



INTERNATIONAL TRUST FUND
for Demining and Mine Victims Assistance



Deployment of the Decision Support System for Mine Suspected Area Reduction
Uporaba sustava potpore odlučivanju u redukciji minski sumnjive površine

Final report of the workshop

Introduction and training in Decision Support System for mine action managers

Bjelolasica Croatian Olympic resort, from 26. to 31. January 2009.

Workshop is the activity of the project "Deployment of the Decision Support System for Mine Suspected Area Reduction" submitted to US Department of State Bureau of Political-Military Affairs Office of Weapons Removal and Abatement, by International Trust Fund for Demining and Mine Victims Assistance (ITF), Zabrva 12, 1292 Ig, Slovenia; realized by CROMAC- Centre for Testing, Development, Training Ltd., Sortina 1d, 10000 Zagreb, Croatia.

OBJECTIVE OF THE WORKSHOP

To inform and train SEEMACC mine action managers in use and deployment of the Decision Support System for Mine Suspected Area Reduction. The workshop consists of two parts:

- *Introduction in Decision Support System (DSS)* for mine action managers (one day),
- *Training in Decision Support System (DSS)* for mine action managers (additional five days).

Introduction in DSS for mine action is aimed for high and medium level management of the mine action centers.

Training in DSS for mine action is aimed for management at the level of the strategic planning, operations, projects in the mine action centers.

AGENDA OF THE WORKSHOP

Day 1 General assessment of the needs and concept of Decision Support System (DSS) for Mine Suspected Area Reduction

Day 2 Overview of a the operational features of a DSS for use in mine action

Days 3-5 Application of DSS on examples

Day 6 Evaluation and conclusions

Detailed agenda is in the document '0-Administrative / WS_PROGRAM__M.Bajic.doc'.

LIST OF PARTICIPANTS

Yann Yvinec (RMA), Shamil Yagizarov (ANAMA), Adil Aslanov (ANAMA), Tim Lardner (GICHD), Asa Wessel (GICHD), Milad Ćerimagić (HQ EUFOR, Sarajevo), Dimče Joševski (Direk. za zaštita i spas.), Branislav Krljaš (BH MAC), Edin Bijedić (BH MAC), Sali Salihi (AMAE), Slađana Košutić (Cent. za razmin. Srbije), Miroslav Pisarević (Cent. za razmin. Srbije), Ćedo Matić (HCR), Tomislav Cvetko (HCR), Milan Bajić (HCR-CTRO Scientific Council, Faculty of Geodesy University of Zagreb), Hrvoje Gold (HCR-CTRO Scientific Council, Faculty of Transport and Traffic Sciences, University of Zagreb), Andrija Krtalić (Faculty of Geodesy, University of Zagreb), Tomislav V. B. Vondraček (HCR-CTRO).

Goran Gačnik (ITF), Nataša Uršič (ITF), Roman Turšič (ITF), Oto Jungwirth (HCR), Davor Laura (HCR), Nikola Pavković (HCR-CTRO).

Contact data of participants are in the document '0-Administrative / 'Sudionici – Participants.xls'.

EVALUATION OF THE WORKSHOP

During the workshop the Decision Support System (DSS) for Mine Suspected Area Reduction was presented and participants were trained in its use and operational deployment in the mine action management (planning, revision of the mine suspected areas, risk management etc.). Presentations are in the directory '1_WS_Bjelolasica_2009_Presentations'. Participants performed all the main steps of the danger map production (basic element of DSS) and airborne surveillance mission planning activities on their proposed or simulated data of mine suspected area. Participant's homeworks are in the directory '2_WS_Bjelolasica_2009_Exercises'.

CONCLUSIONS

1. All participants of the workshop agree that the presented Decision Support System for Mine Suspected Area Reduction based on generic SMART methodology and the airborne survey developed in Croatia has the potential to be applied for survey of mine suspected areas where all the conventional means of surface survey are not convenient to use (mountains, forests).
2. Due to the different mine problems in Albania (single mines restricted to a few mountainous locations), Macedonia (mines from I and II World War) and Serbia (UXO problem from NATO bombing 1999) respective representatives state that now there is no demand for the application of the presented system in their countries.
3. Relating the similarity of the mine problem in Croatia to the mine problem in Bosnia and Herzegovina and Azerbaijan representatives from BH MAC and ANAMA agree that the presented system has the potential to solve the considered mine problem in their countries.

4. Bosnia and Herzegovina (BH MAC) is the primary candidate for the implementation of the system in the form of the pilot project regarding the similarity of the terrain, military doctrine and availability of data and information (mine field records, maps of military activities, etc.).
5. Before the start of the project MAC has to define and propose the list of the mine suspected areas suitable for the application of the system.
6. In the preparation stage of the project the following data should be obtained:
 - Aerophoto images from years before the beginning of the military activities (1991, 1992, 1993)
 - Aerophoto images and digital orthophoto from years after the military activities (1996, 1997,)
 - Data and information from Mine Information System (MIS)
7. In the project team beside the mine expert the person educated to work as the mine scene interpreter is necessary to be assured.
8. The HCR-CTDT team will provide the support to the MAC team in preparation of the project and education of the mine scene interpreter.
9. All participants of the workshop, in particular representatives from BH MAC, BH EUROFOR and ANAMA, are invited to work together with HCR-CTDT in the preparation and realization of the airborne surveillance mission on one of the mine suspected area proposed in the Croatian ITF project.
10. After the end of the project in Croatia all participants of the workshop will receive the final report.