION Class: Ref. no: Sisak,

# **REPORT ON COMPREHENSIVE ANALYSIS OF DATA IN MIS**

#### 1. GENERAL DATA

| MUNICIPALITY/TOWN             |                   | COUNTY     |                        |  |  |  |
|-------------------------------|-------------------|------------|------------------------|--|--|--|
| Cartographic data             | TK 1:25000        | HOK 1:5000 | DOF2                   |  |  |  |
| Decision of the director:     | CI:<br>Ref. No.:  |            | I                      |  |  |  |
| IMPLEMENTATION OF<br>ANALYSIS | Beginning<br>date | End date   | No. of<br>working days |  |  |  |
| Preparations for analysis     | Beginning<br>date | End date   | No. of working<br>days |  |  |  |
| Data analysis                 | Beginning<br>date | End date   | No. of working<br>days |  |  |  |
| Drafting report               | Beginning<br>date | End date   | No. of working<br>days |  |  |  |

#### 2. ANALYSIS OF WAR ACTIVITIES IN WIDER AREA OF REDUCTION OF MSA

| Analysis of chronology of war activities and rele                                    | ocation of line of fire                            |
|--|--|
| Analysis of defence lines and objects in the fun<br>formations                       | ction of defence – operative placement of military |
| Analysis of data collected trough interview with                                     | contact persons                                    |
| Analysis of engineer safeguard of military deplo                                     | pyment   |
| Analysis of topographic military maps with school of before and after war activities | emes of and records of mine explosive obstacles    |
| Analysis of topographic military maps using procedure of overlapping positions,      | List of topographic military maps                  |
| placements and events  | 1.<br>2.<br>3.                                     |
| Annex 1: Cartographic annexes (TK 25 and VK 25)                                      |  |

#### 3. ANALYSIS OF DATA ON MINE CONTAMINATION AND DEMINING

#### 3.1. Status of record on mine-explosive ordnance on wider area of reduction of MSA

| No.    | STATUS OF RECORD OF MEO                                 | No. of<br>records | TYPE OF MEO |    |    | Assessment of number<br>of mines |    |       |
|--------|---|-------------------|-------------|----|----|----------------------------------|----|-------|
|        |   | TECOTUS           | Mix         | AT | AP | AT                               | AP | TOTAL |
| 1.     | MEO that completely within the borders of MSA reduction |                   |             |    |    |                                  |    |       |
| 2.     | "Cut MEO" demined up to the<br>border of MSA reduction  |                   |             |    |    |                                  |    |       |
| 3.     | "Cut MEO" that crosses the border<br>of reduction       |                   |             |    |    |                                  |    |       |
|        | nined in the wider<br>f MSA reduction                   |                   |             |    |    |                                  |    |       |
| Inform | Information on MEO records outside MSA                  |                   |             |    |    |                                  |    |       |
| 1.     | MEO demined (or removed) by<br>military units           |                   |             |    |    |                                  |    |       |
| 2.     | MEO demined (or removed) by UN peace-keeping forces     |                   |             |    |    |                                  |    |       |

| 3. | MEO demined (or removed) by special police of MIA                                  |  |  |  |  |
|----|--|--|--|--|--|
| 4. | MEO demined (or removed) by<br>"AKD Mungos" and other companies<br>prior to CROMAC |  |  |  |  |
| 5. | MEO demined (or removed) by<br>unknown persons                                     |  |  |  |  |
| 6. | MEO demined (or removed) under<br>CROMAC supervision                               |  |  |  |  |
|    | lemined or removed outside MSA in<br>r area of MSA reduction                       |  |  |  |  |
| 7. | MEO records not relating to<br>reduction area                                      |  |  |  |  |
| 8. | MEO records of undefined status  |  |  |  |  |

#### 3.2. Status of mine incidents record

|     | STATUS of the MI                                      |     | Type of a | activated m | Marks of the MI areas |  |
|-----|---|-----|-----------|-------------|-----------------------|--|
| No. | RECORD  | No. | AT mine   | AP mine     | UXO                   |  |
| 1.  | MI within borders of<br>defined MSA reduction<br>area |     |           |             |                       |  |
| 2.  | MI outside MSA<br>reduction area (safe<br>area)       |     |           |             |                       |  |
| 3.  | MI records not relating to MSA reduction area         |     |           |             |                       |  |
| 4.  | MI records of undefined status                        |     |           |             |                       |  |

# 3.3. Assessment of mine number in the wider reduction area

| ANTI-TANK MINES |               |                |                     | ANTI-PERSONNEL MINES |                |                |                     |  |
|-----------------|---------------|----------------|---------------------|----------------------|----------------|----------------|---------------------|--|
| No.             | Type of mine  | No. of<br>mine | Propor<br>tion<br>% | No.                  | Type of mine   | No. of<br>mine | Proporti<br>on<br>% |  |
| 1.              | TMA-1         |                |                     |                      | PMA-1          |                |                     |  |
| 2.              | TMA-2         |                |                     |                      | PMA-2          |                |                     |  |
| 3.              | TMA-3         |                |                     |                      | PMA-3          |                |                     |  |
| 4.              | TMA-4         |                |                     |                      | PMR-2A         |                |                     |  |
| 5.              | TMA-5         |                |                     |                      | PMR-3          |                |                     |  |
| 6.              | TMM-1         |                |                     |                      | PROM-1         |                |                     |  |
| 7.              | TMRP-6        |                |                     |                      | MRUD           |                |                     |  |
| 8.              | Unknown       |                |                     |                      | unknown        |                |                     |  |
| Т               | otal AT mines |                | 100                 |                      | Total AP mines |                | 100                 |  |

Annex 2: Cartographic overview of MEO record and MI in wider reduction area (TK 25, HOK 5 and DOF2)

# 4. ANALYSIS OF ALL PREVIOUS REPORTS ON ADDITIONAL GENERAL SURVEY (AGS) IN THE WIDER MSA REDUCTION AREA

| Mark of previous AGS in a wider area | Area size of<br>AGS (m²) | Proportion of<br>wider MSA<br>reduction area<br>% | No. of areas |
|--------------------------------------|--------------------------|---|--------------|
|                                      |                          |   |              |
|                                      |                          |   |              |
|                                      |                          |   |              |
| Total                                |                          |   |              |

# 5. ANALYSIS OF RESULTS OF CARRIED OUT DEMINING PROJECTS AND SURVEYS IN WIDER MSA REDUCTION AREA

| No. |                   | AREA | Findings according to confirmations |         |     |  |
|-----|-------------------|------|-------------------------------------|---------|-----|--|
|     | CONFIRMATION MARK | ANEA | AT mine                             | AP mine | UXO |  |
| 1.  |                   |      |                                     |         |     |  |
| 2.  |                   |      |                                     |         |     |  |
| 3.  |                   |      |                                     |         |     |  |
| 4.  |                   |      |                                     |         |     |  |

Annex 3: Cartographic overview of demined and surveyed areas from positions of mines and UXO detection (TK 25, HOK 5 and DOF2)

#### 6. INFORMATION ON CONTACTED PERSONS THAT ARE IN THE MIS EVIDENCE

|     | Name and | Wartime   | Employment       |              | Contact | Acqui | red data |
|-----|----------|-----------|------------------|--------------|---------|-------|----------|
| No. |          | telephone | Obstacle<br>mark | For "P" area |         |       |          |
| 1.  |          |           |                  |              |         |       |          |
| 2.  |          |           |                  |              |         |       |          |
| 3.  |          |           |                  |              |         |       |          |
| 4.  |          |           |                  |              |         |       |          |
| 5.  |          |           |                  |              |         |       |          |
| 6.  |          |           |                  |              |         |       |          |
| 7.  |          |           |                  |              |         |       |          |
| 8.  |          |           |                  |              |         |       |          |
| 9.  |          |           |                  |              |         |       |          |
| 10. |          |           |                  |              |         |       |          |
|     |          |           |                  |              |         |       |          |

#### 7. CONCLUSIONS ON COMPREHENSIVE ANALYSIS OF DATA IN MIS

# Annex 4: Cartographic image of model for resolving mine situation on the wider area of reduction (TK25 , HOK 5 and DOF2)

#### ANALYSIS CONDUCTED BY:

| 1                          |  |  |
|----------------------------|--|--|
|                            | (First and last name, position, signature) |  |
|                            |  |  |
| 2                          |  |  |
|                            | (First and last name, position, signature) |  |
|                            |  |  |
| 3.                         |  |  |
|                            | (First and last name, position, signature) |  |
| 4. HEAD OF REGIONAL OFFICE |  |  |
|                            |  |  |
|                            |  |  |
|                            |  |  |

(First and last name, signature)

#### HEAD OF REGIONAL OFFICE

Annex B



#### **REPUBLIC OF CROATIA**

CROATIAN MINE ACTION CENTRE OPERATIONS DIVISION Class: Ref. no: Sisak,

| SUBJECT  | Analysis and control of regional office report<br>reduction | from the project of |
|--|---|---------------------|
| MUNICIPALITY/TOWN  |   |                     |
| MARK OF THE REPORT ON<br>SUBJECT OF REDUCTION                    |   |                     |
| CLASS AND REFERENCE<br>NUMBER OF THE DECISION OF<br>THE DIRECTOR |   |                     |

| RESULTS OF COMPARATIVE ANALYSIS                                       |     |    |
|---|-----|----|
| 1. ANALYSIS OF WAR ACTIVITIES ON WIDER AREA OF REDUCTION IN MSA       | YES | NO |
| DESCRIPTION:  |     |    |
| 2. ANALYSIS OF DATA ON UXO  | YES | NO |
| DESCRIPTION:  |     |    |
| 3.ANALYSIS OF MINE INCIDENTS  | YES | NO |
| 4. ANALYSIS OF CONFIRMATIONS ON MINE CLEARANCE / CERTIFICATES ON NON- | YES | NO |
|   |     |    |
| DESCRIPTION:  |     |    |
| 5. ANALYSIS OF PREVIOUS GS and AGS                                    | YES | NO |
| DESCRIPTION:  |     |    |

# CONCLUSION TO THE ANALYSIS AND CONTROL

# Annex: Cartographic draft (TK 25, HOK 5 and DOF 2)

| 1.                                   |  |  |  |
|--------------------------------------|--|--|--|
|                                      | (First and last name, position, signature) |  |  |
| 2                                    |  |  |  |
|                                      | (First and last name, position, signature) |  |  |
|                                      |  |  |  |
| 3                                    |  |  |  |
|                                      | (First and last name, position, signature) |  |  |
|                                      |  |  |  |
| 4. ASSISTANT DIRECTOR FOR OPERATIONS |  |  |  |

(First and last name, signature)

Assistant director for operations

# I. Conclusion – proposal for polygon of class A

1. Polygon "P" of class A 400 meters and more distance from the line of trenches – conclusion can be:

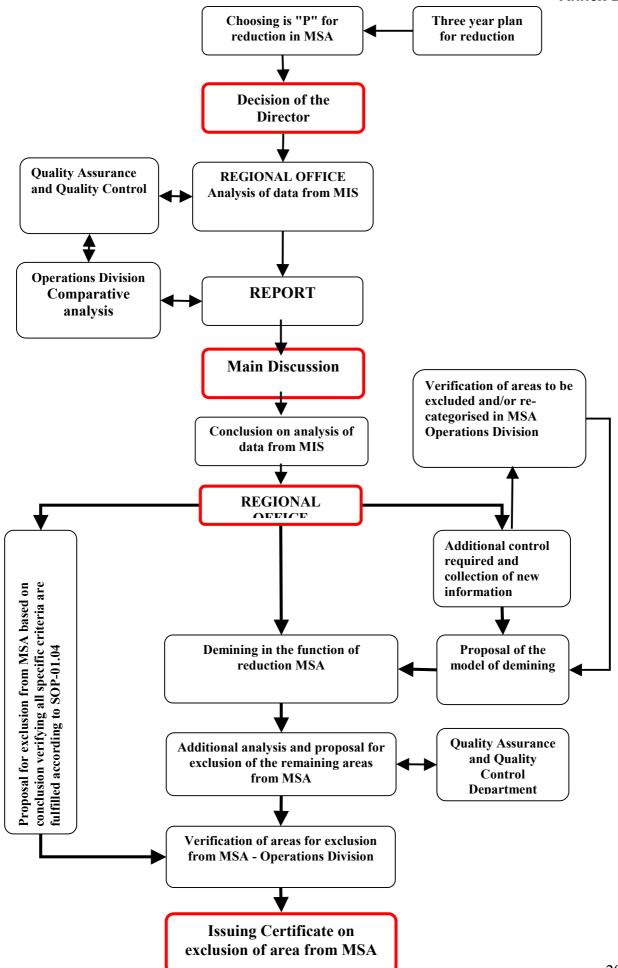
- Exclusion
- Additional General Survey
- Demining by scout trails ( up to 30% of size of polygon)
- 2. Polygon "P" of class A 400-200 m from the line of trenches conclusion can be:
  - Exclusion
  - Additional General Survey
  - Demining by scout trails ( up to 30% of size of polygon)
- 3. Polygon "P" of class A 200-30 m from the line of trenches- conclusion can be:
  - Exclusion
  - Additional General Survey
  - Demining by scout trails ( up to 30% of size of polygon)
- 4. Polygon "P" of class A 0-30 m from the line of trenches- conclusion can be:
  - Exclusion
  - Demining by scout trails ( up to 50% of size of polygon)

# II. Conclusion – proposal for polygon of class B

1. Polygon "P" of class B 400 meters and more distance from the line of trenches – conclusion can be:

- Exclusion
- Additional General Survey
- Demining by scout trails ( up to 30% of size of polygon)
- 2. Polygon "P" of class B 400-200 m from the line of trenches conclusion can be:
  - Exclusion
  - Additional General Survey
  - Demining by scout trails ( up to 30% of size of polygon)
- 3. Polygon "P" of class B 200-30 m from the line of trenches- conclusion can be:
  - Exclusion
  - Additional General Survey
  - Demining by scout trails ( up to 30% of size of polygon)
- 4. Polygon "P" of class B 0-30 m from the line of trenches- conclusion can be:
  - Exclusion
  - Demining by scout trails ( up to 50% of size of polygon)





**Duration** 



Start: End:

Date:

Place:

# Main Discussion – minutes

| Meeting led by: | Minute |
|-----------------|--------|
| weeting led by. | taker: |

#### Present at the meeting:

| No. | First and last name | Function |
|-----|---------------------|----------|
|     |                     |          |
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|     |                     |          |

#### Elements of the agenda

#### Agenda / exponent

- Report on comprehensive analysis of data from MIS Head of Regional Office
- Results of comparative analysis representative of Operations Division
- o Discussion on presented data
- o Adopting conclusion on procedure of reduction
- 0

# Other information

Observers:

CONCLUSIONS WITH FINAL PROPOSITION

REMARK: Proposal should contain descriptive and should be displayed on the maps scale: 1: 2500, 1: 5000 and on **DOF**.

Composed by:

Minutes approved by:

In Sisak,