Report of the Focus Group Workshop on Victim and Casualty Data Collection and Support Requirements for IMSMA v. 4

Workshop hosted by the Mine Action Information Center at James Madison University on behalf of the IMSMA Program Manager of the Geneva International Center for Humanitarian Demining

James Madison University
Harrisonburg, Virginia
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Geneva International Centre for
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Centre International de
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Introduction

The Mine Action Information Center (MAIC) at James Madison University (JMU) hosted a focus group workshop on 15-16 August 2005 in support of the development of version 4 of the Information Management System for Mine Action (IMSMA). Mr. Alan Arnold, the IMSMA program manager, tasked the MAIC to organize and host the workshop in order to bring together subject matter experts in the fields of Mine Risk Education (MRE) and Mine Victim Assistance (MVA). The objective was to elicit, categorize and record comment on and suggestions for the proposed design of Victim and Casualty Data Collection and Analysis modules for IMSMA.

This report presents the proceedings of the two-day workshop held on the JMU campus in mid-August 2005. It includes a narrative summary of the discussions that ensued during the workshop and a list of recommendations agreed to by the participants (see p. 4). It is hoped that these recommendations, and the concerns and perspectives of this group of field experts, will help inform the IMSMA development team as it undertakes the design of the modules related to landmine casualties, including Mine Risk Education and Mine Victim Assistance.

The report's appendices provide supplementary information related to the workshop, such as the list of participants, the meeting agenda, and information distributed to the participants in advance of the workshop. The latter information was sent out to the participants along with a draft agenda so that they could reflect on the tasks before the start of the focus group and come prepared to discuss the pertinent issues in a focused way.

This report was compiled by Suzanne Fiederlein, workshop project manager for the MAIC. Draft versions of the "Focus Group Recommendations for Enhancements to IMSMA" and the "Summary of Workshop Proceedings" were distributed to the participants for their review and comment before final editing and inclusion in this report. As a result, they reflect the views of the group as expressed during the workshop and in the e-mail exchanges among the group in the weeks following the meeting. The MAIC and GICHD would like to thank the participants for their time and efforts in support of this workshop.

Focus Group Recommendations for Enhancements to IMSMA

1. Provide ability to import and export data to other database systems
2. Provide enhanced geo-spatial imaging of data – ability to view layers of various types of data
3. Provide data analysis capability – including univariate and bivariate analysis, graphing, pivot tables (in addition to geo-spatial representation of data)
4. Project Monitoring and Impact Analysis -- Provide ability to monitor activities and their impacts over time – both MRE projects (include KAP data) and VA services (monitor indicators); Provide ability to track individual survivors and analyze victim profiles
5. Create a separate supplementary Victim Assistance element that can function as a "plug in" and be shared with other agencies/NGOs; and develop generic templates, based on similarities among existing victim assistance databases such as the Cambodia Mine Victim Information System (CMVIS), the UNICEF socio-economic database, and the one developed by the Azerbaijan National Agency for Mine Action (ANAMA).

Summary of Workshop Proceedings

Day One – Opening Discussion and IMSMA Presentation

Suzanne Fiederlein, the workshop coordinator for the MAIC, welcomed the participants and opened the workshop with introductions. Alan Arnold, Project Manager for the Information Management System for Mine Action (IMSMA), then outlined the purpose of the workshop. Dennis Barlow, Director of the MAIC, followed with a welcome to the JMU campus.

The purpose of the workshop is to help the GICHD outline the design for the updated version of the software so that it best meets the needs of mine action. The basics of the new IMSMA software have already been developed, and a first release of the system is slated for September. However, development will continue on supplemental components, while the first release is field tested and revised, as needed.

It is hoped that the new version will be more useful in the field through the incorporation of improved data collection functions. As data collection is addressed in the system core the focus of this workshop should be on information analysis and decision support. The new version is highly customizable, providing the ability to collect any data possible, in any language and for any location. Users will be able to design their own forms and reporting formats. The new version also uses a distributed data management scheme. Every entry can be aggregated or looked at individually. The new system focuses on the operations manager as user instead of the Information Technology staff.

Questions to be answered: What decisions need to be made? How to make them? What are relevant facts? How sort them? The goal of the workshop is to answer these questions, particularly as they relate to Mine Risk Education (MRE) and Victim Assistance (VA).

IMSMA 4.0 Presentation

After a short break, Alan Arnold and Noah Klemm (from FGM, Inc. – the GICHD sub-contractor for the IMSMA project) described and demonstrated the new IMSMA version 4. The new version has some fundamental differences from the earlier versions of IMSMA.

The new system is written in Java and is compatible with a variety of operating systems. It no longer requires the use of Microsoft Office and the database used is not Microsoft Access. The new system provides an improved user interface, updated and improved language support, better output and reporting, and contains a number of elements that lay the foundations for future enhancements and upgrades.

One of the biggest and most quickly apparent changes in the updated IMSMA is the integration of the Geographic Information System (GIS) component into the system. This can be seen in the user log-on screen, which is centered on an area map. The map and system gazetteer are used as the basis for navigation through the database.

All data in the updated IMSMA is organized around the newly defined concept of "location". A "location" can be seen as a work area or area of common interest. All mine action objects and activities are tied to a "location" in the new system. This includes hazards, hazard reductions, quality assurance activities, accidents/victims and MRE data. Once a geographic area is selected, all the "locations" within that area along with the activities and objects associated with them appear and are indicated on the map with icons. The data base content associated with each location is based on the field reports that are stored in the system. In order to improve the recognition of individual objects on the map a new symbology set was developed as part of the IMSMA 4.0 design process; it includes well over 100 individual icons, the most important ones being for hazards, hazard reduction, accidents, and MRE activities.

Another concept basic to the new IMSMA is "current view"; this feature permits a user to view all the information in the system about a location as of a particular date. Unlike V3.X of IMSMA the new system allows for the storage and review of multiple reports associated with a single location. Users can then select the point in time they would like to see and all data available at the specified time is made available. This makes it possible to view one field report or the cumulative data entered for a location over time. This should make it much easier to monitor the results of mine action activities over time.

After becoming familiar with the new IMSMA, participants held a question and answer session. The following information is based on those responses. Landmine Impact Survey (LIS) data will be integrated into the system. All data in an existing IMSMA database will be transferred to the new system when it is installed. Adding and defining themes is easily done within the new system. The focus of the system is to provide analysis and decision support tools that are easy to use for operational users. Several participants noted the lack of analytical capabilities in the current version of IMSMA. One task of the focus group was to identify the most desired analytical functions to include in the new version.

Afternoon Session: Focus on Mine Risk Education

After lunch, the discussion moved to MRE and how the new IMSMA should support this area of mine action. Noah Klemm raised the issue of MRE Needs Assessments, which are based on answering the following questions regarding landmine contamination: who (who is at risk?), what (from what type of munitions? what is the pattern of contamination and the context of the fighting?), where (where does the threat exist?), when (date and time of day of accidents, season of year), and why (what was individual doing when accident occurred?). The final product desires to turn raw data into useful information so it can serve as an effective management tool. The participants generally agreed that being able to answer these kinds of questions and identifying patterns in the data are important for operational planning.

Noah Klemm inquired about the importance of including a 'what if' tool based on assumptions. The group appeared to agree that this would be helpful, but they raised a number of other types of information they need and do not now have, including a capacities assessment to determine media outlet best suited for MRE, a spatial element utilized to plan

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refugee and IDP return, and an element mapping the coverage of nomadic groups. The participants also identified the need for a means to record KAP (Knowledge, Attitudes and Practices) survey results (pre-testing as well as later testing) and to monitor behavioral changes linked to MRE activities.

There was considerable support for the inclusion of a geo-spatial analytical capability. Several participants discussed the importance of being able to look at a certain place on a map and finding the location of hazardous areas and accidents as well as the MRE activities that are taking place and by whom, and who the risk takers are in that area. Layers of details should be visible on the map. The option to select area specific factors would enhance the ability to prioritize based on the output of the map. The map would assist in soliciting funding support for MRE activities – it can demonstrate visually the nature of the problem and the need for MRE programs.

It was noted that the output information provided by IMSMA drives risk reduction, but the focus of MRE is prevention. IMSMA pertains to prevention by determining what kinds of activities to perform and where they are to be performed, and planning and monitoring the activities. It is important to be able to measure the relative effectiveness of various activities or at least be able to see the various outcomes of different activities.

It was decided that a costing element might be useful in donor reports. However, a Cost-Benefit Analysis feature is not yet needed as an integral part of IMSMA. The consensus at the close of the day was that the previous IMSMA was too complicated and several elements need to be added to improve the capacity for analysis of data. In particular, participants identified the need for basic univariate or descriptive statistical analysis and bivariate analysis (cross tabulations). If IMSMA could help users visualize data better, by effectively mapping it and presenting it in tables and graphs, that would be a big improvement.

Day Two – Morning Session: Focus on Victim Assistance

Dr. Fiederlein opened the session devoted to a consideration of information management needs of those working in the field of Victim Assistance with a review of the recommendations resulting from the MAIC's research project published in 2004.[1] Two recommendations she emphasized in the context of the workshop were:
1. Bring together stakeholders of VA programs and draft national protocols for managing/sharing data
2. Develop a supplemental VA functionality in addition to core data focusing on accidents and casualties (victim surveillance).

The topic temporarily shifted to the operability of IMSMA and plans for training mine action staff to use the new IMSMA. Alan Arnold identified three training packages offered by the GICHD in support of the release of the new IMSMA:

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[1] Mine Action Information Center, *Enhancement of Casualty Data Collection and Management*, A report submitted to the US Department of State PM/WRA, 30 June 2004.

1. Training provided with no reference to IMSMA specifically; focused on information management and the basic concepts involved with managing information
2. Operations-based training: relating the principles of information management covered in the introductory course to operations specifically associated with mine action; focus on clearance activity
3. On-site training: "How to" training on the physical use of the software in the context of a specific program's requirements

The focus group participants most directly involved in mine victim assistance activities brought the discussion back around to the data requirements of victim assistance (or victim "support") programs. Functions needed in IMSMA relating to victim assistance include: accident records, with some core data on the victims, including socio-economic situation, and the ability to monitor change in areas such as medical and rehabilitation care provided, training received, and other specific indicators identified by service providers. Jane Brouillette noted that the number of indicators is actually quite small but they have proved to be quite useful for monitoring the impact of services. She will provide a list to FGM.

Focus group members pointed out that in the MAIC study cited above, nearly two-thirds of survey respondents felt that victim data in IMSMA currently does not adequately cover MRE or VA. Of those respondents who felt this way, almost 90% thought that a supplemental VA database was a good idea. There needs to be more information collected on the impact of services on individual lives. Support also was voiced for the concept of 'plug-ins' for IMSMA that would allow for data exchange with other actors in the disability services community, including government ministries and NGOs. The group agreed that it was important for data to be transferred easily between an IMSMA database located at a MAC or NMAA and separate databases located in other agencies (relevant government ministries, non-governmental organizations, international organizations, etc.).

The focus group participants spent some time debating the role of mine action in victim assistance, that is, whether the MACs and NMAAs should be involved in collecting and managing data about victims beyond the basic accident/victim surveillance required to support clearance and MRE activities. Several members felt strongly that the MACs and NMAAs should not being dealing with more extensive victim assistance data, that this is more properly the realm of other national authorities such as ministries of health.

Other members strongly believed, citing the UN Sectoral Policy on Victim Assistance, that there is a role for MACs and NMAAs to play and that mine action centers hire Victim Assistance Focal Points. They also reminded the rest of the workshop participants that the Ottawa Convention and the Nairobi Action Plan require the Member States to provide assistance to victims. The role to be played by a MAC/NMAA might be limited, they noted, if other agencies and ministries are able to provide the needed services, but it still has a certain coordination and advocacy role that warrants data collection, especially if insufficient data collection is taking place in the country. Additional information on mine victims will assist in identifying their needs, planning effective victim assistance strategies and programs, and raising funds from donor countries.

Getting back to the question of what types of decision support analysis could IMSMA provide in support of mine victim assistance, Jane Brouillette stated that MACs/NMAAs provide the following support services on behalf of landmine victims:

- Work with multiple government ministries (e.g., health, social welfare, education) to identify capabilities and gaps in them and how to fill the gaps (capacity building role)
- Advocate for survivors and persons with disabilities as well as advocate for the rights of survivors within the larger disability community (advocacy role)

In conclusion, information is needed to help identify what services are being provided to whom and what services are lacking, as well as what services are being provided by which organizations or ministries. It is necessary to track the services being provided to each survivor as well as to coordinate the provision of services offered by different entities and identify gaps in services that need to be filled.

FGM staff, acknowledging that IMSMA can play a role in support of data management for victim assistance, asked if there were some sub-groupings of data elements that can be identified. The following sub-groupings, based on the Nairobi Action Plan and a project of the Victim Assistance Working Group to find out how data on victims is being collected, were identified:

-Laws and public policies
-Economic and social integration
-Psychological rehabilitation
-Physical rehabilitation
-Emergency and on-going medical care
-Understanding the extent of the challenge

In addition to a monitoring function, IMSMA should provide certain reporting capabilities for victim assistance, including those that allow reports on the following information:

- Government reporting requirements under the Ottawa Convention
- Provision of emergency medical care
- Access to rehabilitation services
- Access to and use of equipment
- Access to psycho-social rehabilitation services
- Victims' economic situation or job
- Victims' education
- National disability laws and policies

The morning session ended with instructions to the participants to break into small groups and develop a list of the five to seven most important decision support features to add to IMSMA for MRE and VA.

Afternoon Session: Group Recommendations

After lunch, the group was introduced to a draft data collection form developed at a recent epidemiology workshop sponsored by UNICEF and the CDC. The form provided an example of the types of supplemental data about victims that might be collected. Julien Temple of UNICEF and Oleg Bilukha of the CDC both cautioned that the form was a draft only and not for public dissemination.

Hanoch Barlevi next demonstrated a tool based on Microsoft Excel Pivot Tables for displaying data that was developed in Sri Lanka. A staff member experienced with Excel developed the program. The focus group members were impressed with the graphic displays of data and felt such a feature imbedded into IMSMA would be most useful. The group definitely supported the incorporation of an expanded data analysis feature into the new IMSMA.

The small groups of participants then shared their lists of decision support features most important to add to IMSMA.

Jane Brouillette, Shaza Ahmed, and Akiko Ikeda:
1. Develop 4-5 VA core elements. Add this to the core of IMSMA
2. Separate accident reports and VA reports/forms
3. Develop a supplementary VA element. It could be part of or separate from IMSMA and divided into plug-ins.
4. Graphic, pivot table, and geo-spatially based capabilities for analysis and reporting purposes
5. Export/Import capabilities for IMSMA data
6. Ability to track individual survivors
7. Develop pilot project testing use of core & supplementary elements

Sebastian Kasack and Jenny Reeves:
1. Enhanced mapping - add information on roads, security, schools, clinics and additional activities
2. Incorporate KAP data - a tool for monitoring & establishing benchmarks
3. Add other data on risk reduction, such as water sources, land use, population movements, etc. (not just MRE activities)—layers of geo-spatial information
4. Victim profiles
5. Ability to compare victim profiles, MRE activities, and KAP data (identify relationships)
6. Ability to compare data in two or more countries (aggregate data)

Oleg Bilukha:
1. Provide capability to conduct basic analysis of data
2. Ability to do cross tabulations
3. Ability to subset the data
4. Simplify graphing capability; be able to demonstrate data using circle graphs and bar charts

5. Ability to import results of analysis onto map
6. Provide guidance for conducting basic analysis
7. Ability to join multiple tables and explain to users what the relationships are and how they can use these relationships

Hanoch Barlevi, Julien Temple and Orlaith Gallagher:
1. Distinction between local needs assessment and nationwide needs assessment
2. Local needs assessment: village profiles, community priorities, village and community mapping, community liaison, risk assessment (sectoral & mine action) [qualitative information]
3. Impact Analysis, Monitoring Capability – ability to track behavioral change, to link initial assessment (KAP) with later changes
4. Analysis tool for activities being conducted
5. Ability to do analysis of victim profiles
6. Ability to support project evaluation, tasking, planning and prioritization

Alan Arnold closed the meeting with words of thanks to the participants and JMU's MAIC for hosting the event. He then outlined the future plans for IMSMA:

- IMSMA version 4 will be distributed to users in three waves, with the first set of installments taking place in late 2005. The version will be field tested in these countries and fine-tuned as required.
- A second round of installments is planned for the first half of 2006. This installment will include an expanded set of functionalities, which are now under development, and any revisions made based on the initial field tests.
- The third round will take place during the latter half of 2006, so that IMSMA v. 4 is installed in all programs by the end of the year.

Appendix A – List of Focus Group Participants

Invited Participants for IMSMA VA/MRE Focus Group Workshop, 15-16 August 2005

1. Shaza Ahmed (UN, Sudan)
2. Hanoch Barlevi (consultant, formerly UNICEF)
3. Oleg Bilukha (CDC)*
4. Jane Brouillette (UNDP)
5. Orlaith Gallagher (UNICEF, Ethiopia)
6. Akiko Ikeda (UNMAS)
7. Sebastian Kasack (UNMAS)
8. Ben Lark (ICRC)
9. Stuart Maslen (consultant, worked w/ GICHD)
10. Jenny Reeves (MAG Iraq)
11. Julien Temple (UNICEF, HQ)

GICHD participants : Alan Arnold and Eric Filippino

FGM participants: Katy Fransen, Noah Klemm, and Nicole Lina

MAIC participants: Dennis Barlow, Suzanne Fiederlein

Invited but could not attend:
Mark Anderson (CDC)*
Mike Gerber (CDC)*
David Meddings (WHO)
Carlos Orozco (OAS, Nicaragua)
Sarah Warren (Mercy Corps, formerly w/ VVAF)

*Oleg Bilukha of the CDC attended in place of Mark Anderson and Mike Gerber

Appendix B – Workshop Agenda

IMSMA VA/MRE Workshop AGENDA
August 14-16, 2005   James Madison University, Harrisonburg, VA USA

Sunday, August 14

Between 4:00 pm and 7:00pm -- JMU staff meet participants at Washington Dulles Airport with vans for the 2-hour drive to Harrisonburg. Check-in at the Hampton Inn. Dinner on own (many restaurants close to the hotel). Conference materials will be provided to participants at hotel check-in.

Monday, August 15

7:00-8:30 -- Continental Breakfast provided by the Hampton Inn

8:30 – JMU vans depart hotel for the meeting room (Taylor Hall 404) on the JMU campus

9:00-9:30 – Opening remarks and Introductions

Dennis Barlow, MAIC Director; Alan Arnold, GICHD IMSMA Project Director; and Suzanne Fiederlein, MAIC Workshop Facilitator

9:30 -10:15 – Conceptual Overview of IMSMA Redesign Project

Alan Arnold, GICHD

10:15-10:30 – Coffee Break

10:30 -12:00 – Demonstration of IMSMA Version 4.0

Noah Klemm and Katy Fransen, FGM

12:15-1:15 – Lunch – Room 405 Taylor Hall

1:30-4:45 (with mid-afternoon break):

> *Data Analysis Requirements of Mine Risk Education Programs*

Discussion co-facilitated by Suzanne Fiederlein, MAIC, and Eric Filippino, GICHD

Discussion will focus on the following points:

- What kinds of questions about landmine victims and the requirements of MRE programs are they seeking to have answered?
- Which data elements are necessary for MRE purposes? (review elements included in IMSMA v. 4 compared to v. 3)
- What types of decision support tools would be helpful in this area?
- What types of reports and forms are needed?

Time will be allowed for participants to share about the needs of their programs and their organizational perspectives on data requirements.

FGM to provide mocked-up screen shots of the next version of IMSMA and a listing of IMSMA 3.x and IMSMA 4.x data elements for MRE

5:00 JMU Vans depart Taylor Hall for return to Hampton Inn

6:00 JMU Vans depart hotel for Stonewall Jackson Inn, a restored 1880s mansion near downtown Harrisonburg

6:15-8:30 Group dinner catered by Hanks Smokehouse & Deli, with music provided by Highlanders String Band.

Tuesday, August 16

7:00-8:30 Continental Breakfast provided at the Hampton Inn

8:30 – JMU vans depart for Taylor Hall meeting room on the JMU campus (those departing that day need to check out of hotel)

9:00-12:00 (with mid-morning coffee break) –
 Data Analysis Requirements of Victim & Survivors Assistance Programs

Discussion co-facilitated by Suzanne Fiederlein, MAIC, and Eric Filippino, GICHD

Discussion will focus on the following points:

- What kinds of questions about landmine victims and the requirements of Victim/Survivors Assistance programs are they seeking to have answered?
- Which data elements are necessary for Victim/Survivors Assistance purposes? (review elements included in IMSMA v. 4 compared to v. 3)
- What types of decision support tools would be helpful in this area?
- What types of reports and forms are needed?

Time will be allowed for participants to share about the needs of their programs and their organizational perspectives on data requirements. Discussion will include review of results of previous research on landmine casualty data conducted by the MAIC.

FGM to provide mocked-up screen shots of the next version of IMSMA and a listing of IMSMA 3.x and IMSMA 4.x data elements for Victims and Accidents

12:15-1:15 – Lunch – Room 405 Taylor Hall

1:30-3:30 – Wrap-up & Agree Recommendations

Afternoon session to review the suggestions the group has generated during the workshop and draft final set of recommendations for inclusion in post-workshop report to be submitted to FGM and GICHD.

3:45-4:30 – JMU vans depart for Washington Dulles and Reagan National Airports

Evening – dinner at a Harrisonburg restaurant for those remaining in town until Wednesday

Wednesday, August 17

7:00 a.m. – JMU van departs hotel for Washington Dulles Airport

Appendix C – Information about IMSMA V. 4 Distributed to Participants in Advance of Workshop

IMSMA 4.0 Description

(Information provided by FGM & GICHD staff, June 2005)

The IMSMA Re-Engineering Project has commenced and is in full development for the first release this year. This effort is based upon ideas submitted by system users over the first five years of IMSMA. In response to feedback from field users, the Geneva International Centre for Humanitarian Demining (GICHD) has chosen to revise the IMSMA application in support of several main goals:

- o   To make the system more flexible for the varying needs of the programs
- o   To more accurately support the variety of ways programs perform mine- action
- o   To support locally developed data collection forms
- o   To improve language and localization support
- o   To improve the reporting and out capabilities to directly support program needs

The new version of IMSMA supports mapping and GIS directly within the application, providing users direct and simplified access to maps.

Language-related challenges will be easier through the inclusion of Arabic, English, French, Portuguese, Russian and Spanish versions of the application's screens, forms, error messages and other text. The application's data entry, review and reporting tools have been updated to provide for the creation of locally developed data collection forms in local languages. Combined with a simplified custom data field management capability, these changes make it easier to customize the system to meet local needs.

The updated IMSMA is built around an easy-to-use core module. The core module is designed to provide operations with a simple set of data collection and reporting tools suitable for most situations. Sites with more sophisticated operational requirements may choose from a set of plug-ins designed specifically for particular activities. Plug-ins are in development for Accident, Victim, MRE, and QC activities, with others in the planning stages.