

James Madison University

**JMU Scholarly Commons**

---

Global CWD Repository

Center for International Stabilization and  
Recovery

---

2004

## Enhancement of Casualty Data Collection & Management

Center for International Stabilization and Recovery  
*CISR*

Follow this and additional works at: <https://commons.lib.jmu.edu/cisr-globalcwd>



Part of the [Defense and Security Studies Commons](#), [Peace and Conflict Studies Commons](#), [Public Policy Commons](#), and the [Social Policy Commons](#)

---

### Recommended Citation

and Recovery, Center for International Stabilization, "Enhancement of Casualty Data Collection & Management" (2004). *Global CWD Repository*. 7.  
<https://commons.lib.jmu.edu/cisr-globalcwd/7>

This Other is brought to you for free and open access by the Center for International Stabilization and Recovery at JMU Scholarly Commons. It has been accepted for inclusion in Global CWD Repository by an authorized administrator of JMU Scholarly Commons. For more information, please contact [dc\\_admin@jmu.edu](mailto:dc_admin@jmu.edu).

# Enhancement of Casualty Data Collection & Management

-----  
A Report on the Analysis of Landmine Casualty Data Collection &  
Management Procedures and Recommendations for Improvements

-----  
JMU Grant Task 1.4.4  
2003-2004



JAMES MADISON UNIVERSITY®



**Bureau of Political-Military Affairs**  
U.S. Department of State

Submitted to:

U. S. Department of State  
PM/WRA  
2201 C Street, NW  
Washington, DC 20520

June 30, 2004

-----  
Project Manager and Report Author: Dr. Suzanne L. Fiederlein

## Table of Contents

	<b><u>Page</u></b>
Executive Summary	3
Acknowledgements	4
I. Introduction	5
II. Implementation of Project Objectives	6
III. Data Collection on Landmine Victims	8
• UN Sectoral Policy on Victim Assistance	8
• Initiatives in Azerbaijan and Laos	10
• Continuing Shortcomings of Landmine Casualty Data	12
• Existing Casualty Data Sources	15
• Other Research Findings Regarding the Prospects for Collecting Casualty Data	15
IV. IMSMA's Mine Accident Victim Data Collection and Management Features	16
• MAIC Casualty Data Survey	18
• Results of the Survey	19
V. IMSMA and the Landmine Impact Survey	26
VI. Recommendations for Enhancing Landmine Casualty Data Collection and Management	28
List Of Annexes	
Annex A – ANAMA Victim Assistance Survey Forms	30
Annex B – Landmine Casualty Data Sources	35
Annex C – Regional Seminar Working Group Recommendations	59
Annex D – MAIC Casualty Data Survey	60
Annex E – Distribution of the Surveys	69
Annex F – MAIC Casualty Data Survey Results	70
Annex G – Comments on Data Fields	74
Annex H – Suggested Additional Data Fields	88

## **Executive Summary**

The MAIC built upon research conducted in earlier phases of the project (2001-2002) to investigate the following unresolved questions regarding the development of an effective landmine casualty data system.

1. What kind of data about landmine victims is being collected and is it adequate to the needs of victim assistance service providers?
2. If it is not adequate, what additional data should be collected and how should it be managed?
3. What can be done to improve the dissemination of landmine casualty data?

These questions were addressed by investigating developments in landmine casualty data collection and management since 2002 and adding them to the information about existing data collection and management efforts reported on in the previous phases of the project. Next, following up on a recommendation made at a workshop conducted in an earlier phase of the project, a survey was conducted to evaluate the adequacy and appropriateness of the data fields contained in IMSMA's standard mine accident victim data entry form. Recognizing that the Landmine Impact Survey (LIS) collects data on landmine victims that is stored in a separate component of IMSMA (its "Impact Survey" functionality), the study also examined the LIS victim data fields and compared them to the IMSMA "victim" data fields.

Based on the outcome of this three-pronged research project, nine specific recommendations were made for enhancing the collection and management of landmine casualty data. Below are the major recommendations presented in summary form. The full set of recommendations and explanations are presented in part VI of the report (on pp. 26-27).

### **Recommendations for enhancing landmine casualty data collection and management:**

1. Each mine-affected country should designate a central authority responsible for overseeing landmine casualty data collection and management. In conjunction with victim assistance stakeholders in the country, a protocol should be drafted for the collection, management and dissemination of casualty data.
2. Recognizing that IMSMA has become the standard information management system for mine action, the following revisions should be considered for future versions of IMSMA:
  - A "Victim Assistance" functionality should be developed that includes more detailed information on landmine casualties needed by survivor assistance service providers.
  - The mine accident "Victim" functionality should remain a core of basic information needed by mine action operations such as clearance, along with a few basic mine risk education and victim assistance data fields.
  - Data fields in the mine accident "Victim" functionality should be revised so that they correspond to the data fields in the "Impact Survey" functionality in order to facilitate the creation of comprehensive victim databases.

## **Acknowledgements**

The research for this project, which progressed through several phases, has now continued for over three years. In the course of investigating the challenges and achievements in establishing the means to collect essential information on landmine casualties, the project manager and report author, Dr. Suzanne Fiederlein, has benefited from an extensive network of contacts among personnel working in the field of humanitarian mine action, particularly in the areas of landmine survivors (or victim) assistance and mine risk education. Some of the individuals are listed by name below; many others were participants in wide-ranging group discussions, making it difficult to list them all by name. Dr. Fiederlein, however, is grateful for the frank exchange of information and ideas, for the willingness of people to take the time to provide information on data collection initiatives, both those that have succeeded and those that have been problematic, and on the data requirements of survivors assistance and mine risk education programs. She also appreciates the efforts of all the respondents who completed and returned the recent MAIC Casualty Data Survey (May-June 2004).

While this project could not have borne fruit without the contributions of many knowledgeable people working in humanitarian mine action, Dr. Fiederlein alone accepts responsibility for the research findings, conclusions and recommendations presented in this report. Dr. Fiederlein is grateful to the staff members of the Mine Action Information Center (MAIC) who provided assistance and support to the project, in some cases by serving as a sounding board for the discussion of research conclusions and recommendations and at other times by assisting with specific aspects of the research. MAIC Director, Dennis Barlow and Program Coordinator, Christine Stephan, provided essential support and feedback on the project; Dr. Kay Knickrehm served as consultant for the casualty data survey; Carolyn Firkin facilitated many of the administrative requirements for the project. MAIC student research associate Meredith Minguez contributed greatly to the compilation of information on the landmine casualty data sources listed in Annex B, while another student research associate, Lorraine Spittlehouse, handled the data entry for the survey results and then conducted the preliminary data analysis.

The MAIC also wishes to thank Richard Kidd, the Director of the U.S. Department of State, Office of Weapons Removal and Abatement (DOS PM/WRA), for his support and the sponsorship of this project. While the challenge of casualty data collection and management has not been resolved, much has been learned about landmine casualty data and the report presents several specific recommendations for next steps to take to address the continuing data challenge.

## **I. Introduction**

This task builds upon the previous work conducted by the Mine Action Information Center (MAIC) in 2001-2002 for the project, *Develop a Framework for the Systematic Collection and Management of Landmine Casualty Data* (IMAS task Order QR-13). This report references documents prepared during the earlier phases of the project. They include the following:

*Managing Landmine Casualty Data*, which reported the findings of the project through Phase II (issued 31 December 2001). It included a comparative analysis of nine landmine casualty database systems in use in mine-affected countries and the results of a survey of mine action database operators and victim assistance experts.

*Landmine Casualty Database Workshop*, which captured the presentations, discussions and recommendations of the working group of victim assistance and information management experts that met at James Madison University on May 13-14, 2002 (in completion of Phase III of the project).

The findings of Phases II and III were summarized in a report, *Designing and Developing the Data Structures and Models Necessary to Track and Manage Landmine Casualty Data* (25 September 2002), that provides an overall assessment of the project's outcomes and makes suggestions for future initiatives to build upon the successes of the project.

The specific objectives of Task 1.4.4 are:

1. To act on the recommendations of the May 2002 working group to conduct additional surveying of mine risk education (MRE) and victim assistance personnel about the adequacy and appropriateness of the mine accident and victim data collection and management features of the Information Management System for Mine Action (IMSMA) software.
2. To analyze the data collected in the "Impact Survey" functionality of IMSMA, compare it to the data collected in its "accident victim" functionality and make recommendations for ways to improve the dissemination of all relevant data to mine victim service providers and to continue to collect the relevant data after the impact survey is completed.
3. To identify types of information about victims that are not being collected by IMSMA and yet needed by survivor assistance service providers and explore alternative ways to collect and disseminate that information.

The outcome of each of the objectives are presented in this report, although not exactly in the order set out above, as developments during the research period required some restructuring of the project plan. However, all of the objectives were completed and the project yielded a set of recommendations for enhancing landmine casualty data collection and management.

Before reporting on the research results related to these three specific objectives, it is necessary to present some of the outcomes of the research project that do not fit neatly into one of these three categories. First of all, the project manager, Dr. Suzanne Fiederlein, has established a broad network of contacts among the many different people working in humanitarian mine action in the areas of survivors assistance and mine risk education. Because of her many different contacts, she has at times been able to connect people who would benefit from exchanging information with one another.

Dr. Fiederlein also has been invited to participate in several meetings and discussion groups where she not only gained important information from other participants, but she also was able to share the value of insights she has gained through her research on this project. In particular, she actively participated in the discussions surrounding the drafting of the United Nations Sectoral Policy on Victim Assistance (discussed in more detail below). Reports produced during the earlier phases of the project are referenced in the *Guidelines for the Socio-economic Reintegration of Landmine Survivors* (World Rehabilitation Fund and UNDP, 2003) and in the *Feasibility Study into a National Network for UXO Accidents in Lao PDR* (Handicap International-Belgium and UNDP, 2004). The MAIC can only hope that this report as well will prove a useful source of information for those people grappling with the challenges of casualty data collection.

## **II. Implementation of Project Objectives**

At the time of the May 2002 workshop, IMSMA was undergoing a revision by its developers and managers at the Geneva International Centre for Humanitarian Demining (GICHD) and the Center for Security Studies and Conflict Research at ETH Zurich (ETHZ). Alan Arnold, Project Manager for IMSMA at the GICHD, and Reto Haeni, IMSMA Project Coordinator at ETHZ, both attended the workshop and were familiar with the workshop recommendations.

One specific recommendation was incorporated into the new version of IMSMA (V3.0)<sup>1</sup> – changing the terminology used for “mine accident” and “demining accident” so that it conforms to the usage in the International Standards for Mine Action (IMAS). Other recommendations required further refinement and verification before they could be incorporated into IMSMA; Task 1.4.4 addressed the need for follow-up on the remaining recommendations.

The first objective, to conduct additional surveying of MRE and victim assistance personnel about the adequacy and appropriateness of the mine accident and victim data collection and management features of IMSMA, could not be completed in time for the IMSMA developers to consider them before completing work on the next version of IMSMA (V3.0). The decision was made to await the release of the new version and then analyze it before preparing a new survey. This way the survey could take into account the revisions already made and focus on additional revisions that may be needed in later versions. Furthermore,

---

<sup>1</sup> The newest IMSMA version is technically numbered 3.0176, reflecting some additional refinement of the software required after it was initially developed.

by delaying the survey, a section could be added that would ask about the need for collecting additional victim data required for planning survivors assistance services but not generally included in the information managed by mine action centers and offices who use IMSMA, another recommendation made by the 2002 workshop participants. Furthermore, the second objective also was delayed until the IMSMA V.3 evaluation CD was available for review.

As a result, the third objective was pursued first by the MAIC research team. During 2003, while awaiting the release of the IMSMA V3.0 and the opportunity to examine it in detail, MAIC project manager, Dr. Suzanne L. Fiederlein, conducted several personal interviews in addition to numerous email inquiries about current data collection methods concerning landmine victims<sup>2</sup> and the potential for improvements in those methods.

Among the principal informants were the following:

- Dr. David Meddings of the Injuries and Violence Prevention Department of the World Health Organization (WHO)
- Peter Herby, Kathleen Lawand and Ben Lark of the Mines-Arms Unit of the International Committee of the Red Cross (ICRC)
- Reuben Nogueira-McCarthy, Office of Emergency Programmes, UNICEF
- Ilene Cohn, Judith Dunne, Akiko Ikeda, and Sebastian Kasack of the United Nations Mine Action Service (UNMAS)
- Alan Arnold and Thomas Bollinger of the IMSMA team at the GICHD
- Reto Haeni, IMSMA Project Coordinator at ETHZ

In addition, information was obtained from several group discussions in the following forums:

- Focus group meeting to discuss the draft United Nations sectoral policy on victim assistance (held at UNMAS office, New York, 15 November 2002)
- Discussion group (“sidebar” meeting) on the draft UN victim assistance sectoral policy held during the Intercessional Programme of the APL Ban Convention (Geneva, Switzerland, 3 February 2003)
- “A Dialogue on Disability Caused by Conflict: How to Optimize Synergies with External Partners”, sponsored by the World Bank’s Office of the Advisor for Disability and Development (Washington, DC, 24 September 2003)
- Regional Seminar on Antipersonnel Landmine Victims (Bogotá, Colombia, 12-14 November 2003), organized by the Organization of American States (OAS), the Government of Colombia, and the US Department of State.

Lastly, information about data collection on landmine victims also was obtained by continuing the process begun in Phase II of the project to investigate the systems in use in mine-affected countries for gathering and managing victim data, as reported in the *Managing*

---

<sup>2</sup> The term “landmine victims” used in this report encompasses all people injured or killed in “mine accidents”, including those caused by unexploded ordnance (UXO) as well as landmines. Information about “demining accidents” that occur in the course of conducting humanitarian demining-related activities (or the professional disposal or deactivation of UXO) usually is collected and recorded via separate investigation methods.



*Landmine Casualty Data* publication identified above. This report presents some new developments in landmine/UXO casualty data collection.

### **III. Data Collection on Landmine Victims**

This section will report on new developments in landmine/UXO casualty data collection and some discussions that have occurred within the mine action community regarding concerns and perceived requirements for casualty data collection and dissemination. It will indicate specific research findings that will form the basis of a list of recommendations for next steps in enhancing casualty data collection and dissemination based on the author's investigations of casualty data systems, including IMSMA, and her discussions with the informants and in the forums listed above.

#### **UN Sectoral Policy on Victim Assistance**

In 2002, a debate surfaced within the mine action community concerning the “place” of victim assistance in mine action.<sup>3</sup> While many survivors assistance service providers continued to clamor for more extensive information about the number and characteristics of mine/UXO victims and the needs of survivors for assistance,<sup>4</sup> many people working in the areas of “operational” mine action (mine survey, mine clearance and mine risk education), questioned the appropriateness of mine action operations offices, like Mine Action Centers (MACs), being given the responsibility for collecting detailed victim information. The argument was that a MAC should only collect the victim data necessary for locating and clearing mined areas and planning for mine risk education programs. All other data collection relating to mine victims belongs to the health care field that is responsible for providing medical and rehabilitative services.

The policy implications of this debate prompted the United Nations Mine Action Service (UNMAS) to develop a policy position paper on victim assistance. UNMAS invited various mine action and victim assistance practitioners to participate in a focus group meeting in November 2002 and followed this up with an invitation to interested parties to attend a “sidebar” meeting at the Intercessional Programme of the APL Ban Convention in Geneva, Switzerland in February 2003. The *Sectoral policy: The scope of action of mine action centres and organizations in victim assistance* was formally released in May 2003.<sup>5</sup>

---

<sup>3</sup> For more on this debate, see the following articles: Suzanne L. Fiederlein, “Victim Assistance: A Way Forward Emerges,” *Journal of Mine Action* Issue 6.3 (2002):2-6 and Eric Filippino, “The Role of Mine Action in Victim Assistance,” *Journal of Mine Action* Issue 6.3 (2002):7-9.

<sup>4</sup> The World Rehabilitation Fund, together with the UNDP, published *Guidelines for the Socio-economic Reintegration of Landmine Survivors* in August 2003. The publication only briefly addresses the issue of data collection, but it suggests that more attention needs to be paid to “data relating to the areas covered by the Guidelines”, that is, socio-economic needs of survivors (p. 3). In addition, the Landmine Survivors Network study, *Monitoring Progress in Victim Assistance*, discussed in detail below also indicates the need for more demographic information about victims as well as their need for services.

<sup>5</sup> This sectoral policy is a sub component of “Mine action and effective coordination: the United Nations Policy” (A/56/448/Add2 dated Sep 1998).

The sectoral policy lays out various objectives and guiding principles about victim assistance but explicitly addresses data collection and dissemination in paragraphs 23-28. The essence of the policy regarding victim data is that collecting and sharing data facilitates the delivery of victim assistance, and that mine action centers must take on a central role in data collection and dissemination in countries that do not have adequate “government or other organizational involvement in survivor and victim data management.” The policy prescription is that until such local capacity can be developed,

“the mine action centre should accept the responsibility for collecting data related to landmine survivors and victims in addition to that required to pursue its more narrow focus on mine risk education, survey, mapping and clearance activities and it could become the principal custodian of the national database of such information.” (para. 26)

In addition, the policy promotes the timely notification and exchange of information and asserts that the MACs, in cooperation with government authorities and partner organizations, should help refer victims to available services (para. 27-28). It also promotes the inclusion of experienced victim assistance officers on assessment missions (para. 23) and in the MACs to plan for and coordinate the delivery of victim services, again particularly in the absence of the local capacity to do so (para. 34).

The sectoral policy thus is based on the premise that mine action centers have varying levels of responsibility for data collection and dissemination, depending on the local government capacity to perform these responsibilities. However, this position also means that the ultimate responsibility for victim data collection and management belongs to national government authorities whenever possible.

This UN victim assistance sectoral policy to a certain extent reflects the reality of many mine action centers, which in fact do collect and manage victim data and help refer and/or coordinate the delivery of services. It also helps to clarify the role of MACs in data collection, in those cases where debate about their appropriate role has existed. However, the policy is only advisory in the case of UN-sponsored mine action centers.

In some of these centers, as in Eritrea, the policy has led to an increased stature for victim assistance initiatives promoted by the UN in conjunction with national governments and other service providers. The UN Mission to Ethiopia and Eritrea Mine Action Coordination Centre (UNMEE MACC) has worked in close cooperation with the Eritrean government’s Ministry of Labour and Human Welfare (MLHW).<sup>6</sup>

Among their initiatives are a National Survey for People with Disabilities (begun in 2002 by the MLHW) that will supplement data obtained through the national Landmine Impact

---

<sup>6</sup> For a summary report of these developments in Eritrea, see the article, “Using Community Based Rehabilitation as a Model for Socio-Economic Victim Assistance in Eritrea,” by Jane Brouillette, Technical Advisor Victim Assistance, UNDP Capacity Building Programme, in the UNMAS newsletter, *Landmine Survivors & Victim Assistance*, July 2003.

Survey (LIS) now underway and the victim data in the IMSMA database managed by the MACC. The MLHW also has established a community-based rehabilitation program to address the needs of landmine survivors and other people with disabilities.

At the conclusion of the LIS and the National Survey, the Eritrean government should have a comprehensive database of people with disabilities, including landmine victims. The challenge, as in many cases, will be to maintain the database so that it can be used to monitor people with disabilities into the future, although in this case plans exist to sustain the system, so long as funding remains available.

**Research Finding #1:** According to UN sectoral policy on victim assistance, national governmental authorities have responsibility for collecting and managing data on landmine/UXO victims. In the absence of adequate national capacity to do this, mine action centers have the responsibility to collect, manage and disseminate the required data.

### **Initiatives in Azerbaijan and Laos**

Two other recent initiatives to augment data collection regarding landmine victims also are important to note, one in Azerbaijan and one in Laos.

**In Azerbaijan**, the Azerbaijan National Agency for Mine Action (ANAMA) developed a plan to conduct a Countrywide MINE/UXO Victim Survey that would lead to the creation of a database to identify mine/UXO survivors and their needs for assistance. The various uses of such a database are delineated in the proposal's Impact Statement, reprinted below.

At the completion of the project, **an extensive information base** on the Mine/UXO survivors will be available for all stakeholders. This data-bank can be updated with minimum hassle and **will be made available through ANAMA's web-site**. This information will indeed be an indispensable **tool for any kinds of Mine/UXO survivor's assistance initiatives** of any agency. **A network of 'Mine/UXO Survivors'** can also be established for advocacy, sensitization, MRE and sharing of knowledge/skills on their coping mechanism purposes.

The proposal's "Statement of Problem" section explains more about why the collection of detailed information about victims is needed, but it essentially comes down to a perceived need to have centralized data on who are mine/UXO survivors and what services they require so that mine victim assistance (MVA) projects can be planned and so that information can be shared with the various agencies and donors who could provide assistance.

The proposal notes that ANAMA already has collected some raw information on victims and stored it in a database using IMSMA. The office's staff developed a customized IMSMA data collection form to use in the survey (see Annex A), which is accompanied by an

instructional guide for using the form. The form includes detailed information about the type of medical and psychosocial care, physical rehabilitation services, and vocational training provided to the victim. It also has data fields covering education, economic assistance and advocacy. In some ways the questionnaire developed for the survey project is perhaps too detailed and lengthy for use on a large scale. ANAMA had produced another victim assistance questionnaire in 2001 which covers the same general areas of information as the more detailed form but does so with less detail. It also is included in Annex A for reference.

So far, the survey has been conducted in the Fizuli district of Azerbaijan, and the ANAMA staff provided the MAIC with the raw data from that component of the survey. How the information will actually be used to provide services or to track the care provided to any particular survivor is not known. However, the data provides details on the number of survivors and the number of various types of injuries sustained and services provided. It is not known whether a protocol for sharing the data has been developed. A major consideration would be how the survivors' identities will be protected when the data is shared with service providers.

For the purposes of this report on landmine casualty data collection and management, the key point is that a mine action center has acted on a perceived need to collect more detailed information on landmine/UXO survivors in order to plan assistance services for these people. This example provides us with additional information on the types of data that are considered necessary for planning mine victim assistance programs. The ANAMA data fields can be compared to those already identified in the earlier phases of this project.

**In Laos**, Handicap International-Belgium recently completed a feasibility study (funded by the UNDP) on establishing a national surveillance network for UXO accidents.<sup>7</sup> As with the ANAMA survey project, this study was motivated by the perceived need for improved systematic nationwide data collection on UXO survivors and their needs for services.

In the case of Laos, plans for a national surveillance network is guided by the country's detailed National Strategic Plan for the UXO Program in the Lao People's Democratic Republic 2003-2013. Taking into account the specific national context and requirements, the study made the recommendation that a system similar to the CMVIS in Cambodia be created in Laos.

The study concluded that a separate database using the more detailed CMVIS system was preferable to adapting the IMSMA accident victim functionality, although IMSMA already is in use on a limited basis by the database department of UXO Lao. The CMVIS is a well established database system that has successfully been used in Cambodia since 1997. It provides for the collection of more extensive victim data than IMSMA and was judged by the study authors to be "more flexible, more adapted to the needs of the end-users (queries and reports) and much quicker than the whole IMSMA software" (*Feasibility Study*, p. 20). They also note that if IMSMA comes to be used more comprehensively in the future, data from the CMVIS-based victim database could be easily transferred into IMSMA.

---

<sup>7</sup> Handicap International-Belgium and UNDP, *Feasibility Study into a National Network for UXO Accidents in Lao PDR*, January-February 2004.

The recommendation to use a database system modeled after CMVIS is only one component of the national surveillance network proposed by the study. The network, which the study called the Lao UXO/Mine Victim Information system (LUMVIS), is based on a nationwide network of data gatherers (Victim Liaison Officers) and a national coordination unit that would be responsible for management of the database. The study actually offers two options for managing the national network, based on whether the network is managed by an NGO or by the National Regulatory Authority (created by the National Strategic Plan).

Once again, for the purposes of this report, the important point is that the study determined a need for a more extensive victim database than IMSMA currently could provide. In this case, the decision was made to create a database devoted to victims that would exist distinct from IMSMA, although data in it could be transferred at a later date to an IMSMA-based system.

**Research Finding #2:** Recent initiatives to collect additional information about landmine/UXO victims have been predicated on using an expanded form of IMSMA as well as using a non-IMSMA database system. Both models have been used to address the perceived need to collect more detailed information than is provided for in the currently available versions of IMSMA.

### **Continuing Shortcomings of Landmine Casualty Data**

The Landmine Survivors Network (LSN), in collaboration with the ICBL Working Group on Victim Assistance, conducted an analysis monitoring the progress made by the states parties to the Antipersonnel (AP) Mine Ban Convention to meet their obligations in the area of victim assistance under the convention.

The analysis measured progress by means of six indicators, one of which (Indicator 1) was “the extent to which information on mine victims’ demographics is available.”<sup>8</sup> The remaining indicators addressed availability of medical, rehabilitative and socio-economic reintegration services, laws and advocacy mechanisms for survivors and other disabled persons. The study compared measures on these indicators collected at three times -- 1999/2000, 2002 and 2003 -- and used a five-level, color-coded system to indicate how well the country was meeting the indicator criteria. The study evaluated not just countries that were states parties; a total of 69 countries recognized as mine affected by the *Landmine Monitor* were included.<sup>9</sup> The information used to evaluate the countries in 2002 and 2003 came from the *Landmine Monitor* for those years.

---

<sup>8</sup> Landmine Survivors Network, *Monitoring Progress in Victim Assistance: Analysis of the Victim Assistance Indicator Study*. Update, September 2003. At: [http://landminesurvivors.org/documents/indicator\\_final.pdf](http://landminesurvivors.org/documents/indicator_final.pdf) (27 June 2004). Individual country assessments also are available.

<sup>9</sup> Individual country assessments were available on the Landmine Survivors Network website for 67 of the 69 countries in the study. No specific information was accessible on Ecuador or Ethiopia (as of 28 June 2004).

The analysis concluded that victim assistance, even in the countries that are states parties to the AP Mine Ban Convention which should be working to fulfill their obligations under article 6.3, is not improving but instead could be described as stagnating (*Monitoring Progress*, pp.3,8). While the overall conclusions of the study may be noteworthy as a means for drawing attention to the lack of progress in the realm of victim assistance, what is of most interest for this report on casualty data, are the results for Indicator 1 on the existence of information on mine victims' demographics.

According to the report, as of 2003, only one country (Lebanon) out of 67 received a "green" rating, indicating the data system or mechanism is in place and running optimally. Another 22 countries had a "yellow" rating, meaning a system is in place but has "shortcomings." An additional 5 countries had an "orange" rating, meaning a system is in "a very early stage of development" (*Monitoring Progress*, p.5). Thus, a total of just 28 out of 67 countries (41.8%) were judged as having a system, even a limited one, to collect data on the demographics of landmine victims.

While the LSN analysis is significant within the context of the AP Mine Ban Convention and the efforts in 2004 to assess how well the states parties are progressing toward fulfilling the requirements of the convention, its evaluation of the countries must be regarded with some caution, largely based on the fact that reliable information about the existence of landmine casualty data collection systems is still hard to obtain. The *Landmine Monitor* remains the one centralized system for collecting information on landmine victims, and it still relies on a piecemeal manner of data collection.

Although IMSMA was designed to provide a common software system to manage mine action data including landmine casualties, and it has now been installed in 38 field programs<sup>10</sup> around the world, it is often not utilized in a comprehensive manner, with some countries actively using some features of it but not others.<sup>11</sup> Furthermore, the initial plan to create a Headquarters Module for IMSMA where data collected from the different countries via the IMSMA Field Module could be aggregated, so far has not materialized.

The governments of many countries continue to be reluctant to disseminate reports on victims and other aspects of their mine action programs, even after IMSMA was installed and could be used to generate reports. In some cases, IMSMA is not being used in a comprehensive manner due to its complexity and/or the difficulty in collecting data to enter into it.

The International Committee of the Red Cross (ICRC), after indicating plans to gradually convert its victim databases (developed for mine risk education purposes) over to an IMSMA-based system, has been slow to do so, apparently due to concerns about the

---

<sup>10</sup> From information contained in email message received by S. Fiederlein from Alan Arnold, 5 March and 24 June 2004.

<sup>11</sup> Alan Arnold, Project Manager for IMSMA at the GICHD, indicated in an interview (30 September 2003) that only about one-third of the programs using IMSMA were using it fully. For example, the Handicap International-Belgium and UNDP *Feasibility Study* referenced above (footnote 6) reports that UXO Lao enters victim data into IMSMA but "don't use IMSMA to analyse it or produce reports" (p. 20).

adequacy of IMSMA to its program requirements.<sup>12</sup> However, as of June 2004, the ICRC is in the process of formalizing its use of IMSMA, after in fact using it for some of its reporting for quite some time (for victim data it collects that is turned over to a MAC).<sup>13</sup>

Alan Arnold, Project Manager for IMSMA at the GICHD, indicated in an interview with MAIC researcher Dr. Suzanne Fiederlein (30 September 2003, GICHD offices, Geneva) that future development of IMSMA will include creating a smaller core of functions with a simplified GIS feature integrated into it. The emphasis will be on the basic information that a program needs to operate and then to have additional layers of data collection and management that can be activated if needed and can be used effectively for planning and analysis. The objective is to simplify its use so that it does not overwhelm the smaller programs. However, this indicates that the goal of using IMSMA as a way to collect victim data effectively in all mine-affected countries remains unlikely to be attained in the near future. As a result, the quest for alternative ways of collecting, managing and disseminating landmine casualty data remains open. However, as IMSMA undergoes further revision, it might yet become an effective system for collecting and managing both core victim data needed for mine action operations as well as more detailed victim data needed by survivors assistance service providers.

Currently, IMSMA is designed to meet the needs of humanitarian mine action operations like mine clearance, mine survey and mine risk education. It is not intended to collect detailed information about victims such as the types of medical and rehabilitative care they have received. In this sense, it serves as a limited injury surveillance system and not a detailed victim services database. However, version 2 of IMSMA did expand the information collected about casualties resulting from recent accidents to include some details on types of injuries sustained and if and when the victim reached a hospital. The question arises whether the information currently collected via IMSMA should be expanded to cover more types of data considered necessary by survivors assistance service providers. This will be taken up in a later section of this report. At this point, the conclusion is that the use of IMSMA has not led to a significant increase in the systematic collection of even limited core data on victims.

**Research Finding #3:** Most mine-affected countries still do not have adequate landmine victim data collection and management systems in operation, despite the development and distribution of IMSMA.

---

<sup>12</sup> See: *Managing Landmine Casualty Data*, p. 10 for discussion of reported ICRC plans to convert to an IMSMA-based system. The ICRC's hesitancy to move forward with the plans was expressed in a discussion the author had with Peter Herby and Kathleen Lawand of the ICRC's Mines-Arms Unit (1 October 2003, Geneva).

<sup>13</sup> Ben Lark of the ICRC clarified the ICRC's use of IMSMA and plans to formalize its use in a Letter of Understanding (LOU) with the GICHD (email exchange with the author, 25 June 2004). He emphasized the difference in the types of data the ICRC collects, with "victim surveillance" being information needed by mine action programs (operations) which is reported via IMSMA and medical information that is stored in existing (non-IMSMA) ICRC data bases.

## **Existing Casualty Data Sources**

Although most mine-affected countries do not have an adequate landmine victim data collection system or mechanism, considerable information about landmine victims is available. The problem is that it is not collected in a systematic or centralized way so that the data can be verified, aggregated and effectively analyzed.

In order to identify the types of victim data available and its sources, the MAIC staff compiled a matrix (see Annex B) of all the mine-affected countries, listing the types of victim data and the data sources reported in the *Landmine Monitor 2003*. Added to this list of information drawn from the *Landmine Monitor* is information on which countries have IMSMA installed and which version (versions 2.1 and higher are equipped to collect some victim details such as type of injury). A column also was set up for recording whether the country has had a Landmine Impact Survey (LIS) and if not, whether one was planned and for what year. This information is important because, as will be discussed in more detail below, the LIS collects certain types of victim data. If the MAIC was aware of any additional data sources not reflected in the *Landmine Monitor*, it was entered into the matrix as well. Some information could be culled, for example, from reports presented at conferences and meetings or in journal articles and reports.

The matrix provides a summary of known sources of victim data collected in mine-affected countries. The MAIC makes no claim that it is exhaustive; instead it is regarded as illustrative. It remains cumbersome to analyze, although less so than reading the narrative country reports in the *Landmine Monitor* itself. The matrix could become a starting point for developing a global count of known landmine victims, although the information will remain in large part unverifiable. The objective by creating the matrix is to provide a picture of what is currently known about landmine casualty data, including numbers of victims where available and identifying data sources such as IMSMA and LIS for the countries.

## **Other Research Findings Regarding the Prospects for Collecting Casualty Data**

Before moving on to examine IMSMA's victim data features in more detail, the report presents some additional research findings drawn from the author's discussions with various personnel involved in providing services to landmine survivors and other people with disabilities.

1. It is unlikely that landmine injuries can be effectively captured by relying on a national system of injury surveillance, like the International Classification of Diseases (ICD). This is because for most mine-affected countries, landmine injuries are of less concern for the national public health sectors than other more pervasive types of injuries and diseases. Most Ministries of Health will be reluctant to spend scarce resources on data collection relating to a comparatively small problem. Furthermore, most national surveillance systems implemented from the capital city disproportionately focus on the urban areas while most landmine injuries occur in more remote areas. This suggests that the preferred way to collect data on landmine injuries is to



design targeted surveys that focus on known landmine contaminated areas. The increased completion of LIS should help identify those regions of the countries where such victim surveys should be conducted.<sup>14</sup>

2. Although there are only dim prospects that a national injury surveillance system will provide adequate means for collecting data on landmine victims, it would still be worthwhile to add “landmines/UXO” as a category of injury when a national injury surveillance system is established in a mine-affected country. As the public health sector matures, the surveillance system will increase in its effectiveness in collecting data. On the other hand, it has been suggested that creating a landmine/UXO victim surveillance system could form the basis for the future development of a national injury surveillance system – that is, the landmine injury system could eventually be expanded to capture data on other types of injuries, like automobile accidents.<sup>15</sup>

**Research Finding #4:** Data collection efforts focused on known contaminated areas of a mine-affected country are more effective in capturing data on mine victims than relying on a national injury surveillance system. However, inclusion of landmine/UXO accident as a category of injury in a national injury surveillance system may yield useful data as the national public health sector matures and begins to collect data more effectively.

**Research Finding #5:** Establishing a landmine/UXO casualty data system may facilitate the creation of a nationwide injury surveillance system in the future

#### ***IV. IMSMA’s Mine Accident Victim Data Collection and Management Features***

The report will return to discuss the various research findings and use them to create a list of recommendations for enhancing landmine casualty data collection and management. Now the report turns to the first objective listed in the introduction, a review of the mine accident and victim data collection and management features of IMSMA.

IMSMA has become the established data management system in use in the mine action community. A few mine action field programs, such as in Bosnia-Herzegovina and Croatia, continue to use a data management system designed before IMSMA for their clearance-related operations. Other programs that had developed data systems prior to IMSMA have now converted to IMSMA, such as Afghanistan. In some cases, IMSMA is in use for “operational” mine action, but a separate system is used to manage victim data, as in Cambodia and potentially in Laos, if the recommendations from the *Feasibility Study* are

---

<sup>14</sup> This conclusion is based particularly on the author’s conversations with Dr. David Meddings of the WHO as well as with participants of the World Bank’s “Dialogue on Disability Caused by Conflict: How to Optimize Synergies with External Partners” 24 September 2003. However, the author takes full responsibility for making the conclusion presented here.

<sup>15</sup> See Handicap International-Belgium and UNDP, *Feasibility Study*, p. 38.

implemented. Many more countries are gradually installing IMSMA and plan to use it as their central data management system for both operations and victim surveillance. As noted above, IMSMA is now installed in 38 field programs, in addition to being used by training programs in France, Sweden, Switzerland, the United Kingdom, and the United States.<sup>16</sup> Most of these field programs are using version 3 of IMSMA, although eight have continued to use version 2 and two use a customized version 1.2.

Although IMSMA initially was designed to meet the needs of humanitarian mine action operations like mine clearance, mine survey and mine risk education, beginning with version 2, and with input from the WHO, ICRC, UNICEF, the GICHD and several NGOs, an expanded “incident victim functionality” was created. The expanded details on the types of injuries and the initial emergency medical care given the victim were drawn from the WHO’s “Minimal Recommended Dataset for Surveillance on Landmine/UXO Injuries.”<sup>17</sup>

While many national mine action programs appear satisfied with the victim component of IMSMA, survivors assistance service providers continue to seek out more information about landmine victims. The debate over the extent that mine action program offices like Mine Action Centers or National Demining Offices should collect more extensive information on victims has already been discussed. The question to examine now is whether the information currently collected via IMSMA should be expanded to cover more types of data considered necessary by survivors assistance service providers.

This was a central questions explored by the participants of the May 2002 workshop at JMU. Their recommendation was to go to the personnel working in the fields of victim assistance and mine risk education<sup>18</sup> and ask them for more feedback on the victim data fields now included in IMSMA and what additional data, if any, was needed. A related question the participants examined at the workshop was who should ideally collect and manage landmine/UXO victim data. Their conclusion was that a national government authority such as the Ministry of Health should manage it since that entity is ultimately responsible for providing for the health services the survivors need.<sup>19</sup>

That a national government authority such as the Ministry of Health should be responsible for collecting and managing victim data is a commonly expressed sentiment. Sometimes a government ministry besides Health is designated as the responsible authority (for example, the Ministry of Labour and Human Welfare in Eritrea). As the UN Sectoral Policy on Victim

---

<sup>16</sup> See email messages from Alan Arnold, Project Manager for IMSMA at the GICHD, to S. Fiederlein, MAIC, 5 March 2004 and 24 June 2004.

<sup>17</sup> See *Managing Landmine Casualty Data*, p. 13 for a discussion of this dataset and the process of incorporating it into IMSMA v. 2.

<sup>18</sup> The participants identified specific data fields on the IMSMA victim form as being relevant to certain purposes in mine action, such as “operational mine action” (mine clearance, etc.), mine risk education and victim assistance. Because the focus of this project is data collection for purposes of victim assistance, this survey focused on personnel working in the areas of victim assistance and MRE (the workshop participants had questions about some of the IMSMA “Victim” data fields targeted to this purpose as well). See p. 17 of the *Landmine Casualty Database Workshop Proceedings*.

<sup>19</sup> See the “Working Group Recommendations” on pp. 15-20 of the *Landmine Casualty Database Workshop Proceedings*.

Assistance points out, however, often a national government in a mine-affected country does not have the capacity to perform this role, and then a MAC may be the only entity in a position to take on the responsibility of data collection and management.

A working group session at the Regional Seminar on Antipersonnel Landmine Victims (Bogotá, Colombia, 12-14 November 2003) produced a list of recommendations for addressing casualty data issues. The group consensus was that a national authority be given official responsibility for managing a centralized victim database. Which government ministry or other “authority” (e.g., a MAC) is placed in that role should be determined by the stakeholders involved and could differ from country to country depending on the national circumstances. Another noteworthy recommendation was that the officially recognized victim data authority then should work out with the stakeholders a standard or protocol for how to disseminate data to those organizations that need it to provide services to victims. The emphasis was on establishing a clear central data management authority and protocol for its use and dissemination, even if the data was gathered in a decentralized manner.<sup>20</sup>

### **MAIC Casualty Data Survey**

Acting upon the recommendations of the May 2002 workshop participants, the MAIC developed a survey based upon the accident victim data component of IMSMA version 3, which was released in 2003. The survey was designed to ask the respondents to evaluate the adequacy and appropriateness of the data fields contained on the data entry sheet for this version of IMSMA (see Annex D for a copy of the survey instrument).

It is important to remember that IMSMA can be customized by the mine action program running it; however, most programs use the system as it was originally designed, although many choose not to use all of its components. Even if the program were to customize the accident victim data entry sheet, it would begin by assessing the features it has standard and then deciding which to keep and which to change. So the survey asked specifically about the data fields on the standard data entry sheet and then went beyond it to ask if there were any additional data fields that should be added.

The last section of the survey then moved to the question of how the additional data information should be collected and managed. The survey presented three options for this, based on the information obtained during the research phase of the project. The options are, 1) to add them to the accident victim form that already exists in IMSMA, that is, to expand the current data entry form to include additional information about the victim; 2) to add to IMSMA a separate ‘Victim Assistance’ component along the lines of the Mine Risk Education one included in the new version 3 (this would permit the entry of more detailed information about victims in a separate section of IMSMA that could be used if desired by the program but would not alter the basic accident victim component); or 3) to have “an authority such as a governmental health ministry” collect it “as part of its public health oversight role,” and thus not alter IMSMA and not expect the mine action programs to be responsible for this expanded data collection. These three different options were increased to

---

<sup>20</sup> See Annex C for a copy of the working group recommendations. For the complete proceedings of the seminar, see: <http://maic.jmu.edu/conference/proceedings/2003Colombia/index.htm>

five in the survey to allow for combining an expanded “Victim” form with a supplemental “Victim Assistance” functionality or a separate victim database managed by an entity like a Ministry of Health.

### **Results of the Survey**

The survey instrument (Annex D) was distributed via email to a wide range of International Organizations (IOs) and Non-governmental Organizations (NGOs) working in the fields of victim assistance and mine risk education. The surveys were distributed in mid-May 2004 with a return date of June 1, although a few organizations requested and were granted short extensions. All responses were entered and data analysis completed by June 11.

This targeted (non-random) survey was completed and returned by 28 respondents. Annex E provides information on the survey distribution methodology, which was designed to get the survey into the hands of a wide assortment of organizations working in the desired fields of mine action. The end product was that all types of organizations from all regions of the mine-affected world were represented in the pool of respondents.

In Part 1 of the survey, the respondents were given the following instructions for completing the survey.

First of all, please rate the importance of including each data field according to the following scale. Use as the basis of your judgment your answer to the following question: *How important is it to include this data in a general landmine casualty database that could be used to collect data in various mine-affected countries?*

Write the number of your response in the box beside the data field.

- 1 = Do not include this data
- 2 = Low priority to include this data
- 3 = Neutral, no opinion on including or excluding this data
- 4 = Important to include this data if it is available
- 5 = Essential data--should always be included

The respondents also were invited to provide written comments about each data field. They were asked to provide suggestions for rewording of the question or to note any lack of clarity or potential problem or concern they see in using the question. Many respondents did provide written comments; they will be discussed after the numerical evaluations of the data fields are presented.

**Part I – IMSMA Victim Data Fields:** The survey results indicate a high level of agreement among the respondents that most of the data fields included in IMSMA’s victim form are important or essential to include in a general landmine casualty database. Annex F reports the numerical results of the responses for each of the data fields.

The results are reported as a weighted mean for all responses (excluding “no answer” [recorded as 9]) and as a percentage of those giving a response of 4 (important) or 5

(essential). The percentage measure was used in the survey conducted as part of the MAIC *Managing Landmine Casualty Data* study published in December 2001. It is used as an indication of which data fields should be included as the “core” of a general landmine casualty database; a data field was considered to have a “high level” of agreement for inclusion if 75% or more of the respondents gave it a 4 or a 5. The mean provides additional information on the relative number of responses that were 4 or 5. For example, fields 1.1 (Mine accident ID) and 1.14 (Municipality) both had 75% of respondents marking either 4 or 5; however, the 4.63 mean for 1.1 compared to the 4.11 mean for 1.14 indicates that field 1.1 had more responses that were 5 than did field 1.14.<sup>21</sup>

Annex F also includes a column labeled “Analysis” with comments about the responses for that field, such as perceived confusion about the way the field was worded or what its intent was. When significant confusion was expressed by the respondents, it was noted and the results were regarded as less reliable. All three of the data fields so identified fell short of the 75% agreement measure. In addition to these three fields, which all had five or more “no answer” [blank] responses, several more presented some question about their purpose and meaning largely due to the fact that they are IMSMA internal fields used for data management purposes and therefore not data fields commonly used by MRE or victim assistance personnel unless they were well versed in IMSMA. These fields also are identified in Annex F. They are not necessarily regarded as less reliable, but they are given less importance in the analysis.

The analysis of the results focuses on the data fields that relate either to demographic information about the victim, information about the accident that caused the injury, information pertinent to the victim’s knowledge about mine risk, or information about the injury and medical treatment received by the victim. They are extracted from the complete results in Annex F and are presented in the table below. The data field descriptions are condensed as well.

As noted above, most of the data fields on the IMSMA victim form met the 75 percent “agreement” standard. The ten data fields in Table 1 that do not meet the threshold for inclusion in a general landmine casualty database are highlighted. They can be classified into four categories of data fields. The lower percentages for fields 1.4 (Reported by:) and 1.5 (Organization [Name of org., Address & Tel]) reflect some confusion over the differences among the various fields listed in this section. Once someone becomes trained in using IMSMA, this confusion should go away.

The second type of data field that did not reach the 75 percent threshold were those on the first hospital reached by the victim (4.3, Name of first hospital reached and 4.4, Time until first hospital reached). Based on the comments provided on the data fields (Annex G), some respondents seemed to think that this level of detail (beyond that in fields 4.1 and 4.2) is not needed. However, these fields are included in the WHO “Minimal Recommended Dataset

---

<sup>21</sup> 1.1 (Mine accident ID) had 20 responses that were “5” and 1 that was “4” and 1.14 (Municipality) had 15 responses that were “5” and 6 that were “4”.

for Surveillance on Landmine/UXO Injuries<sup>22</sup> and are considered important indicators of the availability of medical facilities and services.

**Table – Victim Data Fields**

		Mean	% Agree
<b>2.0</b>	<b>Victim Data</b>		
2.1	Victim ID	4.81	92.86%
2.3	Family name	4.39	85.71%
2.4	First name	4.39	85.71%
2.5	Sex (check box: <i>Male, Female</i> )	5.00	100.00%
2.6	Date of Birth	4.82	96.43%
2.7	Address	4.29	78.57%
<b>1.0</b>	<b>General mine accident information</b>		
1.1	Mine accident ID	4.63	75.00%
1.2	Date and time of mine accident	4.82	100.00%
1.3	Data gathered by	4.32	78.57%
1.4	Reported by	4.15	64.29%
1.5	Organization: [Name of org.] (Address & Tel)	4.19	64.29%
1.8	Date of report	4.19	78.57%
	<b>Nearest town from mine accident</b>		
1.10	Province	4.61	96.43%
1.11	District	4.64	96.43%
1.12	Sub district	4.57	92.86%
1.13	Nearest town	4.68	92.86%
1.14	Municipality	4.11	75.00%
	<b>Distance and direction from nearest town</b>		
1.20	Distance from nearest town:	4.04	78.57%
1.21	Direction from nearest town	3.86	75.00%
<b>3.0</b>	<b>Injuries</b>		
3.1	Was the person injured or killed	4.96	100.00%
3.2	If killed, location of death	4.29	82.14%
	<b>Loss of: (check box on diagram of human body)</b>		
3.3.1	Right side/Left side:	4.46	82.14%
3.3.2	Eyesight ( <i>right/left</i> )	4.5	82.14%
3.3.3	Hearing ( <i>right/left</i> )	4.5	82.14%
3.4	Other injuries:	4.33	78.57%
<b>4.0</b>	<b>Other Information</b>		

<sup>22</sup> See: *Guidance on Surveillance of Injuries due to Landmines and Unexploded Ordnance*, Geneva: WHO, 2000.

4.1	First medical facility reached	4.19	78.57%
4.2	Time until first facility reached (___ h)	4.08	75.00%
4.3	Name of first hospital reached	3.92	64.29%
4.4	Time until first hospital reached (___ h)	3.96	67.86%
4.13	Occupation	4.44	85.71%
4.14	Occupation <i>prior</i> to accident	4.07	75.00%
4.5	Activity at time of mine accident	4.64	92.86%
4.6	How often did the person go there?	4	67.86%
4.7	Did the person know that area was dangerous?	4.32	85.71%
4.8	If they knew area was dangerous, why did they go there?	4.18	78.57%
4.9	Did the person see the object before accident?	4	71.43%
4.10	Did the person receive Mine Risk Education?	4.57	89.29%
4.11	Medical report reference	3.35	39.29%
4.12	Was area marked?	4.64	92.86%
<b>6.0</b>	<b>Other persons involved</b>	<b>4.33</b>	<b>78.57%</b>
	<b>List of other Victims</b>		
6.1	Name	4.07	67.86%
6.2	First name	3.92	57.14%
6.3	Status (check box: <i>killed, injured</i> )	4.08	67.86%
<b>7.0</b>	<b>Device that caused the mine accident</b>	<b>4.37</b>	<b>78.57%</b>

The third category of data field that did not meet the 75 percent threshold is of more interest, in that it includes some of the fields that the participants of the May 2002 workshop voiced concerns about. The participants identified fields 4.5 through 4.10 and 4.12 as having a mine risk education purpose. Field 4.12 (Was area marked) was seen as having immediate value, but they questioned the relevancy and appropriateness of 4.6 through 4.10.<sup>23</sup> In particular, concern was raised about field 4.7 (Did the person know that the area was dangerous?), although over 85 percent of the respondents gave it a 4 or a 5 in this survey. In contrast, the respondents were less in agreement that 4.6 (How often did the person go there?) and 4.9 (Did the person see the object before accident?) be included in a core landmine casualty dataset. Although most of these “MRE” fields still met the 75 percent agreement threshold, comments provided (Annex G) indicate that a number of respondents question the value of including these items, expressing sentiments similar to those voiced by the workshop participants; these comments will be discussed in more detail below.

The final category of data fields that were rated as less important by the respondents includes those relating to other victims of the accident. The written comments (Annex G) for these fields (6.1, 6.2 and 6.3) provide some insight into why they were given less importance.. The

<sup>23</sup> See *Landmine Casualty Database Workshop*, pp. 17-19

views were that this information was captured in other victim reports, that its use could lead to overestimation of casualty figures, or that it was confidential information that needed to be carefully guarded. Some comments reflected the purpose behind the fields, so that reports on different victims from the same accident could be linked. Perhaps one way to address the misgivings about including the names of other victims would be to record only the Victim ID of other victims from the same accident.

One last field that also was rated as less important to be included was 4.11 (Medical report reference). Unfortunately, the comments for this field provide little clue about why it was regarded as less important, other than it was often not available or not really needed or appropriate to include on the victim form.

**Comments on Data Fields:** As noted above, Annex G presents the written comments provided by the respondents about the various data fields. Some of the comments capture important insights from personnel with valuable field experience. They reflect cultural nuances and practical considerations in using the fields. They should be studied by anyone developing or revising a landmine casualty database.

They also provide information about some data fields that are not captured by the numerical responses. For example, several respondents continue to express concerns about including the “MRE” fields 4.6-4.10. In total, eight respondents questioned the use of one or more of these questions (for a total of 14 negative comments). On the other hand, several respondents felt that many of these questions were useful ones to include. The comments show that there is still disagreement about the importance of including all of these items in a general landmine victim database.

In contrast, the respondents demonstrated much more agreement on the fields that can be identified as having a “victim assistance” purpose. Except for the fields on the first hospital reached (items 4.3 and 4.4), the respondents agreed that the fields should be included. However, when examining the comments, concerns about some of the fields are apparent. In particular, the data fields on “Occupation” generated comments that again were similar to those expressed by the workshop participants.<sup>24</sup> Item 4.13 asks about the victim’s occupation and 4.14 asks about the victim’s occupation *prior* to accident. The comments reflect confusion over the distinction between these. They also assert that the list of sub-choices to choose from is too limited or not appropriate. However, some positive comments and the numerical responses indicate there is agreement that this type of question is important to include, even if its exact wording may require revision. Suggestions for revising some of the data fields will be included in the final “Recommendations” section of this report.

**Research Finding #6:** Survey results indicate basic agreement that most of the existing IMSMA “Victim” data fields are important or essential to include in a general landmine casualty database, although concerns remain about some of them. The written comments on the data fields are important to consider when revising this component of IMSMA.

---

<sup>24</sup> See *Landmine Casualty Database Workshop*, p. 17



**Part 2 – The Need for Supplemental Data Collection:** While the results from Part 1 indicate general support for the data fields presently included in the standard IMSMA accident victim data entry form, Part 2 results indicate significant disagreement about how best to collect and manage supplemental casualty information.

Part 2 is predicated upon an important distinction that needs to be made about the types of “victim” data that can be collected and used. IMSMA’s accident victim data form began as a landmine casualty surveillance instrument – to collect basic information about the number of victims, limited demographic information on the victims (sex, age, status [killed/injured]) and where the accidents occurred. This provided mine clearance personnel with information needed to plan their operations and gave mine action authorities basic information on the number and location of victims.

As new versions of IMSMA were developed, IMSMA began to respond to requests from people working in survivors assistance and mine risk education to collect additional information about the victims, such as type of injury, initial medical care received, and mine risk education knowledge and training. It thus became a limited victim assistance and MRE database. The additional data fields were recommended by personnel from the WHO, ICRC, UNICEF and several NGOs engaged in victim assistance.<sup>25</sup> With the release of IMSMA V.3, an expanded mine risk education feature was incorporated into IMSMA, although the MRE content of the accident victim data entry form was not altered.

As discussed above, a debate eventually ensued about how much victim data mine action programs should be required to collect. The question examined in Part 2 of the survey concerns two aspects of this issue, whether the victim dataset contained in IMSMA’s accident victim functionality is sufficient for victim assistance purposes and if not, what additional data should be collected and how should it be managed.

The instructions for Part 2 were as follows:

The next section of this questionnaire explores the need to collect additional data on landmine casualties.

There are two parts to this issue. One involves whether an information management system like IMSMA should include more data fields relating to landmine victims and victim assistance and what those essential data fields should be. The second part involves indicating how these additional fields should be addressed. Should they 1) be added to the “Victim” form discussed above; 2) added to IMSMA as a separate “Victim Assistance” functionality (as is done for Mine Risk Education currently); or 3) collected by an authority such as a governmental health ministry as part of its public health oversight role.

The results of the survey are presented in Annex F and summarized and discussed below.

---

<sup>25</sup> *Managing Landmine Casualty Data*, p. 13.

1. Do the data fields listed above in the first section of this survey adequately cover the types of information on landmine casualties needed to plan mine risk education and victim assistance programs? Yes **35.71%** No **64.29%** (check one)

Based on the sample of 28 respondents completing the survey, nearly a two-thirds majority thought that the current IMSMA “Victim” form did not adequately cover the types of information on landmine casualties needed for MRE and victim assistance purposes (although it might be sufficient for “operational” mine action purposes). Thus there was strong support for expanding the data collected on landmine victims. However, the respondents did not agree on how best to collect and manage that additional data.

The next question in Part 2 asked the respondents who replied “No” to the first question to select an option for addressing the collection and management of the additional data. The results of this question were the following:

2. If your answer is **NO**, which of the following options do you think is best to address the need to collect additional data on landmine casualties:

<b>Mark the box of the one option you most favor</b>	<b># Responses</b>	<b>weighted %*</b>
Add 1-5 data fields to the existing IMSMA “Victim” form	<b>2</b>	<b>10.53%</b>
Leave the existing IMSMA “Victim” form as is but develop a more extensive supplemental “Victim Assistance” functionality for IMSMA	<b>4</b>	<b>21.05%</b>
Add 1-5 data fields to the existing IMSMA “Victim” form AND develop a more extensive supplemental “Victim Assistance” functionality for IMSMA	<b>4</b>	<b>21.05%</b>
Leave the existing IMSMA “Victim” form as is but promote the development of expanded victim databases by other entities such as national Ministries of Health	<b>5</b>	<b>26.32%</b>
Add 1-5 data fields to the existing IMSMA “Victim” form AND promote the development of expanded victim databases by other entities such as national Ministries of Health	<b>4</b>	<b>21.05%</b>

**\*weighted % calculated based on the number of responses for each option out of 19 total responses**

The one aspect of this question that most of the respondents agreed on was that simply expanding the existing IMSMA “Victim” form was not sufficient -- 89.47 percent of those answering the question chose an option that involved a supplemental victim assistance database, whether one that was part of IMSMA or independent from it. Otherwise, the respondents split almost evenly on which of the four other options they preferred.

**Research Finding #7:** Survey results indicate support for expanding the data collected on landmine casualties and developing a supplemental victim assistance database, either within IMSMA or separate from it.

**Suggested Additional Data Fields:** The next question to consider is what data fields should be included in a supplemental victim assistance database. Annex H contains the additional data fields suggested by the respondents, listed separately based on whether they should be incorporated into an expanded IMSMA “Victim” form or a supplemental victim assistance

functionality or database. Some of the commonalities or patterns apparent in the responses will be identified in the final “Recommendations” section of this report.

## ***V. IMSMA and the Landmine Impact Survey***

The final objective of the research project was to examine the “Impact Survey” functionality of IMSMA and compare the data it collects on victims to that contained in the “accident victim” functionality, which was the subject of the previous section. After comparing the two types of victim data captured in these different functionalities in IMSMA and identifying any differences, the project is to make recommendations for ways to improve the dissemination of all relevant data to mine victim service providers and to continue to collect the relevant data after the impact survey is completed.

The “Impact Survey” functionality of IMSMA is based on the Landmine Impact Survey (LIS) protocol developed by the Survey Working Group, approved by UNMAS and made operational in the LIS conducted by organizations like the Survey Action Center (SAC).<sup>26</sup> Once the LIS protocol, including a UN certification process, was developed and began to be used, then an “Impact Survey” functionality for IMSMA was created so that the data captured in the survey could be stored and used via IMSMA.

The victim data collected by a LIS is of two types. First of all, all reported victims of landmine accidents are counted during the community survey process. Secondly, detailed information on recent victims, that is, victims due to mine accidents that have occurred within the past twenty four months, is collected and factored into the “landmine impact score” for communities. It is this detailed information that this report is most interested in.

Data from completed landmine impact surveys from Chad and Yemen were compiled into WebReports posted by the IMSMA team at the GICHD.<sup>27</sup> They provide good illustration of the types of information on victims that emerge from the LIS and can be reported via IMSMA. The formal LIS reports for each country contain a full reporting of the survey results, as well as an explanation of the methodology and national context of the LIS.<sup>28</sup>

The following information can be provided about landmine victims through the survey process and is reported in the WebReports for Chad and Yemen:

---

<sup>26</sup> The Survey Action Center (SAC) has provided technical assistance to most of the Landmine Impact Surveys completed or underway to date. However, the Canadian International Demining Corps (CIDC), conducted the survey in Mozambique (in partnership with Paul F. Wilkinson & Associates Inc) and the Vietnam Veterans of America Foundation (VVAFA) has also been involved in LIS work. The SAC often subcontracts with organizations like Norwegian Peoples Aid or Handicap International on LIS projects. See SAC’s *Global Landmine Survey Initiative* for more information on how the surveys are conducted. It is available at: [http://www.sac-na.org/resources\\_publications.html](http://www.sac-na.org/resources_publications.html).

<sup>27</sup> Available at: <http://imsma-mygm.ethz.ch/wr/webreport.aspx?ctry=td&topic=impact&topics=impact> (24 June 2004).

<sup>28</sup> LIS reports for Cambodia, Chad, Kosovo, Mozambique, Thailand and Yemen are available off the SAC website at: [http://www.sac-na.org/surveys\\_completed.html](http://www.sac-na.org/surveys_completed.html).

- **Number of recent victims** (and this figure calculated as average per year and normalized by population nationally and in affected communities).
- **Accident fatalities** by gender and by age (broken into the following age group categories [in years]: 0-4, 5-14, 15-29, 30-44, 45-59, 60 plus)
- **Activity at Time of Accident**, according to a military or civilian differentiation, with civilian activities including Collecting food/water, Farming, Herding, Household work, Playing, Tampering, Travel, Other, Unknown
- **Type of injuries**, according to five categories: fatal, amputation, loss of sight, other, unknown
- **Medical care received**, according to six categories: emergency care, rehabilitative care, vocational training, other care, no care, unknown care. Medical care provided by gender also can be calculated (as could care by age).

In addition to these data fields, information on **Occupation of victim prior to accident** is collected in the LIS, although not reported in the WebReports. The categories of occupations used vary depending on country, but normally include for civilians: Farming, Household work, Trading, Not earning/Unemployed, Other, Unknown. Yemen also contained data on occupation after the accident (reported in full LIS report). The LIS also collects the name (family name, first name and middle name) of the victim, although this information is not provided in the WebReports or the published LIS reports in order to protect the confidentiality of victims.

Of course, the LIS collects other data about the socio-economic impact of landmines in a country and information about known mined areas and suspected mined areas (dangerous areas). This would include information (if available) about the location and date of the mine accident that caused the casualty. In IMSMA, the victim information then is linked to data collected about mined and dangerous areas. However, the information about the recent victims is not linked to the data entered into IMSMA by means of the mine accident victim forms. The data on the two different sets of victim information are stored separately.<sup>29</sup>

The LIS thus collects some of the same information on victims as the mine accident victim record does; however, it also collects data that the other does not, such as the type of medical care received beyond just the medical facility the victim reached. Its occupation categories also provide for more economic details than the accident victim record does. The accident victim record contains more categories of occupation having to do with mine action personnel and other “official” positions such as aid worker, government worker and international observer and fewer categories that detail the occupation of civilians like farmer, herder, trader, household work, etc.

One challenge that has emerged with the LIS is that the data collected on victims does not become the basis of a victim database that can be used to plan specific services or monitor the care a victim receives over the years. The data remains a snapshot of the situation at a certain time. The LIS provides useful information to aid the country in planning its

---

<sup>29</sup> *IMSMA Users Guide*, Chapter 6, “Reports from the Field”, p. 9.

humanitarian mine action program; however, the potential value of the LIS victim data is not fully utilized.

**Research Finding #8:** The LIS includes data fields on landmine victims that are similar to the mine accident victim form but also includes some that offer more details on victims' medical care and occupation. The challenge is to meld these two victim data sources to develop more robust victim databases.

## ***VI. Recommendations for Enhancing Landmine Casualty Data Collection and Management***

This final section of the report presents recommendations for actions to take to enhance the collection, management and dissemination of landmine casualty data so that it can better meet the needs of survivor assistance service providers. The recommendations are based on the research conducted for this report, as presented above and summarized in the “Research Findings” boxes.

1. Each mine-affected country should bring together representatives of all the stakeholders in landmine victim assistance programs to draft a standard or protocol for the collection, management and dissemination of landmine casualty data. A central landmine casualty data collection and management authority should be designated for each country. This should be done as early in the mine action program as possible.
2. A supplemental “victim assistance” functionality or feature of IMSMA should be developed. It should be designed to use in conjunction with the other features of IMSMA but also designed so that it could be used by a government office (like a health or labor/human welfare ministry) separate from the mine action center or national demining office.
3. Countries could have the option of using a different information management system (like the proposed LUMVIS in Laos) to collect and manage their landmine casualty data, but the existence of one developed to function with IMSMA would provide mine-affected countries with a ready database option. The development of a “core” of basic casualty data (a minimum dataset) should be promoted to encourage the collection of some common data across countries.
4. The IMSMA “Victim” form should remain a streamlined record of the core data that all mine action programs should collect – data needed for mine action operations like clearance but also a few basic questions useful for mine risk education and victim assistance. However, detailed information related to these two areas should be contained in separate MRE and VA functionalities. The MRE functionality already exists.

5. The data fields in the IMSMA “Victim” form should be revised to coincide more with the data fields used in the Landmine Impact Survey (LIS). The “Occupation prior to accident” question (field 4.14) should be rewritten so that it contains more categories of civilian occupations. The “occupation” question (field 4.13) should be removed from the “Victim” form and moved to the separate victim assistance functionality. It should be reworded so that it is more clearly different from 4.14; it should focus on the economic situation of the survivor after the accident and should include more meaningful categories of responses.
6. A means to link victim data collected as part of the LIS with accident victim data collected via the IMSMA “Victim” form should be developed so that they can be combined into a common victim database. Data reliability issues will be a challenge and victim’s identities will have to be protected, but the LIS data should become more than a snapshot of the situation at the time that the LIS was conducted. Revising the IMSMA “Victim” form to make it coincide more to the LIS data should help facilitate the merger of the two data sources.
7. A focus group of subject matter experts should be convened to decide on the standard data fields to include in the victim assistance functionality. The VA functionality should also be customizable to suit the needs of the particular country, but should retain a certain core of data fields so that similar and comparable data on victims can be collected in different countries.
8. The additional data fields suggested by the respondents to the MAIC Casualty Data Survey should be reviewed as part of the work of the focus group. Additional surveying of MRE and VA personnel may be necessary. Some of the common suggested additional data fields include (drawn from Annex H):
  - Information on economic situation – Economic support/livelihood, education, occupation, training, head of household status, marital status, number of children, etc.
  - Information on rehabilitative services provided and those still required – Has survivor been provided with prostheses or assistive devices? Are they functional and used by the survivor? Has survivor received psycho-social counseling? etc.
9. Efforts should be made to make IMSMA less complex and more “user” friendly so that more countries will begin to use it in an effective way. Simplifying and standardizing the victim data fields and creating a victim assistance functionality may help encourage more countries to report and share data. Donor countries and international organizations should continue to encourage mine-affected countries to release reports and share data with victim assistance service providers.

## **Annex A – ANAMA Victim Assistance Survey Forms**

**Victim Assistance survey forms and questionnaires developed by ANAMA for use in Azerbaijan.**

**The “Questionnaire on Survivor’s Needs Research for Social Reintegration & Rehabilitation” (with a date of February 2004) was used in a survey of the Fuzili district in August 2003. The “Needs Research for Social Reintegration & Rehabilitation” is a less detailed version created in 2001 (form has the date 17.09.01). Both are based on IMSMA and are examples of how IMSMA has been adapted to accommodate the collection of more detailed information on the services survivors have received and the needs they still have for assistance.**



## Questionnaire on Survivor's Needs Research for Social Reintegration & Rehabilitation

### 7 Losses, Injuries and Consequences:

<b>Losses</b> 7.1a* <input type="checkbox"/> <input type="checkbox"/> sight 7.1b <input type="checkbox"/> <input type="checkbox"/> hearing 7.1c <input type="checkbox"/> <input type="checkbox"/> above-elbow 7.1d <input type="checkbox"/> <input type="checkbox"/> below-elbow 7.1e <input type="checkbox"/> <input type="checkbox"/> hand 7.1f h/fingers:** <input type="checkbox"/>	
7.1g <input type="checkbox"/> <input type="checkbox"/> above-knee 7.1h <input type="checkbox"/> <input type="checkbox"/> below-knee 7.1i <input type="checkbox"/> <input type="checkbox"/> foot 7.1j <input type="checkbox"/> <input type="checkbox"/> foot fingers: <input type="checkbox"/> <input type="checkbox"/> 7.2 <input type="checkbox"/> <b>Avulsion: ***</b> (_____)	
<b>Injuries</b> 7.3 <b>Cerebral trauma:</b> 7.3a <input type="checkbox"/> compound 7.3b <input type="checkbox"/> simple 7.4 <b>Spinal cord trauma:</b> 7.4a <input type="checkbox"/> compound 7.4b <input type="checkbox"/> simple	
7.5 <b>Fractures:</b> 7.5a <input type="checkbox"/> skull 7.5b <input type="checkbox"/> jaw 7.5c <input type="checkbox"/> ribs: <input type="checkbox"/> <input type="checkbox"/> 7.5d <input type="checkbox"/> <input type="checkbox"/> shoulder 7.5e <input type="checkbox"/> <input type="checkbox"/> forearm 7.5f <input type="checkbox"/> <input type="checkbox"/> hand 7.5g <input type="checkbox"/> <input type="checkbox"/> pelvis 7.5h <input type="checkbox"/> <input type="checkbox"/> thigh	
7.5i <input type="checkbox"/> <input type="checkbox"/> knee 7.5j <input type="checkbox"/> <input type="checkbox"/> crus 7.5k <input type="checkbox"/> <input type="checkbox"/> foot 7.6 <b>Paralysis/Paresis:</b> 7.6a <input type="checkbox"/> acentric 7.6b <input type="checkbox"/> centric 7.7 <b>Burn:</b> 7.7a <input type="checkbox"/> 1 7.7b <input type="checkbox"/> 2 7.7c <input type="checkbox"/> 3	
7.8 <b>Bruises:</b> 7.8a <input type="checkbox"/> <input type="checkbox"/> eye 7.8b <input type="checkbox"/> <input type="checkbox"/> ear 7.8c <input type="checkbox"/> <input type="checkbox"/> hand 7.8d <input type="checkbox"/> <input type="checkbox"/> breast 7.8e <input type="checkbox"/> <input type="checkbox"/> back 7.8f <input type="checkbox"/> <input type="checkbox"/> abdomen 7.8g <input type="checkbox"/> <input type="checkbox"/> pelvis 7.8h <input type="checkbox"/> <input type="checkbox"/> leg <b>Total:</b>	
7.9 <b>Fragment' injuries:</b> 7.9a <input type="checkbox"/> head 7.9b <input type="checkbox"/> eye 7.9c <input type="checkbox"/> breast 7.9d <input type="checkbox"/> back 7.9e <input type="checkbox"/> abdomen 7.9f <input type="checkbox"/> pelvis 7.9g <input type="checkbox"/> hand 7.9h <input type="checkbox"/> leg	
7.10 <b>Not extracted:</b> 7.10a <input type="checkbox"/> head 7.10b <input type="checkbox"/> eye 7.10c <input type="checkbox"/> breast 7.10d <input type="checkbox"/> back 7.10e <input type="checkbox"/> abdomen 7.10f <input type="checkbox"/> pelvis 7.10g <input type="checkbox"/> hand 7.10h <input type="checkbox"/> leg	
<b>Injuries' Consequences</b> 7.11 <input type="checkbox"/> <b>Visual defects:</b> (_____) 7.12 <input type="checkbox"/> <b>Dystrophy:</b> (_____) 7.13 <input type="checkbox"/> <b>Adhesions:</b> (_____)	
7.14 <b>Functions' perversion:</b> 7.14a <input type="checkbox"/> <input type="checkbox"/> sight 7.14b <input type="checkbox"/> <input type="checkbox"/> hearing 7.14c <input type="checkbox"/> <input type="checkbox"/> speech 7.14d <input type="checkbox"/> <input type="checkbox"/> smell 7.14e <input type="checkbox"/> <input type="checkbox"/> feel: _____	
7.14f <input type="checkbox"/> <input type="checkbox"/> basic-motional apparatus 7.14g <input type="checkbox"/> <input type="checkbox"/> nervous system 7.14h <input type="checkbox"/> <input type="checkbox"/> cardiovascular system 7.14i <input type="checkbox"/> <input type="checkbox"/> digestive tract	
7.14j <input type="checkbox"/> <input type="checkbox"/> respiratory system 7.14k <input type="checkbox"/> <input type="checkbox"/> endocrine system 7.14l <input type="checkbox"/> <input type="checkbox"/> urology system 7.14m <input type="checkbox"/> <input type="checkbox"/> genital system	
7.15 <b>Operations lived through:</b> 7.15a <input type="checkbox"/> Amputation 7.15b <input type="checkbox"/> Resection: (_____) 7.15c <input type="checkbox"/> Neurosurgery 7.15d <input type="checkbox"/> Sight	
7.15e <input type="checkbox"/> Hearing 7.15f <input type="checkbox"/> Bones 7.15g <input type="checkbox"/> Fragments' extraction 7.15h <input type="checkbox"/> others 7.15i <input type="checkbox"/> Other/Specify: _____	

### 8 Medical care:

8.1 <b>Surgery:</b> 8.1a <input type="checkbox"/> Amputation 8.1b <input type="checkbox"/> Resurgery: (_____) 8.1c <input type="checkbox"/> RENEUROLOGY 8.1d <input type="checkbox"/> Bones 8.1e <input type="checkbox"/> Wound care						
8.1f <input type="checkbox"/> General 8.1g <input type="checkbox"/> Plastic: (_____) 8.1h <input type="checkbox"/> Recovery: (_____) 8.1i <input type="checkbox"/> Fragments' extraction 8.1j <input type="checkbox"/> Adhesions' separation						
8.2 <b>Treatment/ Consultation of:</b>	8.2d <input type="checkbox"/> general surgeon		8.2h <input type="checkbox"/> oculist		8.2i <input type="checkbox"/> therapist	
	8.2a <input type="checkbox"/> prosthetist		8.2e <input type="checkbox"/> neurosurgeon		8.2j <input type="checkbox"/> otologist	
	8.2b <input type="checkbox"/> orthopedist		8.2f <input type="checkbox"/> ophthalmic surgeon		8.2k <input type="checkbox"/> gastroent-st	
	8.2c <input type="checkbox"/> traumath-st		8.2g <input type="checkbox"/> vascular surgeon		8.2l <input type="checkbox"/> psychologist	
		8.2j <input type="checkbox"/> neurologist		8.2m <input type="checkbox"/> nephrologist		
		8.2k <input type="checkbox"/> cardiologist		8.2n <input type="checkbox"/> dome-doctor		
		8.2o <input type="checkbox"/> urologist		8.2p <input type="checkbox"/> physiotherap-st		
				8.2q <input type="checkbox"/> endocrinologist		
				8.2r <input type="checkbox"/> stomato-st		
				8.2s <input type="checkbox"/> Others:		
8.3 <b>Diagnostics:</b> 8.3a <input type="checkbox"/> Electroencephalography 8.3b <input type="checkbox"/> X-ray 8.3c <input type="checkbox"/> Ultrasonography 8.3d <input type="checkbox"/> others						

### 9 Physical rehabilitation:

9.1 <b>Prosthetics:</b> 9.1a <input type="checkbox"/> below-knee 9.1b <input type="checkbox"/> above-knee 9.1c <input type="checkbox"/> of foot 9.1d <input type="checkbox"/> below-elbow 9.1e <input type="checkbox"/> above-elbow 9.1f <input type="checkbox"/> of hand					
9.2 <input type="checkbox"/> Replacement prosthetics 9.3 <input type="checkbox"/> Repeat prosthetics 9.4 <input type="checkbox"/> Prosthesis's fitting 9.5 <input type="checkbox"/> Repair service prosthetics					
9.6 <b>Providing with prosthetic-orthopedic products:</b> 9.6a <input type="checkbox"/> Armchair 9.6b <input type="checkbox"/> Wheelchair 9.6c <input type="checkbox"/> Crutches 9.6d <input type="checkbox"/> Walking-stick					
9.7 <b>Physical Therapy:</b> 9.7a <input type="checkbox"/> Treatment in sanatorium 9.7b <input type="checkbox"/> Remedial gymnastics 9.7c <input type="checkbox"/> Bandaging the residual limb					
9.7d <input type="checkbox"/> Range of motion exercises 9.7e <input type="checkbox"/> Gait training 9.7f <input type="checkbox"/> Others					
9.8 <b>Occupational Therapy Trainings in:</b> 9.8a <input type="checkbox"/> Activities of Daily Living 9.8b <input type="checkbox"/> Use of upper extremity prostheses					

### 10 Social adaptation:

10.1 <b>Hearing:</b> 10.1a <input type="checkbox"/> Aero-phonic techniques 10.1b <input type="checkbox"/> Signs and lips language 10.1c <input type="checkbox"/> Technical means of communication			
10.2 <b>Sight:</b> 10.2a <input type="checkbox"/> Braille 10.2b <input type="checkbox"/> Printings in special type 10.2c <input type="checkbox"/> Soniferous books 10.2d <input type="checkbox"/> Subject guides			
10.2e <input type="checkbox"/> Special-purpose tape recorders 10.2f <input type="checkbox"/> Loupes 10.2g <input type="checkbox"/> Lens 10.2h <input type="checkbox"/> Eye-stick			

### 11 Psychosocial care:

11.1 <input type="checkbox"/> Peer support 11.2 <input type="checkbox"/> Education of survivor's families in care 11.3 <input type="checkbox"/> Participation in Support Groups		
11.4 <input type="checkbox"/> Social Support Group's visits 11.5 <input type="checkbox"/> Mine Awareness' activity 11.6 <input type="checkbox"/> Mine Victim Assistance' activity		
11.7 <input type="checkbox"/> Participation in Associations of Mine Survivors 11.8 <input type="checkbox"/> Create family		

12 **Awareness on laws of disabled people** (put value):    1    2    3    4    5





## Questionnaire on Survivor's Needs Research for Social Reintegration & Rehabilitation

### 13 Economic assistance:

13.1 <input type="checkbox"/> Treatment (_____)	13.2 <input type="checkbox"/> Medicaments	13.3 <input type="checkbox"/> Public assistance	13.4 <input type="checkbox"/> Payment for habitation & public service
13.5 <b>Medical &amp; domestic services</b> at: 13.5a <input type="checkbox"/> home 13.5b <input type="checkbox"/> stationary institutions			13.6 <input type="checkbox"/> Technical & others means for rehab-on
13.7 <b>Assignment of lands</b> for: 13.7a <input type="checkbox"/> agricultural works 13.7b <input type="checkbox"/> housing construction			13.8 <input type="checkbox"/> Repair of a house
13.11 <b>Loans</b> (specify aim): (_____)			13.9 <input type="checkbox"/> Provision of housing
13.12 <b>Grants</b> (specify aim): (_____)			13.10 <input type="checkbox"/> Provision of car
13.13 <b>Small business start up:</b> 13.13a <input type="checkbox"/> Obtaining of raw produce & production' distribution 13.13b <input type="checkbox"/> Allotment of empty quarters			
13.14 <b>Procurement of ware and food products</b> (specify): 13.14a <input type="checkbox"/> social amenities 13.14b <input type="checkbox"/> industrial 13.14c <input type="checkbox"/> economic			
13.14d <input type="checkbox"/> food products 13.14e <input type="checkbox"/> sports		13' Others: _____	

### 14 Professional Rehabilitation 14.1 Profession: (\_\_\_\_\_)

14.2a  Unemployed  
14.2b  Others: (\_\_\_\_\_)

<b>14.4 Agriculture:</b> 14.4a <input type="checkbox"/> Husbandry 14.4b <input type="checkbox"/> Grain-growing 14.4c <input type="checkbox"/> Cotton-planting 14.4d <input type="checkbox"/> Mechanization 14.4e <input type="checkbox"/> Stock raising 14.4f <input type="checkbox"/> Aviculture 14.4g <input type="checkbox"/> Beekeeping 14.4h <input type="checkbox"/> Fruit-growing 14.4i <input type="checkbox"/> Floriculture 14.4j <input type="checkbox"/> Olericulture 14.4k <input type="checkbox"/> Viniculture	<b>14.5 Industry/Technique:</b> 14.5a <input type="checkbox"/> Carpentry 14.5b <input type="checkbox"/> Metalwork 14.5c <input type="checkbox"/> House painting 14.5d <input type="checkbox"/> Plumbing 14.5e <input type="checkbox"/> Electric works 14.5f <input type="checkbox"/> Welder's work 14.5g <input type="checkbox"/> Mechanics 14.5h <input type="checkbox"/> Radiotechnics 14.5i <input type="checkbox"/> Construction 14.5j <input type="checkbox"/> Car repair 14.5k <input type="checkbox"/> Driving	<b>14.6 Economy/Business:</b> 14.6a <input type="checkbox"/> Economy 14.6b <input type="checkbox"/> Finance 14.6c <input type="checkbox"/> Management 14.6d <input type="checkbox"/> Business 14.6e <input type="checkbox"/> Communication <b>14.7 Crafts:</b> 14.7a <input type="checkbox"/> Pottery 14.7b <input type="checkbox"/> Hammered work 14.7c <input type="checkbox"/> Woodcarving 14.7d <input type="checkbox"/> Shoemaking 14.7e <input type="checkbox"/> Tailoring	<b>14.8 Science:</b> 14.8a <input type="checkbox"/> Medicine 14.8b <input type="checkbox"/> Nursing 14.8c <input type="checkbox"/> Veterinary 14.8d <input type="checkbox"/> Jurisprudence 14.8e <input type="checkbox"/> Pedagogy: (_____)	<b>14.9 Art:</b> 14.9a <input type="checkbox"/> Sculpture 14.9b <input type="checkbox"/> Beaux-arts 14.9c <input type="checkbox"/> Music 14.9d <input type="checkbox"/> Literature 14.9e <input type="checkbox"/> Footlights <b>14.10 Others:</b> 14.10a <input type="checkbox"/> Collective work 14.10b <input type="checkbox"/> Engineering: (_____)
14.11 <input type="checkbox"/> Preferable field of activity: (_____)				

### 15 Education: 15.1 At present: (\_\_\_\_\_)

15.1a <input type="checkbox"/> Primary	15.1b <input type="checkbox"/> Uneducated
15.2 <input type="checkbox"/> Secondary	15.3 <input type="checkbox"/> Paraprofessional: (_____)
15.4 <input type="checkbox"/> High: (_____)	
15.5 <input type="checkbox"/> At home 15.6 <input type="checkbox"/> Special (in malformation cases) 15.7 <input type="checkbox"/> Assistance to parents in visiting education of disabled children	
15.8 <b>Training courses:</b> 15.8a <input type="checkbox"/> Computer 15.8b <input type="checkbox"/> Lingual 15.8c <input type="checkbox"/> Veterinary 15.8d <input type="checkbox"/> others: (_____)	

<b>16 Fitness Sports:</b>		16.7 <input type="checkbox"/> Table games	16.11 <input type="checkbox"/> Weight-lifting	16.15 <input type="checkbox"/> Wrestling	16.19 <input type="checkbox"/> Different sports
16.1 <input type="checkbox"/> Track	16.4 <input type="checkbox"/> Gymnastics	16.8 <input type="checkbox"/> Chess	16.12 <input type="checkbox"/> Football	16.16 <input type="checkbox"/> Karate	16.20 <input type="checkbox"/> Participation in Para Olympic games
16.2 <input type="checkbox"/> Running	16.5 <input type="checkbox"/> Exercisers	16.9 <input type="checkbox"/> Billiards	16.13 <input type="checkbox"/> Volleyball	16.17 <input type="checkbox"/> Boxing	
16.3 <input type="checkbox"/> Shooting	16.6 <input type="checkbox"/> Swimming	16.10 <input type="checkbox"/> Ping-pong	16.14 <input type="checkbox"/> Basketball	16.18 <input type="checkbox"/> Yoga, yoga	16' Others:

### 17 Additional information: 17.1 Degree of disablement: \_\_\_\_\_ 17.2 Pension 17.3 Salary (az. manat): \_\_\_\_\_

17.4 **Monthly Family Income** (az. manat): \_\_\_\_\_ 17.5 **Disablement:** 17.5a  total 17.5b  partial 17.5c  temporary

17.6  In care of parents 17.7 Dwelling-space (sq.m): \_\_\_\_\_ 17.8 Family members (age): \_\_\_\_\_

18 **For interviewers:** 18.1  Talented in: \_\_\_\_\_ 18.2  Recommendable for honorary duties with invalids

18.3  Needy 18.4  Disparity between degree of disablement & severity of injuries 18.5 **Remarks:** \_\_\_\_\_

18.6 **Contacts:** \_\_\_\_\_

### 19 Remarks of mine/UXO survivor or his/her witness: \_\_\_\_\_

**Signature:** \_\_\_\_\_ (\_\_\_\_\_)

\*   -Left and right sights of the body; \*\* \_\_\_\_\_ -Number of injuries & looses; \*\*\* (\_\_\_\_\_) Reference to the numbers of other paragraphs.



## Needs Research for Social Reintegration & Rehabilitation

### 7 Medical care:

7.1 <input type="checkbox"/> Amputation surgery	7.8 <input type="checkbox"/> Eye surgery	7.15 <input type="checkbox"/> Medicines (specify):
7.2 <input type="checkbox"/> Revision surgery	7.9 <input type="checkbox"/> Eye treatment	
7.3 <input type="checkbox"/> Reconstructive surgery	7.10 <input type="checkbox"/> Neurosurgery	7.16 <input type="checkbox"/> Stomatology    7.16a <input type="checkbox"/> Dental prosthesis
7.4 <input type="checkbox"/> Plastic surgery	7.11 <input type="checkbox"/> Neurology	7.17 <input type="checkbox"/> Diagnostic procedures (specify):
7.5 <input type="checkbox"/> Thoracic surgery	7.12 <input type="checkbox"/> Psychiatry	
7.6 <input type="checkbox"/> Spinal surgery	7.13 <input type="checkbox"/> Hearing treatment	7.18 <input type="checkbox"/> Treatment in resort/sanatorium
7.7 <input type="checkbox"/> Spinal treatment	7.14 <input type="checkbox"/> Wound care	7' Others (specify):

### 8 Psychosocial care:

8.1 <input type="checkbox"/> A psychologist's counsel	8.2 <input type="checkbox"/> Peer support	8.3 <input type="checkbox"/> Participation in Support Groups
8.4 <input type="checkbox"/> Social Support Group's visits		8.5 <input type="checkbox"/> Education of survivor's families in care issues
8' Others (specify):		

### 8.6 Social adaptation:

8.61 <b>Hearing:</b>	8.61a <input type="checkbox"/> Aero-phonetic techniques	8.61b <input type="checkbox"/> Signs and lips language	8.61c <input type="checkbox"/> Technical means of communication
8.62 <b>Sight:</b>	8.62a <input type="checkbox"/> Braille	8.62b <input type="checkbox"/> Printings in special type	8.62c <input type="checkbox"/> Soniferous books
	8.62d <input type="checkbox"/> Subject guides	8.62e <input type="checkbox"/> Special-purpose tape recorders	8.62f <input type="checkbox"/> Walking-sticks
	8.62g <input type="checkbox"/> Loupes	8.6' Others (specify):	

### 9 Physical rehabilitation:

9.1 <input type="checkbox"/> <b>Prosthetics:</b> 9.1a <input type="checkbox"/> below-knee    9.1b <input type="checkbox"/> above-knee    9.1c <input type="checkbox"/> of upper extremities	9.2 <input type="checkbox"/> Replacement prosthetics
9.3 <input type="checkbox"/> Repeat prosthetics	9.4 <input type="checkbox"/> Prosthesis's fitting
9.5 <input type="checkbox"/> Repair service prosthetics	9.6 <input type="checkbox"/> Visual deficits
9.7 <input type="checkbox"/> Consultation of:    9.7a <input type="checkbox"/> Orthopedist    9.7b <input type="checkbox"/> Prosthetist    9.7c <input type="checkbox"/> Physical therapist    9.7' Others:	
9.8 Providing with prosthetic-orthopedic products (specify):	
9.9 <input type="checkbox"/> Prosthetic feet	9.10 <input type="checkbox"/> Armchairs
9.11 <input type="checkbox"/> Wheelchairs	9.12 <input type="checkbox"/> Crutches
9.13 <b>Physical Therapy:</b>	9.14 <b>Occupational Therapy:</b>
9.13a <input type="checkbox"/> Range of motion exercises	9.14a <input type="checkbox"/> Training in Activities of Daily Living
9.13b <input type="checkbox"/> Gait training	9.14b <input type="checkbox"/> Training in use of upper extremity prostheses
9.13c <input type="checkbox"/> Bandaging the residual limb	9' Others (specify):

### 10 Vocational:

10.1 <b>Crafts &amp; Art:</b>	10.1k <input type="checkbox"/> Knitting	10.2b <input type="checkbox"/> Viniculture	10.3b <input type="checkbox"/> Translation
10.1a <input type="checkbox"/> Carpet weaving	10.1l <input type="checkbox"/> Embroidery	10.2c <input type="checkbox"/> Olericulture	10.3c <input type="checkbox"/> Computer skills
10.1b <input type="checkbox"/> Metalwork	10.1m <input type="checkbox"/> Sculpture	10.2d <input type="checkbox"/> Fruit-growing	10.3' Others (specify):
10.1c <input type="checkbox"/> Pottery	10.1n <input type="checkbox"/> Painting	10.2e <input type="checkbox"/> Animal husbandry	
10.1d <input type="checkbox"/> Carpentry	10.1o <input type="checkbox"/> Music	10.2f <input type="checkbox"/> Aviculture	10.4 <b>Economic:</b>
10.1e <input type="checkbox"/> Radio engineering	10.1p <input type="checkbox"/> Literature	10.2g <input type="checkbox"/> Beekeeping	10.4a <input type="checkbox"/> Management
10.1f <input type="checkbox"/> Plumbing	10.1' Others (specify):	10.2' Others (specify):	10.4b <input type="checkbox"/> Marketing
10.1g <input type="checkbox"/> Prosthesis's production			10.4c <input type="checkbox"/> Accountancy
10.1h <input type="checkbox"/> Tailoring	10.2 <b>Agriculture:</b>	10.3 <b>Education:</b>	10.4' Others (specify):
10.1j <input type="checkbox"/> Shoemaking	10.2a <input type="checkbox"/> Floriculture	10.3a <input type="checkbox"/> Teaching	

10.5  Note the more preferable field of activity you like indicating the place of work (firm, enterprise, agency etc.)



11 Education and upbringing:

11.1 Upbringing:

11.1a <input type="checkbox"/> General type of preschool	11.1b <input type="checkbox"/> Out-of-school upbringing	11.1c <input type="checkbox"/> Stationary institutions
11.1f <input type="checkbox"/> Special type of preschool (for backward children)		

11.2 Education:

11.2a <input type="checkbox"/> General education school (secondary education)	11.2b <input type="checkbox"/> High education (specify field):
11.2c <input type="checkbox"/> Special scholastic institutions (for backward children)	
11.2d <input type="checkbox"/> Specialized secondary education (specialized faculties; departments of vocational and training schools, high schools)	
11.2e <input type="checkbox"/> Instructional schools for assistance to parents in visiting education of disabled children	
11.2f <input type="checkbox"/> Home care (specify type):	11' Others (specify):

12 Economic assistance:

12.1 <input type="checkbox"/> Obtaining of medicaments	12.2 <input type="checkbox"/> Boarding out	12.3 <input type="checkbox"/> Public assistance
12.4 <input type="checkbox"/> Treatment (specify type):		12.5 <input type="checkbox"/> Privilege in using of urban transportation
12.6 <input type="checkbox"/> Obtaining of technical or Others means for rehabilitation (specify type):		
12.7 <input type="checkbox"/> Small business start up	12.10 <input type="checkbox"/> Loans (specify aim):	
12.8 <input type="checkbox"/> Obtaining of raw produce & production distribution	12.11 <input type="checkbox"/> Grants (specify aim):	
12.9 <input type="checkbox"/> Allotment of empty quarters	12.12 <input type="checkbox"/> Vocational guidance services	
12.13 Assignment of lands for: 12.13a <input type="checkbox"/> agricultural work 12.13b <input type="checkbox"/> construction of the garage 12.13' <input type="checkbox"/> Others:		
12.14 <input type="checkbox"/> Payment for habitation and public service	12.15 <input type="checkbox"/> Hooking up a telephone	12.16 <input type="checkbox"/> The use of the telephone fee
12.17 Procurement of ware and food products (specify): 12.17a <input type="checkbox"/> social amenities 12.17b <input type="checkbox"/> industrial 12.17c <input type="checkbox"/> economic 12.17d <input type="checkbox"/> tourist and sport goods 12.17' <input type="checkbox"/> Others:		
12.18 Medical and personal services: 12.18a <input type="checkbox"/> Home care 12.18b <input type="checkbox"/> At the stationary institutions		
12.19 <input type="checkbox"/> Provision of housing	12.20 <input type="checkbox"/> Provision of car	12' Others (specify):

13 Advocacy: 13.1 Law awareness (put value): \_1\_2\_3\_4\_5\_ 13.2 Fields of laws interested in (specify):

13.2a  Legislation and public policy 13.2b  Communication and information system 13.2c  built environment  
 13.2d  Labor/employment issues 13.2e  All disability rights 13' Others (specify):

14  Fitness Sports: \_\_\_\_\_

15 Training courses: 15.1  Vocational trainings (specify field): \_\_\_\_\_

15' Others (specify): \_\_\_\_\_

16 Additional information: 16.1  Height (sm): \_\_\_\_\_ 16.2  Weight (kg): \_\_\_\_\_ 16.3  Size of shoes: \_\_\_\_\_

16.4  Degree of disablement: \_\_\_\_\_ 16.5  Dwelling-space (sq.m): \_\_\_\_\_ 16.6  Number of family members: \_\_\_\_\_

16.7 Participation in the work on: 16.7a  mine awareness 16.7b  mine/UXO victim assistance

17 For comments and wishes of respondents: \_\_\_\_\_

18 For interviewees: 18.1  Talented in (specify field): \_\_\_\_\_ 18.2  Oligophrenia (specify degree): \_1\_2\_3\_

18.3  Physical defects (specify): \_\_\_\_\_ 18.4  Recommendable for honorary duties with invalids

18.4 Specific/Others comments: \_\_\_\_\_

## Annex B – Landmine Casualty Data Sources

Mine-affected countries	MAC/NMAA	Use of IMSMA? Version?	Major Casualty Data Source (From <i>Landmine Monitor 2003</i> unless otherwise noted)	Landmine Impact Survey
<b>AFRICA</b>				
Angola	National Inter-Sectoral Commission on Demining and Humanitarian Assistance (CNIDAH) overall coordination, gradually taking on full responsibility for mine action. Mine clearance activities implemented and coord. by INAROOE, being restructured as National Institute for Demining (INAD). -287 new casualties in 2002, 673 in 2001 * UN and many NGO sources indicate the number of incidents increased dramatically during 2002-2003 and INAROOE acknowledges the real number of casualties to be higher than recorded.	Yes, V3.0176 (new 2004)	->UNICEF-at least 200 incidents up to 04/02 ->US State Dept estimates over 800 new casualties each year ->Refugees International reported 50 killed and more injured since 11/02 ->LMR reports a total of 2,055 casualties from 1998 to 2001 ->Various International media sources reported another 63 casualties 2002 and 4 in 2003 ->ICRC rehabilitation centers in 2003 plans to implement patient management system w/IMSMA-compatible database on mine injuries. ->Jesuit Refugee Service (JRS) assisted 191 mine survivors in 2002	Set up began in 12/02, data gathering to be underway by 04/04.
Burundi	Department of Civil Protection (DCP) identified by UNMAS as most suitable mine action coordination body, but no capacity yet to implement or coordinate action in line with international standards. No systematic data collection mechanism yet in Burundi		->UNICEF-at least 114 new casualties in 2002. Conducted survey btwn 11/02 and 01/03 to determine extent of mine problem and collected data on incidents occurring btwn 01/01/01 and 12/31/02. Reported 116 new casualties (only civilian) in 2001, and 5 in 2003 up to 01/11. -> Various Media Sources reported 13 casualties in 2003 -> Ministry of National Defense reported 267 victims from 1994 to 1998, and reportedly has statistics on military casualties, but not available to the public. ->Other unspecified sources claim 791 deaths from 1993-2000 (LMR 2001)	

Chad	National High Commission on Demining (HCND)-20 new casualties in 2002	Yes, V3.0176	->Military Hospital in N'djamena-200 new casualties -in 2002 ->ICRC ->SECADEV pros./orth. center in N'djamena, 90 new surv. in 2002	Completed July 2001, and final report released in January 2002. Handicap International contracted by VVAF. 1,688 victims, 339 of which injured or killed in previous 24 months.
DR Congo	National Commission to Fight Antipersonnel Mines and Mine Action Coordination Center (MACC), established by MONUC (UN Mission in the DR Congo) to develop and maintain a reliable information system based on IMSMA -MACC records on 257 mine casualties since 1965; 9 new in 2001, 18 new in 2002, 10 new in 2003	Yes, V3.0176	->Handicap International Belgium – conducted casualty survey 06/02-04/03 in Kisangani region (areas within 150 km radius) and reported 87 casualties: 53 in 1997, 6 in 1998, 2 in 1999, 21 in 2000, 2 in 2001, and 3 in 2002. *though since May 2003 HIB's mine clearance, survey and data collection programs suspended for lack of funds. ->UN-at least 32 new casualties in 2002. ->LMR-recorded 135 new casualties in 2001, 10 new in 2002 (in addition to scattered reports of other incidents) ->Simana Rehabilitation Center (Kisangani) assisted 8 mine survivors in 2002.	
Eritrea	Eritrean Demining Authority established July 2002 to manage and coordinate mine action	Yes, V3.0176	->UNMEE (UN Mission in Ethiopia and Eritrea) MACC (Mine Action Coordination Center) - reported 90 new casualties in 2002 + 12 Ethiopians, 13 new from Jan to May 2003 -> Casualty data in the TSZ (Temporary Security Zone btwn Eritrea and Ethiopia) is reported primarily by military observers, UNMEE MACC officers, ICRC or other NGOs -> No official figures on number of mine-related injuries and deaths outside the TSZ ->Reports (media?) indicate between Jan 2001 and Nov 2002 164 injured and 64 killed in TSZ	Survey began in May 2002 by UNDP
Ethiopia	Ethiopian Mine Action Office (EMAO) established February 2001	Yes, V3.0176	-> RaDO (Rehabilitation and Development Organization) reported 67 new in 2002; 1998 to Dec 2001 335 casualties in Tigray	Began January 2002 by Norwegian People's Aid

			region; 1999-12/01 87 new in Afar region; as of 05/03 16 new in Tigray. -> Various rehabilitation centers providing some data (see LMR, p520-521)	(NPA) under contract with SAC, completed Oct or Dec 2003
Guinea-Bissau	National Mine Action Center (CAAMI), 06/98 to 04/02 recorded 290 casualties, 01-04, 2003 6 new	Yes, V3.0176 (Installed Oct.2003)	->UNDP-228 casualties for period 1998/99 to 04/03 ->In 2002, 33 new casualties, reports by: HUMAID, ANDES, HI	Countrywide survey on casualties launched 12/01 to be completed mid-2003
Kenya	*Kenya does not have a landmine problem, but is contaminated by UXO from Kenyan and foreign military drills; many incidents go unreported in northern region where military drills occur		->Jaipur Foot Project- 13 injured in 2002 -> LMR-7 injured in 2001 -> Various Media: <i>Daily Nation</i> reports that more than 500 may have been killed since military drills began in 1945, and many more injured; <i>East African Standard</i> reported 9 new casualties in 06/2003	
Malawi	No national MAC- Mines suspected only along border with Mozambique and Zimbabwe		No reports in 2002 of casualties; last reported incident in 2000 with 5 casualties (LMR 2001), and May 2003 2 casualties reported in <i>Associated Press</i>	
Mauritania	National Humanitarian Demining Office (NHDO), and in July 2002 created National Commission in charge of mine issue: 3 new in 2002, 3 in 2003	Yes, V3.0176 (new 2004)	->LMR (2002): 1978-2000 343 killed and 239 injured but numbers probably much higher due to country size and nomadic way of life	
Mozambique	Mozambique National Demining Institute (IND), 47 casualties in 2002, 80 in 2001	Yes, V3.0176		Completed August 2001, and final report published in September 2001. Surveyed by Canadian International Demining Corps (CIDC), identified 2,145 casualties and acknowledged this number is probably understated
Namibia	No national MAC Office of the Chief Inspector of Explosives, Ministry of Home Affairs reported 19 casualties in 2002		->USDOS report says from 1999 to July 2002 135 killed and 440 injured. -> Media reported 1 casualty May 2003	

Niger	National Commission for the Collection and Control of Illegal Weapons is in charge of landmine issue.		Niger provided information on mine casualties at Standing Committees on Mine Clearance. This reported no new casualties in 2002, 4 new in Jan 2003, at least 31 in 1997, 1 in 1998	
Rwanda	National Demining Office (NDO), reports that up to end of 2002, 650 casualties recorded	Yes, V3.0176	-> LMR 2002 reports 23 casualties in 2001 and at least 5 new in 2002.	
Senegal	National Commission on Small Arms is responsible for the mine issue.		-> Handicap International (HI) recorded 48 new casualties in 2002, 56 new in 2001, and 15 in 2003 up to 19 June. In region of Casamance recorded 636 casualties between 1996 and June 2003, and 1 in 1988, though it is believed reported figures may not reflect the true reality of the numbers in the region . -> <i>The Independent</i> reported an incident in 2002 killing 8	
Sierra Leone	No national MAC. Most landmines used during the civil war have been removed; face more danger from UXO than landmines.	Yes, V3.0176	-> According to medical records at the Military Hospital at Wilberforce, 45 killed and 11 injured during 1992-1997 civil war. -> USDOS reported no new casualties in 2002	
Somalia	UNMAS had to abandon efforts in 2002 to set up mine action offices due to insecurity		*Limited information available, casualties not systematically recorded. -> Subregional Development Center (SRDC) recorded 17 casualties in 3 regions in 2002 -> Various Media reports: April 2002, 22 casualties in 1 region, 14 in 11/02 in another. 2003, 16 casualties in different regions -> LMR 2002: in 2001 121 casualties in Mogadishu, 103 incidents involving casualties in Puntland. -> ICRC: treated 405 new casualties in 2001 -> LMR 2001: between 1995 and 2000, 4,357 casualties reported	UNDP and SAC hoped to begin in 2003, security permitting.
(Somaliland)	Somaliland Mine Action Center (SMAC) now a unit within Ministry of Resettlement, Rehabilitation &	Yes, V3.0176	*Complete and accurate data on new casualties not available, and it is believed that landmine casualties are under-reported, as many are located in remote areas and there no procedures or requirements	Completed March 2003, identified 276 casualties in last 2 years; however, one highly-affected

	Reintegration and responsible for mine action coordination after contract expired with UNDP, and the National Demining Agency (NDA) being reformed as a mine clearance unit.		exist for reporting incidents to police or mine action officers. ->Media reported 5 casualties in 2002 -> LMR 2002: in 2001, 33 killed and 70 injured	region has not been surveyed and the number of mine casualties is not known. SMAC database contained additional 2,651 casualties from before 2000 which were identified by the LIS.
Sudan	UNMAS established National Mine Action Center in Khartoum in September 2002, Humanitarian Aid Commission (HAC) is government focal point for coordination of mine action and is represented in the MAC. As of June 2003, 2,667 casualties reported since 1998	Yes, V3.0176	Sudan Landmine Information and Response Initiative (SLIRI) est. in 2002 to create comprehensive information network throughout all potentially mine-affected areas, and to create comprehensive data collection mechanism to register landmine casualties, to collate through IMSMA. -> In 2002, at least 68 new casualties reported from various sources (see LMR 2003, p 543 for details). -> Sudanese Red Crescent-Kassala Branch reported 14 casualties in 2002 in that state and 6 more Jan-Feb 2003 -> UN Emergency Mine Action Programme in Sudan: in 2002, at least 15 new casualties in the Nuba Mountains -> From Jan.-June 2001, 123 casualties reported in LMR 2002.  Additional information from UNMAS Landmine Survivors & Victim Assistance Newsletter (March 2004): Until recently, there was no official collection of data on landmine victims. In July 2003, the WHO and Ministry of Health conducted nationwide survey in every health facility in various states (Upper Nile, Blue Nile, Kassala, South Kordofan and Bahr El Jebel States). The Sudanese Red Crescent Society (SRC), in coordination with the National Mine Action Office and UNICEF collected information on landmine victims. Staff of the National	



			Orthopedic Workshop received training on how to collect data on victims. So far, IMSMA holds data on about 3,000 mine victims in Sudan.	
Uganda	*The total number of casualties in Uganda is not known, as there is no comprehensive data collection system.		-> Some limited information is available as part of general hospital records maintained according to the Health Information Management System. In 2001, 32 new casualties were reported, in 2002, at least 7 casualties in northern Uganda, and at least 25 new through June 2003. -> LMR 2001: between 1991 and March 2001, 601 mine casualties reported in Uganda.	
Western Sahara		Yes, V3.0176 (Installed Sep-Oct, 2003)	->UN Mission for a Referendum in Western Sahara (MINURSO) -> Polisario (the Popular Front for the Liberation of Saguia el Hamra and Río de Oro) -> the Sahara Section of the Forum for Truth and Justice (Moroccan organization) (for details see pg. 768)	
Zambia	Zambian Mine Action Center (ZMAC), established August 2001	Yes, V2.0	->USDOS reports that since 1980 there have been at least 200 casualties, though the number could be higher -> LMR (2002)-no casualties found in 2002. -> Inter-Ministerial Task Force on Demining- 1 casualty in 11/02	
Zimbabwe	National Authority on Mine Action (NAMAZ), established 2002 to fulfill requirements of Mine Ban Treaty and formulate national mine action plan. Zimbabwe Mine Action Center (ZIMAC) formed to coordinate, manage and facilitate all mine action activities in country and the National Demining Office (NDO) falls under ZIMAC and is responsible for demining activities		-> UN mission to Zimbabwe in 11/99, reported since 1980 at 46 killed and 210 injured, though it was estimated this only represented 60 % of total number casualties in this period. -> LMR (2002): in 2001 5 new casualties reported; in 2000 4 new reported -> Various media (see pg 506)	

	only, only behalf of ZIMAC. -> in 2002, at least 9 casualties			
<b>AMERICAS</b>				
Chile	National Demining Commission (CNAD), established May 2002 and officially constituted August 2002, chaired by Ministry of Defense	Yes, V3.0176 (installed Mar-Apr 2003)	-> LMR (2002): 4 new casualties in 2001 -> LMR (2001): between 1976-2000, 33 civilian casualties and 55 military personnel -> Various media reports (see pg 173-74)	
Colombia	National Interministerial Commission on Antipersonnel Mine Action (CINAMA); main program of this is the Program for the Prevention of Antipersonnel Mine Accidents and Victim Assistance (PAAV), and the Antipersonnel Mine Observatory is the central component of PAAV. The Observatory is responsible for collecting, categorizing, centralizing and updating all information on the mine issue, and developed a National Mine Action Plan in 2003. -Observatory reported 216 new casualties in 2001, and 530 new in 2002 (a 145 percent increase). In 2003, between Jan. and April 15 151 new casualties reported. - Between 1990 and 15 April 2003, the Observatory recorded 1,920 casualties.	Yes, V3.0176		
Costa Rica		Yes, V3.0176	OAS Program for Integral Action Against Antipersonnel Mines (AICMA) responsible for coordinating and supervising the Assistance Program for Demining in Central America (PADCA).	

			AICMA program initiated in 1996 in Costa Rica. ->OAS: no new casualties in 2002; only 3 known mine survivors.	
Ecuador	Ecuadorian Mine Clearance Center (CENDESMI) and General Command for Mine Clearance are responsible for mine action in the country and for coordination with the OAS Mine Action Program (AICMA). *There is no systematic gathering mechanism for landmine incidents and exact figures are unavailable.	Yes, V3.0176	->USDOS: approx. 120 casualties between 1995 and 1999 ->Impact survey by OAS AICMA in La Loja province identified 7 casualties in 2001 -> LMR (2002): reported 1 casualty in 01/02 and has no information on further casualties in 2002 or first half of 2003.	
Guatemala	Executive Coordination Unit (UCE) established 1997; created National Plan for Demining, under which the OAS and IADB assist with efforts.	Yes, V3.0176	-> Association of Volunteer Firefighters: no casualties reported in 2002. -> LMR (2002): in 2001, 4 casualties recorded; since 1994, approx. 15 casualties, but before that time no official records kept. ->UNICEF/ASCATED (Asociación de Capacitación y Asistencia Técnica en Educación y Discapacidad): identified approx. 177 survivors from 1972 to December 2002.	
Nicaragua	Comisión Nacional de Desminado (CND), established in 1998 and is financially supported by Ministry of Defense.	Yes, V3.0176	->OAS PADCA (Assistance Program for Demining in Central America): 15 new casualties in 2002, 19 new in 2001, 3 as of May 2003. From 1980 through May 2003 recorded 570 casualties, and from 1989 to May 2003, 5 deminers killed and 32 injured. *OAS PADCA documents acknowledge that it is difficult to determine the exact number of landmine/UXO casualties in Nicaragua, as many incidents in rural areas are still believed to go unrecorded.	
Perú	Peruvian Center for Mine Action, "Contraminas"	Yes, V3.0176	-> ICRC -> LMR 2002: 4 casualties in 2001 -> Peru's Article 7 report, 19 casualties in 2002, as of May 2003 5 casualties. -> According to OAS, Peruvian	

			authorities have recorded 179 casualties since 1995	
<b>ASIA/ PACIFIC</b>				
Afghanistan	*UN MACA plans to hand over its functions to an Afghan government counterpart within 2-3 years.	Yes, V3.0176	->UN Mine Action Program for Afghanistan (MAPA), comprised of UN Mine Action Center for Afghanistan (UN MACA) and 15 NGO implementing partners. UN MACA estimates around 150 new mine casualties each month. ->ICRC is the principal source of mine casualty data, providing the UN Mine Action Program with 90 percent of its information on new casualties: 1,286 new in 2002, in 412 new in 1 <sup>st</sup> 6 months of 2003. 1,445 in 2001, 1,327 in 2000, 1,270 in 1999, and 887 in 1998. Between 1980 and 1997, 1,744 casualties	A new LIS began in June 2003 and is being implemented by the Mine Clearance Planning Agency (MCPA) and the SAC.
Burma (Myanmar)			*In 2002, at least 114 new casualties reported, although the total number of casualties remains unknown, and appear to be increasing during last 5-6 years. In 2001, information available on 57 new casualties. Systematic collection remains difficult, especially in relation to those killed rather than injured in an accident. -> Among those reporting casualties in 2002 were Médecins Sans Frontières, Mae Sot Hospital in Thailand, and the Trauma Care Foundation Burma (TCFB). -> For further sources (mostly media) see LMR 2003, pg 568	
Cambodia	Cambodian Mine Action and Victim Assistance Authority (CMAA), established September 2000 as coordinating and planning body for mine action in Cambodia.	Yes, V3.0176 (installed Feb-Mar 2003)	->CMVIS conducts Casualty Analysis Survey, information collected by Cambodian Red Cross (CRC) : 834 new casualties in 2002, 829 in 2001, 863 in 2000. To end of May 2003, 371 new casualties. To December 2002, database has records on 56,793 casualties since 1979. -> Cambodian Mine Action Center (CMAC): 12 deminers injured in 2002 -> HIB	Survey completed and released in June 2002

			<p>-&gt; Emergency (NGO) Hospital in Battambang assisted 94 new mine casualties in 2002</p> <p>-&gt; Sihanuok Hospital Center of Hope in Phnom Penh also provides surgery for new mine casualties.</p>	
China	<p>*China still insists on a military requirement for antipersonnel mines.</p> <p>*Data on landmine casualties is generally not made publicly available; however, casualties are known to have occurred in 2002 and early 2003 in Yunnan province, according to a Yunnan province official.</p>		<p>-&gt; Landmine Monitor conducted field survey in 2001, identifying 5,310 casualties in Yunnan province. In 2002, Landmine Monitor was not allowed to conduct field surveys in Disabled People's Federation) office certain prefectures in the Yunnan province, but the local CDPF (China provided a report on landmine survivors.</p>	
India	<p>*There is no comprehensive data collection mechanism on mine incidents in India, and the exact number of casualties is not known.</p>		<p>-&gt; Based on media reports, information available on at least 523 casualties in 2002, and 332 in 2001. 190 casualties between Jan.1 and June 15, 2003. Most media reports focused on military casualties; it is believed many civilian casualties go unreported.</p> <p>-&gt;Minister of Defense identified casualties in March 2002 report to Congress (see LMR 2003, p. 595 for details)</p> <p>-&gt; Indian Institute for Peace, Disarmament &amp; Environmental Protection (IIPDEP) reported on 7 border villages (see p. 595 for details)</p>	
Indonesia	<p>*Indonesia has declared that it is not mine-affected.</p>		<p>*A number of media reports have referred to landmine incidents and casualties in 2002-2003. The incidents appear to involve homemade victim-activated improvised explosive devices (IEDs) and booby-traps, rather than factory-produced antipersonnel mines. In 2002, such mines killed 3 and injured 10 in August, and 5 more casualties in November. In May 2003, a landmine killed a soldier.</p>	
Korea, DPR	<p>*There are no official statistics regarding the number of North Koreans killed or injured by landmines.</p>		<p>-&gt; A newspaper reported a landmine injury in December 2002 in the DMZ.</p>	

	Landmine incidents are likely to occur in certain battle sites of the Korean War and in or near the DMZ.			
Korea, RO			-> Korean Campaign to Ban Landmines (KCBL) collects information on landmine incidents from various sources. In 2002, 15 new casualties, in 2002 4 new casualties reported, and through May 2003 2 new casualties.	
Laos	<p>Lao National UXO program (UXO LAO) responsible for mine/UXO clearance. The Ministry of Labour and Social Welfare is responsible for the coordination and implementation of UXO clearance and awareness activities.</p> <p>-UXO LAO: 99 new casualties in 2002, 122 in 2001, 102 in 2000. Jan. to March 2003, 16 new casualties</p> <p>*The statistics do not represent the countryside situation; casualty data is only collected in 9 of the 15 provinces and incidents in remote areas often are not recorded, especially when person involved dies.</p> <p>* Laos is mainly affected by UXO</p>		-> HIB: Jan.-May 2003, 13 casualties in border province of Savannakhet.	Level One Survey conducted by HIB and released in 1997 remains main reference.
Nepal	<p>*There are no official records on landmine casualties.</p> <p>*In addition to landmines, use of Improvised Explosive Devices (IEDs) is extensive and included in casualty statistics.</p>		<p>-&gt; Nepal Campaign to Ban Landmines (NCBL): 720 casualties in 2002; 214 killed and 210 injured in 2001.</p> <p>-&gt; Media: reported 13 casualties from 29 January through May 2003.</p>	
Pakistan	*The extent of the landmine problem and the total number of casualties is not fully known due to the lack		-> Pakistan Campaign to Ban Landmines (PCBL): 111 new casualties in 2002, and an additional 25 + military casualties (soldiers) in the Pakistan/India	

	<p>of adequate reporting structures.</p> <p>*The most serious landmine problem is in the Federally Administered Tribal Area (FATA).</p>		<p>border area; 92 new casualties in 2001. Since 1980 outbreak of Afghan War, identified 1,038 casualties.</p> <p>-&gt; Community Motivation and Development Organization (CMDO): established a data collection system in the Bajaur Agency of the FATA (see p.664).</p> <p>-&gt; Various Media: at least 16 casualties in beginning months of 2003 (see p.664 for details).</p>	
Philippines			<p>-&gt; The Armed Forces of the Philippines (AFP) reported at least 3 new casualties in 2002. Between April 2002 and April 2003 15 killed and 30 others injured, majority of which were AFP soldiers.</p> <p>-&gt; LMR 2002: 22 new casualties in 2001.</p> <p>-&gt; Media reports: at least 15 casualties in 2003 up to July (see p. 401 for details).</p>	
Sri Lanka	<p>*The government plans to establish a national coordination body for mine action in 2003 with the assistance of the UNDP and UNICEF. Coordination at the district level is already provided by Government Agents (GAs), with the support of District Mine Action Offices (DMAO). A National Steering Committee on Mine Action (NSCMA) was established in the latter part of 2002 to provide guidance and direction in the formulation of a National Mine Action Program. In LTTE (Liberation Tigers of Tamil Eelam) controlled areas, mine action activities are coordinated by the TRO (Tamil Rehabilitation Organization) and</p>	<p>Yes, V3.0176</p>	<p>-&gt;UNDP: at least 142 new casualties in 2002, and 207 in 2001; the UNDP believes the actual number may be higher than recorded. 12 new casualties in January 2003. Run IMSMA database, which contains records on 958 civilian casualties from 1995 to 10 Feb. 2003. In addition, Sri Lanka reports 3,005 military and police casualties.</p> <p>-&gt; Sri Lankan Army: reported 7 soldier casualties in 2002, and 1 up to March 2003. More than 40 Sri Lankan Army deminer casualties in mine clearance since March 2001</p> <p>-&gt; HDU: 4 deminer casualties in 2002</p>	

	implemented by the Humanitarian Demining Unit (HDU)			
Thailand	<p>National Mine Action Committee (NMAC) for mine action policy and Thailand Mine Action Center (TMAC) to implement and coordinate mine action activities, temporary agency under the Supreme Command of the Royal Thai Armed Forces.</p> <p>-at least 36 new casualties in 2002.</p> <p>TMAC has no information from other mine-affected areas where HMAUs (Humanitarian Mine Action Units) are not operating, for these units collect reports on incidents and transmit the information to IMSMA.</p>	Yes, V2.2	-> Mae Sot Hospital on Thai-Burma border	<p>Requested by UNMAS and TMAC.</p> <p>Norwegian People's Aid (NPA) selected by VVAF to execute survey.</p> <p>Completed July 2001 and final report published in 2002. Between June 1998 and May 2001, 346 new casualties recorded (79 killed and 267 injured). Less recent casualties totaled 3,122 (1,418 killed and 1,704 injured).</p>
Vietnam	<p>*The People's Army of Vietnam continues to view landmines as necessary and cost-effective weapons for national defense.</p> <p>The Ministry of Defense continues to play the leading role in mine action; BOMICO (Technology Center for Bomb and Mine Disposal, department of the Engineering Command of the MoD) responsible for surveys and research of landmines &amp; UXO).</p> <p>BOMICO estimates that 1,110 people are killed and 1,882 injured every year on average, but no data provided to support figures.</p> <p>Ministry of Labor,</p>		<p>-&gt; A media report indicated 66 killed and 100 injured in 2002. Another said 97 killed and 140 injured in 2001.</p> <p>-&gt;Landmine Monitor's independent survey of domestic media recorded 67 killed and 86 injured in 2002; 16 killed and 26 injured in first quarter of 2003.</p> <p>-&gt; Clear Path International</p> <p>-&gt;Project RENEW</p>	<p>Ongoing survey; work began in July 2001 and a regional pilot survey is planned in central Vietnam.</p>



	<p>Invalids and Social Affairs (MOLISA) in latest available nationwide figures: reported December 31, 2000 38,849 killed and 65,852 injured since 1975. This represented an increase of 601 killed and 1,788 injured since the May 1998 figures.</p> <p>There is no comprehensive mechanism for collecting and recording data on casualties in Vietnam.</p>			
<b>EUROPE/ CENTRAL ASIA</b>				
Albania	<p>Albanian Mine Action Committee (AMAC) Albanian Mine Action Executive (AMAE) (has IMSMA): in 12/02 2 casualties, and 1 in Jan. 2003.</p> <p>*The number killed or injured in the hotspots in other parts of Albania since 1997 is not known as these areas do not fall within the mandate of the AMAE.</p>	Yes, V3.0176	<p>-&gt; ICRC: 7 new in 2002; between 1999 and 2001 234 new (for breakdown see p. 72), though the actual number of casualties is expected to be higher due to the fact that some go unreported and the remoteness of some mine-affected areas.</p> <p>-&gt; Albanian Red Cross</p> <p>From UNMAS Landmine Survivors &amp; Victim Assistance Newsletter (March 2004): HIB and ICBL Landmine Monitor Research Network study of victim assistance in southeastern Europe. From 1999-2002, 241 casualties: 20 killed, 221 survivors.</p>	
Armenia	<p>National Center for Humanitarian Mine Action opened March 16, 2002.</p> <p>No casualties were reported in 2002</p> <p>*There are no official statistics available on the number of landmine casualties. The Ministry of Defense does not provide information on casualties among military personnel.</p>	Yes, V2.0	<p>-&gt; The Armenian National Committee of the ICBL is compiling and verifying a database on landmine casualties in Armenia. As of April 2002, the database contained information on 343 survivors, soldiers and civilians, of landmine incidents; 228 were injured after armistice in May 1994.</p>	

Azerbaijan	Azerbaijan National Agency for Mine Action (ANAMA), responsible for coordinating all aspects of mine action within Azerbaijan, established July 1998. UN to hand over management and implementation of all aspects of mine action operations to ANAMA by end of 2003. -ANAMA: 17 new casualties in 2002, 25 new in 2001, and 6 up to June 2003. As of June 2003, database contains records of 1,252.	Yes, V2.2 (Installed Sep, 2003)	->Media reports (see p. 557) -> Committee of Soldiers' Mothers: 12 casualties among Armed Forces in 2002  From UNMAS Landmine Survivors & Victim Assistance Newsletter (March 2004): Azerbaijan National Agency for Mine Action (ANAMA) has completed the first part of nationwide survey of mine survivors through its Mine and Unexploded Ordnance Survivors' Support Programme. The survey was developed and launched in the Fizuli district, and ANAMA will extend it to the rest of the country as funding becomes available. There are an estimated 1,400 survivors nationwide.	Completed May 2003 - 52 from approximately 2000-2003; 1,164 prior to 2000
(Nagorno-Karabakh)			->ICRC: 15 new in 2002 -> LMR 2002: 4 killed and 14 injured in 2001. -> According to information provided by the Ministry of Foreign Affairs, since the 1994 cease-fire, over 250 casualties reported; this number has been steadily decreasing, from 86 in 1995 to less than 20 in each of the last few years.	
Belarus	Primary responsibility rests with the Ministry of Defense and Ministry of Internal Affairs. In 2001, 3 killed and 4 injured, in 2002, 2 killed and 2 injured. For the period from 1944-2002, there have been 6,014 casualties, including 3,387 and 2,627.		-> Belarus Campaign to Ban Landmines.	
Bosnia & Herzegovina	BiH Mine Action Center (BHMIC)	Yes, V3.0176	->ICRC: 72 new casualties in 2002, 87 in 2001, and 27 up to May 2003. As of 9 May 2003, ICRC database contained information on 4,798 casualties since 1992. Between 1996 and 2002 the mine incident rate fell from an average of 52 casualties per month to six per month.	Ongoing survey; work began October 1, 2002.

			From UNMAS Landmine Survivors & Victim Assistance Newsletter (March 2004): HIB and ICBL study: from 1992-14 August 2003, 4,801 casualties: 928 killed, 3,873 survivors.	
Croatia	Croatian Mine Action Center (CROMAC) CROMAC database recorded 29 new casualties in 2002. As of the end of December 2002, database included details on 1,848 casualties since 1991, with at least 554 occurring since the end of the war in 1995. *In May 2002, the Croatian Mine Victims Association (CMVA), in collaboration with CROMAC, began a survey of mine casualties in Croatia; data collection continues in 2003.		From UNMAS Landmine Survivors & Victim Assistance Newsletter (March 2004): HIB and ICBL study: from 1991-2002, 1,848 casualties: 414 killed, 1,373 survivors, 61 unknown.	
Cyprus		Yes, V2.2	->UN: in 2002 and up to end of April 2003, no military or civilian casualties reported in the Republic-controlled areas or the buffer zone	
Estonia	The Rescue Board of the Ministry of the Interior has been using IMSMA. -In 2002, 8 casualties reported.	Yes, V3.0176	->LMR 2002: 12 casualties in 2001	
Georgia	* There are no comprehensive official statistics on the number of people killed or injured by landmines and UXO in Georgia.		->ICBL Georgian Committee: data on 70 new casualties in 2002, data on 98 new casualties in 2001. -> Media reported 3 injured soldiers in April 2003.	Level One Survey conducted by HALO in areas surrounding 3 Russian military bases in June 2002.
(Abkhazia)	Abkhazian Mine Action Center (AMAC), fully funded, staffed and supported by HALO. *There is no systematic data collection on landmine casualties in Abkhazia.		-> UN: reports of 12 new casualties in 2002. -> HALO database recorded 5 mine or UXO related incidents between April 2002 and March 2003, compared to eight incidents between April 2001 and March 2002. ->Gagra Orthopedic Center (established by the ICRC) identified 244 landmine amputees	

			<p>since 1995.</p> <p>-&gt;The Ministry of Health and Social Security does not collect specific data on landmine casualties.</p> <p>-&gt; LMR 2002: more than 50 CIS peacekeepers have reportedly been killed by landmines in Abkhazia over the past several years.</p> <p>-&gt;Abkhazian Committee of the ICBL believes the available data underestimates the actual number of new mine casualties</p>	
Greece	*There is no central register of mine casualties.		<p>-&gt; Various media reports: 10 new casualties in 2002, 14 new casualties in 2001 and 5 through March 2003.</p> <p>-&gt; Médecins sans Frontières-Greece conducted survey of media reports which indicated that the number of mine casualties per year averaged 8 between 1994 and 2002.</p> <p>-&gt; According to the Greek military, since 1954, 30 personnel have been killed and 17 more injured in clearance operations.</p>	
Kyrgyzstan			Various Media Reports: from 1999 to 2003, 11 casualties recorded (see p.629 for details)	
FYR Macedonia	<p>UNMAS opened a Mine Action Office (MAO) in Skopje in September 2001.</p> <p>In 2002, 4 new casualties recorded; in 2001, 38 new; in March 2003, 5 new reported.</p> <p>FYR continues to report UXO casualties from WWI &amp; II ordnance; between 1997 and 2000, 35 casualties in Struga, and between 1965 and 2002, 119 casualties in Bitola region, and 2 in Gevgelija.</p>	Yes, V2.2	<p>From UNMAS Landmine Survivors &amp; Victim Assistance Newsletter (March 2004):</p> <p>HIB and ICBL study: from 1965-March 2003, 220 casualties: 35 killed and 185 survivors.</p>	
Russia	A Counter Mine Danger Service was reportedly established under the auspices of the Russian Federation Engineer Forces to integrate military and civilian		-> Various media and military sources: Russian military casualties in Chechnya from 1999 to March 2003, 2,500.	

	mine action-related elements. *There is limited official data on mine casualties.			
(Chechnya)			<p>-&gt; Chechen Ministry of Health: reported 5,695 casualties registered in 2002, and in 2001, officials report that there were 2,140 casualties.</p> <p>-&gt; UNICEF: in 2002, recorded 244 new casualties, 154 new in 2001, and as of July 2003, the database contains information on 2,281 casualties in Chechnya.</p> <p>-&gt; Landmine Monitor recorded about 300 casualties in 2002 from international media sources, and in 2001, collated data on 1,153 casualties.</p> <p>-&gt;International media reported on over 130 casualties to June 2003</p> <p>-&gt;Voice of the Mountains (VoM) is the focal point for the collection of mine casualty data which is provided by the WHO, the ICRC, Danish Demining Group, and Let's Save the Generation (LSG). VoM maintains the database in Ingushetia.</p>	*There has been no effort to comprehensively survey or catalogue the impact of mines in Chechnya.
*(Northern Ossetia) ?		Yes, V3.0176	UNICEF	
Serbia & Montenegro	The Mine Action Center for Serbia and Montenegro was formed in March 2002 as part of the Federal Ministry of Foreign Affairs.	Yes	<p>-&gt;ICRC: 3 casualties in 2002</p> <p>-&gt; Various Media (see p. 681-82)</p> <p>From UNMAS Landmine Survivors &amp; Victim Assistance Newsletter (March 2004): HIB and ICBL study: from 1997-February 2003, 142 casualties: 30 killed, 57 survivors and 55 unknown.</p>	
(Kosovo)	The UN Mine Action Coordination Center handed responsibility for mine action to UNMIK (Mission in Kosovo) and local bodies in late 2001. Responsibility for IMSMA moved to the OKPCC (Office of the KPC Coordinator), and responsibility for the	Yes, V2.2	<p>-&gt;ICRC: in 2002, 24 new casualties</p> <p>-&gt; MACC: 22 casualties in 2001; in 2000, 9 killed and 84 injured.</p> <p>-&gt; UNMIK: in the period June 1999 to December 2001, a total of 457 casualties.</p> <p>From UNMAS Landmine Survivors &amp; Victim Assistance Newsletter (March 2004):</p>	Modified version created by VVAF

	<p>mine victim database was moved from the ICRC to the Ministry of Health Institute for Public Health (IPH) in March 2002. By June 2002 no victim data had been provided; the initial regional reporting was changed and an individual given the task of collecting and collating mine victim statistics.</p> <p>-OKPCC: 15 civilian casualties in 2002.</p> <p>-UNMIK OKPCC: in 2003, 3 casualties to April 2003.</p>		<p>HIB and ICBL study: from June 1999-December 2002, 472 casualties: 100 killed and 372 survivors.</p>	
Tajikistan	<p>*UNDP reported in June 2003 that the Commission on the Implementation of International Humanitarian Law was in the process of forming an Executive Mine Action Cell that will be responsible for managing data collection and victim data collection, among other things.</p> <p>Tajik authorities report that between 2000 and 2002, about 52 people and many animals had fallen victim to landmines.</p>			
Turkey	<p>According to the government, between 1993 and 2003, 299 members of the armed forces and 289 civilians died as a result of antipersonnel mines; another 1,524 members of the armed forces and 793 civilians were injured</p>		<p>-&gt; The Human Rights Association: in 2002 reported a total of 15 killed and 25 injured from mines, and additional casualties from UXO. Their November 2002 report calculates that a total of 838 people were killed and 937 injured in mine explosions between 1990 and 2002. During the same period, UXO killed 137 people and injured 213. No data relating to incidents between 1983 and 1990 could be obtained.</p> <p>-&gt; The Human Rights Foundation of Turkey reported continuing</p>	

			casualties, especially to children, in 2003. -> Turkey's Permanent Mission to the UN has provided data on mine-related casualties in 2001 and 2002, which are attributed to mines laid by the PKK. Both civilian and military casualties are recorded by the Chief of General Staff Data Collection Center. In 2002, recorded 21 new casualties and in 2001 58 new casualties.	
Ukraine	Ministry of Emergency Situations and Ministry of Defense. In 2002, there were 20 new casualties and in 2001, 14 killed and 4 injured.			
Uzbekistan	*There are no publicly available statistics on landmine casualties in Uzbekistan. *The majority of Uzbek mine casualties occur along the border areas with Tajikistan and Kyrgyzstan.		->USDOS: there were reportedly 5 new casualties in 2002. -> In July 2001, the chief of a border guard's outpost states that there were sometimes "daily" casualties among the civilian population. -> In March 2002, it was reported that unofficial sources put the number of mine casualties in Uzbekistan at several dozen.	
<b>MIDDLE EAST/ NORTH AFRICA</b>				
Algeria	Algeria has stated that a long-term demining program is being prepared and that a coordination committee will be established to serve as the focal point for mine action. *There is no official or comprehensive mechanism to collect information on mine casualties in Algeria.		-> Mine casualties continue to be reported in sporadic press accounts of incidents. At least 46 casualties in 2002 (see p. 76 for breakdown).	
Egypt	The National Committee to Supervise Mine Clearance changed its name in July 2002 to the National Committee to Develop the Northwest Coast and Mine		-> The Landmines Struggle Center (LSC) conducted survey. It collects and receives information on mine/UXO incidents from local sources and media. In 2002, they reported 10 new casualties; in 2001, 11 new casualties; in 2000, 12 new casualties.	

	Clearance.		*Many mine incidents are likely to go unreported, especially amongst the nomadic Bedouin tribes in the Western desert.	
Iran	<p>*A new project to support mine action has been designed by the UNDP, which will focus on channeling assistance through the National Committee for Demining within the Iranian Ministry of Interior. The project includes installation of the IMSMA.</p> <p>*There is no official data available on landmine casualties in Iran.</p> <p>*There is no systematic nationwide reporting of landmine survivors in Iran; a survey done in Ilam province in 2000 is the most in-depth study to date. Between 1989 and 1999, the survey recorded 1,082 casualties. No comprehensive information is available on landmine casualties in other provinces. However, it was reported that 52 have been killed and 100 injured by landmines while searching in the former war zones for those missing in action since the end of the war in 1988.</p>		->Landmine Monitor recorded 11 civilians killed and 21 injured in 2002 from a limited number of available media reports. However, according to several media reports, every year dozens of shepherds and local residents are milled or injured by mines in the border regions. LM also recorded 18 civilians killed in 2001; 52 army deminers killed and another 122 injured during mine clearance operations in 2001.	
Iraq	According to the USDOS, the Coalition Provisional Authority (CPA) has assumed responsibility for mine action in Iraq, and has established the Iraq National Mine Action Authority (NMAA) and Iraq Mine Action Center (IMAC).	Yes, V3.0176	- The UN Mine Action Service, supported by UNICEF and UNOPS, leads UN mine action planning. Casualty statistics are maintained by UNOPS and MAG. -> In 2002, UNOPS recorded 279 casualties in 2 regions. UNOPS estimates that its casualty data represents 90 percent of new casualties in the three northern governorates. There were also 6	



			<p>deminer casualties in 2002 in the northern regions. In 2001, UNOPS reported an average of 30 casualties per month. During March and April 2003, reported that the number of casualties increased by 90 percent.</p> <p>-&gt; MAG, in the same period in 2002, recorded 32 new casualties in 2 regions and 96 in another. In 2001, recorded 201 killed or injured in northern Iraq, and at least 21 more in other regions of the country. In the five months to the end of May 2003, 493 new casualties reported. Between 1991 and 2000, 10,997 casualties reported in 6 governorates of northern Iraq; 3,697 killed and 7,300 injured.</p> <p>-&gt; German medical team attached to UNIKOM (see p.611-12 for details)</p> <p>-&gt; British Royal Engineers: According to a member, around 5 casualties per week in Basra alone by UXO since end of April.</p> <p>-&gt; For media reports and US soldier casualties see p. 612</p> <p>* There is no comprehensive or reliable information available on mine/UXO casualties in the south of Iraq in 2003.</p>	
Jordan	National Demining and Rehabilitation Committee (NDRC), civilian-led and focal point for all mine action in Jordan.		<p>-&gt; The government reported 15 new casualties in 2002. Government (Royal Jordanian Corps of Engineers) reported 525 casualties since 1967; however, a USDOS publication cites the Jordanian Armed Forces Medical Services as reporting 636 casualties since 1967.</p> <p>-&gt;LMR 2002: In 2001, 8 new casualties.</p> <p>-&gt; Landmine Survivors Network: 1 casualty in 04/03.</p> <p>-&gt; Hashemite Charitable Society for Soldiers with Special Needs: reported 1 casualty in 01/03.</p>	
Kuwait	The Engineering Corps of the Kuwait Ministry of Defense is responsible for survey, assessment, quality		<p>-&gt; UNIKOM (UN Iraq-Kuwait Observer Mission) records mine/UXO casualties in the demilitarized zone, but most involve Iraqi civilians.</p>	

	assurance, clearance, and educating the population of the risks of landmines and UXO. -> In 2002, reported at least 10 casualties		-> LMR 2002: at least 4 new casualties in 2001. -> The Kuwait Institute for Scientific Research published report on civilian war casualties in February 2002: 1,026 mine injuries and 85 deaths from mines, and 175 injuries and 119 killed from UXO. -> Various media reports (see p. 626 for details)	
Lebanon	National Demining Office (NDO) of the Lebanese Army is the official body in charge of the national mine action plan and undertakes all coordination and planning efforts.	Yes, V3.0176	->UNIFIL: 11 deminer casualties in 2002. -> Landmine Resource Center (LMRC) of the Faculty of Health Sciences at the University of Balamand maintains landmine casualty database in cooperation with the NDO: 42 new casualties in 2002; 85 new in 2001; as of March 2003, 5 casualties. As of 31 December 2002, database contained information on a total of 2,784 casualties, 1,388 of which were reported in South Lebanon and Nabatieh districts. (Landmines have also killed a number of animals in 2002)	Ongoing survey; work began in April 2002 and data collection completed in April 2003.
Syria	*Landmine casualty data is not systematically collected in Syria. There is no centralized registered and some casualties go directly to hospitals in Damascus for emergency treatment. However, new information reported by the Director of Social Affairs indicates that there have been at least 216 casualties since 1973 in the Syrian-controlled Golan.		-> Khan Arnaba Community Rehabilitation Center reported a casualty in February 2003. -> Director of Health in the Bordering Areas (Golan) and a Medical Officer Beir Ajam village reported 2 casualties each in 2002.	
Tunisia	There is currently no national body to comprehensively address the mine problem in Tunisia. The army is the only body authorized to take any practical actions related to landmines or		-> MAG undertook an assessment mission to Tunisia in December 2002. -> UNMAS undertook another assessment mission from 20-24 January 2003. In 2002, 4 casualties, and 4 casualties registered in the previous 2 years.	

	UXO. Between 1991 and 1996, Tunisian authorities registered 3 casualties.			
Yemen	<p>National Mine Action Committee (NMAC), chaired by the Minister of State is responsible for policy formulation, resource allocation, and the national mine action strategy.</p> <p>- In 2001, registered 5 new casualties.</p> <p>Yemen Executive Mine Action Center (YEMAC) is responsible for coordination of mine action activities, and the activities of the Regional Executive Mine Action Branch (REMAB).</p>	Yes, V3.0176	<p>-&gt;Yemen Mine Awareness Association (YMAA) collects reports of mine incidents through the media, security authorities, sheiks and villagers, and survivor assistance staff also collects data while interviewing mine survivors: in 2002, 7 killed and 12 injured</p> <p>-&gt;Regional Mine Action Center in Aden: in 2001 recorded 10 killed and eight injured; 2 soldiers injured in training exercise at Center.</p>	<p>Requested by UNMAS on behalf of NDC, implemented by VVAF.</p> <p>Survey completed in July 2000, and the final report was published and released in April 2001; recorded a total of 4,904 casualties.</p>
Palestine	<p>A National Mine Action Committee was created in August 2002 consisting of the ICRC, UNICEF, UNRWA, and other governmental and non-governmental organizations. They are responsible for day-to-day mine action activities in the OPT (Palestinian Occupied Territories).</p>		<p>-&gt; Defense for Children International/Palestine Section: In 2002, 45 casualties by 15 May and during rest of year 3 more killed and 9 injured. *Given the difficult situation on the ground in 2002, comprehensive figures on the number of casualties are unavailable. In 2001, recorded 20 casualties and in March 2003, 1 casualty.</p>	

## **Annex C – Regional Seminar Working Group Recommendations**

### **Regional Seminar on Antipersonnel Landmine Victims Bogota, Colombia, 12-14 November 2003**

#### **Working Group No. 1 -- Conclusions and Recommendations**

##### **Data Collection on Antipersonnel Mine Victims**

- Data Collection
  - One must determine the ultimate use of the information to know what information is necessary (especially considering the costs of the process).
  - Collection of data must be coordinated between the various entities to prevent duplication of efforts.
  - Collection of data has to be decentralized and delivered to the national authorities.
  - The reliability of the data must be verified.
  - There must be an effort to standardize the collection of data.
  - Respect to the victims must predominate data collection. The final use of the data and the possibilities of services and support must be transparent.
  - The ongoing existence and use of the information must be secured.
- Centralization of information
  - The information should be centralized in the national authority (this will help prevent duplication of efforts; it also helps optimize costs and assure data reliability).
- Distribution of information
  - There should be a national standard for distributing data (how and what information is distributed).
  - There must be an appropriate and efficient manner of distribution.
- Restrictions in the distribution of information
  - The national security context influences the distribution of information.
  - Personal information should not be distributed.
  - Information that could put people's lives in danger should not be distributed.
- Other considerations
  - Differences exist between countries in conflict and countries in post-conflict (this influences the manner of collection and the distribution of the data)
  - It is necessary to improve the capacity at the national level to process the data

## Annex D – MAIC Casualty Data Survey

### Survey about Data Fields to Use in Mine Victim Databases

The Mine Action Information Center (MAIC) at James Madison University is conducting a survey about the fields that should be included in a database designed to collect and analyze information about victims of landmine accidents. This survey is being distributed to persons working for victim (or “survivor”) assistance organizations and in the field of Mine Risk Education.

The questionnaire is based upon the data fields included in the most recent version of the Information Management System for Mine Action (IMSMA), now widely in use in mine-affected countries. However, this survey project is being conducted independently of the Geneva International Center for Humanitarian Demining (GICHD) which distributes and maintains the IMSMA software. The project emanates from a recommendation made at a workshop hosted by the MAIC in May 2002 to survey victim assistance and mine risk education personnel concerning casualty data collection, and it builds upon previous research conducted by the MAIC on casualty data. The proceedings of the workshop can be viewed at: <http://maic.jmu.edu/conference/proceedings/casualty/index.htm>.

The survey seeks information about the importance of including certain data fields in a landmine casualty or victim database. The questionnaire also asks the respondent to evaluate the clarity and appropriateness of the specific questions being asked. It then asks for suggestions of additional data fields and questions to include in a landmine casualty database, either an expanded IMSMA or a supplemental one. At the very end of the survey we ask for information about the respondent. This information will be separated from your responses to the survey questions. Your responses will be kept anonymous.

Please return your completed survey no later than **June 1, 2004** by one of the following methods:

1. by E-mail: [fiedersl@jmu.edu](mailto:fiedersl@jmu.edu)
2. by FAX: 1.540.568.8176
3. by post or courier: Dr. Suzanne Fiederlein  
Mine Action Information Center  
MSC 8504, James Madison University  
One Court Square, Room 314  
Harrisonburg, VA 22807 USA

Please contact Suzanne Fiederlein (e-mail: [fiedersl@jmu.edu](mailto:fiedersl@jmu.edu)), telephone: 1.540.568.2715 or 568.2718) if you have any questions about the survey.

## I. Data Fields to Be Included on Mine Accidents and Victims

### Part 1: IMSMA Victim Data Fields

The following data fields are included on the “Victim” data entry form of IMSMA version 3. It is intended to be used to record information about victims of mine accidents occurring apart from demining activities. Additional landmine casualty data is recorded elsewhere in IMSMA, including in its Demining Accident Casualty report form (for use when the casualty occurs during a demining-related activity) and its Landmine Impact Survey functionality. This questionnaire focuses on data that would be collected during an ongoing mine action program and would provide information on recent casualties potentially requiring medical assistance.

The questionnaire retains the wording and numbering used by IMSMA as much as possible, with some changes made to facilitate the processing of the questionnaire responses and improve clarity. However, the questionnaire also retains the order in which the data fields appear on the form. For example, the items on the victim’s personal information (“victim data”) appear first on the form but are numbered 2.0-2.7. The questionnaire also retains use of the terms “victim” and “victim assistance” in keeping with the terminology used currently in IMSMA.

First of all, please rate the importance of including each data field according to the following scale. Use as the basis of your judgment your answer to the following question: *How important is it to include this data in a general landmine casualty database that could be used to collect data in various mine-affected countries?* Write the number of your response in the box beside the data field.

- 1 = Do not include this data
- 2 = Low priority to include this data
- 3 = Neutral, no opinion on including or excluding this data
- 4 = Important to include this data if it is available
- 5 = Essential data--should always be included

Next, in the right-hand column, provide comments about the data fields, including suggestions for rewording of the question, if applicable. Please note any lack of clarity in the wording or any potential problems or concerns you see in using the question. You may include positive comments as well as negative. **The next section of the questionnaire will ask you about additional data that may be useful to collect about landmine casualties.**

<b>Data fields</b>		<b>Importance (1-5)</b>	<b>Comments on data fields</b>
<b>Victim data</b>			
2.1	Victim ID		
2.2	Owner MAC		
2.3	Family name		
2.4	First name		
2.5	Sex (check box: <i>Male, Female</i> )		
2.6	Date of Birth		
2.7	Address		
<b>General mine accident information</b>			
1.1	Mine accident ID		
1.2	Date and time of mine accident		
1.3	Data gathered by		
1.4	Reported by		
1.5	Organization: [Name of org.] (Address & Tel)		
1.6	Data entry date		
1.7	Data entered by		
1.8	Date of report		
1.9	Date of report received		

Nearest town from mine accident			
1.10	Province		
1.11	District		
1.12	Subdistrict		
1.13	Nearest town		
1.14	Municipality		
	<b>Distance and direction from nearest town (not necessary, if coordinates are known)</b>		
1.20	Distance from nearest town: (check box: <i>less than 500m, 500m-5 km, more than 5 km</i> )		
1.21	Direction from nearest town (check box: <i>North, South, East, West, North-East, North-West, South-East, South-West, Unknown</i> )		
	<b>Injuries</b>		
3.1	Was the person injured or killed (check box: <i>Killed, Injured</i> )		
3.2	If killed, location of death (check box: <i>In situ, At health care facility, During transport to health care facility, Other: _____</i> )		
	<b>Loss of: (check box on diagram of human body)</b>		
3.3.1	Right side/Left side: <i>Arm; Hand/finger; Leg – Above knee, Below knee; Foot/toes</i>		
3.3.2	Eyesight ( <i>right/left</i> )		
3.3.3	Hearing ( <i>right/left</i> )		
	How important is it to use diagram of human body? (1=definitely omit diagram, 2=not important, 3=neutral/no opinion, 4=important, 5=essential) _____		
	Comments:		



3.4	Other injuries: (check box on separate diagram of human body) Types of injuries with check box: <i>Head/Neck, Back, Chest, Abdomen, Pelvis/Buttocks, Upper limbs, Lower limbs</i>		
<b>Other Information</b>			
4.1	First medical facility reached (check box: <i>Dispensary, First aid, Hospital</i> )		
4.2	Time until first facility reached ( ___h)		
4.3	Name of first hospital reached		
4.4	Time until first hospital reached ( ___h)		
4.13	Occupation (check box from list of 8 with limited sub-choices [in brackets]: <i>Mine action personnel</i> [Contractor, Government, MAC, NGO, UN], <i>Military</i> [Int. peacekeeper, National], <i>Civilian</i> [IDP, Local resident, Passing through, Pastoralist/nomad, Refugee], <i>Aid worker, Government official, International observer, Other, Unknown</i> )		
4.14	Occupation prior to accident (includes same list as item 4.13 above)		
4.5	Activity at time of mine accident (check box from list of 14, including <i>Tending animals/livestock, Passing/standing nearby, Collecting wood/food/water, Hunting/fishing, Demining, Military, Police, Playing/recreation, Tampering, Farming, Traveling, Household work, Unknown, Other: _____</i> )		
4.6	How often did the person go there? (check box: <i>More than once a day, Several times a week or less, Once a day, Never before</i> )		
4.7	Did the person know that area was dangerous? (check box: <i>Yes, No, Unknown</i> )		

4.8	If they knew area was dangerous, why did they go there? (check box: <i>No other access, Peer pressure, Economic necessity, Other</i> )		
4.9	Did the person see the object before accident? (check box: <i>No; Yes, did not touch; Yes, touched it; Unknown</i> )		
4.10	Did the person receive Mine Risk Education? (check box: <i>Yes, No, Unknown</i> )		
4.11	Medical report reference (if available):		
4.12	Was area marked? (check box: <i>Yes, No</i> )		
<b>5.0</b>	<b>Received MRE:</b> <i>Use values from the lists provided in the Appendix*</i> (table provided with spaces for list of activities)  *Rather than ask you to evaluate the specific MRE activity section included on the form, just assess how important it is to include details such as type of activity, method and frequency of the MRE training received by the victim.		
<b>6.0</b>	<b>Other persons involved</b> (check box) How many others were killed? _____ How many others were injured? _____		
	<b>List of other Victims</b> (table with spaces for list of names)		
6.1	Name		
6.2	First name		
6.3	Status (check box: <i>killed, injured</i> )		
<b>7.0</b>	<b>Device that caused the mine accident</b> (check box: <i>Unknown; Anti-personnel mine; Anti-tank mine; Cluster munitions; Other UXO; Booby trap; Fuse; Specify device, if it is known: _____</i> )		

**Part 2: The Need for Supplemental Data Collection**

The next section of this questionnaire explores the need to collect additional data on landmine casualties.

There are two parts to this issue. One involves whether an information management system like IMSMA should include more data fields relating to landmine victims and victim assistance and what those additional data fields should be. The second part involves indicating how these additional fields should be addressed. Should they 1) be added to the “Victim” form discussed above; 2) added to IMSMA as a separate “Victim Assistance” functionality (as is done for Mine Risk Education currently); or 3) collected by an authority such as a governmental health ministry as part of its public health oversight role.

1. Do the data fields listed above in the first section of this survey adequately cover the types of information on landmine casualties needed to plan mine risk education and victim assistance programs? Yes \_\_\_ No \_\_\_ (check one)

2. If your answer is **NO**, which of the following options do you think is best to address the need to collect additional data on landmine casualties:

**Mark the box of the one option you most favor**

Add 1-5 data fields to the existing IMSMA “Victim” form	
Leave the existing IMSMA “Victim” form as is but develop a more extensive supplemental “Victim Assistance” functionality for IMSMA	
Add 1-5 data fields to the existing IMSMA “Victim” form AND develop a more extensive supplemental “Victim Assistance” functionality for IMSMA	
Leave the existing IMSMA “Victim” form as is but promote the development of expanded victim databases by other entities such as national Ministries of Health	
Add 1-5 data fields to the existing IMSMA “Victim” form AND promote the development of expanded victim databases by other entities such as national Ministries of Health	

3. Please list suggestions of additional data fields you think should be included in an expanded landmine victim database.

A. To be added to an expanded "Victim" form:

1.	
2.	
3.	
4.	
5.	

B. To be included in a supplemental "Victim Assistance" functionality or separate victim database managed by a national governmental entity:

1.	
2.	
3.	
4.	
5.	
6.	

4. Please provide any additional comments or suggestions for improving the collection of landmine casualty information.

--

## II. Information about the Respondent

This information will be separated from the rest of the questionnaire to ensure the confidentiality of your responses. None of this information will be entered into the survey database. Its purpose is to help us manage the distribution and processing of questionnaires. The list of contact information for respondents will be destroyed upon completion of the survey project.

1. Your organization: (Name of organization) \_\_\_\_\_
2. Category of organization: \_\_\_\_\_  
 Choose from the following:
  1. Government of mine-affected country
  2. Government of donor country
  3. NGO (engaged in victim assistance)
  4. NGO (engaged in mine awareness education)
  5. NGO (other)
  6. International Organization (IO)
  7. Consultant
  8. Other (please specify) \_\_\_\_\_
3. In completing this survey, is your response: \_\_\_\_\_  
 Choose from the following:
  1. the official view of your organization
  2. a representative view based on broad consultation within your organization
  3. your individual views and comments

4. Please provide your contact information:

Name	
Telephone	
FAX	
E-mail	

## **Annex E – Distribution of the Surveys**

The surveys were sent out via email beginning May 11. Several different means were used to identify pertinent organizations and appropriate people within those organizations. First of all, the survey was sent to all the participants involved in the May 2002 workshop (for participants list, see: <http://maic.jmu.edu/conference/proceedings/casualty/participants.pdf>). Secondly, messages about the survey were posted at two different times to the MRE Discussion Group ([MREdiscussion@yahoogroups.com](mailto:MREdiscussion@yahoogroups.com)); some surveys were then sent out to people who responded to those postings. Thirdly, the survey was sent to the UNMAS office in New York as well as to UN agencies working in mine action (UNICEF, UNDP, UNOPS) who were asked to distribute the surveys to their field staff most directly involved in Mine Risk Education and Victim Assistance. It was also sent to the International Committee of the Red Cross (ICRC), World Health Organization (WHO), Pan American Health Organization (PAHO), the Leahy War Victims Fund, and country offices of the Organization of American States (OAS). The last approach was to send surveys to personnel in non-governmental organizations (NGOs) involved in MRE or victim assistance work. The project director had compiled an extensive contact list during her research; conference participant lists also were consulted as was the MAIC's contact database and registry of mine action organizations. The list below is representative (but not exhaustive) of the organizations sent surveys.

Center for International Rehabilitation  
Danish Demining Group  
Handicap International (Belgium and France)  
International Trust Fund for Demining and Mine Victims Assistance  
Landmine Survivors Network  
Mines Advisory Group  
Norwegian Peoples Aid  
Survey Action Center  
Swedish Rescue Services Agency  
Vietnam Veterans of America Foundation  
World Rehabilitation Fund

These NGOs run programs in several different countries. NGOs with a national focus also were identified and sent surveys; a few of those were: Center for Integrated Rehabilitation in Colombia (CIREC), Landmines Resource Center (Lebanon), and RaDO (Ethiopia).

Of course not all of the organizations sent surveys responded. However, a total of 28 completed surveys were returned. To protect the anonymity of the respondents, they will not be identified except by noting the broad categories of type of organization with which they are affiliated. Of the 28 respondents, ten came from personnel working in a United Nations agency (such as UNICEF, UNDP, etc.); twelve were from a non-UN International Organization, non-governmental organization or university/foundation/fund; and six were from national mine action program offices (governments). The respondents came from or worked in countries representing every region of the world, although Africa, Southeast Europe/Caucuses, and the Middle East were better represented than Latin America and Southeast Asia.

## Annex F – MAIC Casualty Data Survey Results

### Part 1: IMSMA Victim Data Fields

	Data fields	Mean	% Agree*	Analysis
<b>2.0</b>	<b>Victim data</b>			
2.1	Victim ID	4.81	92.86%	IMSMA internal field
2.2	Owner MAC	3.70	46.43%	IMSMA internal field. Confusion about the data field's purpose/ meaning. Relatively high number of "no answer" [blank] responses (5). Results unreliable.
2.3	Family name	4.39	85.71%	
2.4	First name	4.39	85.71%	
2.5	Sex (check box: <i>Male, Female</i> )	5.00	100.00%	
2.6	Date of Birth	4.82	96.43%	
2.7	Address	4.29	78.57%	
<b>1.0</b>	<b>General mine accident information</b>			
1.1	Mine accident ID	4.63	75.00%	IMSMA internal field
1.2	Date and time of mine accident	4.82	100.00%	
1.3	Data gathered by	4.32	78.57%	
1.4	Reported by	4.15	64.29%	
1.5	Organization: [Name of org.] (Address & Tel)	4.19	64.29%	
1.6	Data entry date	4.16	67.86%	IMSMA internal field
1.7	Data entered by	3.93	60.71%	IMSMA internal field
1.8	Date of report	4.19	78.57%	
1.9	Date of report received	3.74	64.29%	IMSMA internal field
	<b>Nearest town from mine accident</b>			
1.10	Province	4.61	96.43%	
1.11	District	4.64	96.43%	
1.12	Subdistrict	4.57	92.86%	
1.13	Nearest town	4.68	92.86%	
1.14	Municipality	4.11	75.00%	
	<b>Distance and direction from nearest town (not necessary, if coordinates are known)</b>			
1.20	Distance from nearest town: (check box: <i>less than 500m, 500m-5 km, more than 5 km</i> )	4.04	78.57%	
1.21	Direction from nearest town (check box: <i>North, South, East, West, North-East, North-West, South-East, South-West, Unknown</i> )	3.86	75.00%	

<b>3.0</b>	<b>Injuries</b>			
3.1	Was the person injured or killed (check box: <i>Killed, Injured</i> )	<b>4.96</b>	<b>100.00%</b>	
3.2	If killed, location of death (check box: <i>In situ, At health care facility, During transport to health care facility, Other: _____</i> )	<b>4.29</b>	<b>82.14%</b>	
3.3	<b>Loss of: (check box on diagram of human body)</b>	<b>3.77</b>	<b>28.57%</b>	<p><b>[Question 3.3]</b> How important is it to use diagram of human body?  (1=definitely omit diagram, 2=not important, 3=neutral/no opinion, 4=important, 5=essential)  <b>Confusion about this question on the use of a diagram; high number of “No answers”[15]. Results for 3.3 are unreliable.</b></p>
3.3.1	Right side/Left side: <i>Arm; Hand/finger; Leg – Above knee, Below knee; Foot/toes</i>	<b>4.46</b>	<b>82.14%</b>	
3.3.2	Eyesight ( <i>right/left</i> )	<b>4.5</b>	<b>82.14%</b>	
3.3.3	Hearing ( <i>right/left</i> )	<b>4.5</b>	<b>82.14%</b>	
3.4	Other injuries: (check box on separate diagram of human body) Types of injuries with check box: <i>Head/Neck, Back, Chest, Abdomen, Pelvis/Buttocks, Upper limbs, Lower limbs</i>	<b>4.33</b>	<b>78.57%</b>	
<b>4.0</b>	<b>Other Information</b>			
4.1	First medical facility reached (check box: <i>Dispensary, First aid, Hospital</i> )	<b>4.19</b>	<b>78.57%</b>	
4.2	Time until first facility reached (____h)	<b>4.08</b>	<b>75.00%</b>	
4.3	Name of first hospital reached	<b>3.92</b>	<b>64.29%</b>	
4.4	Time until first hospital reached (____h)	<b>3.96</b>	<b>67.86%</b>	
4.13	Occupation (check box from list of 8 with limited sub-choices [in brackets]: <i>Mine action personnel</i> [Contractor, Government, MAC, NGO, UN], <i>Military</i> [Int. peacekeeper, National], <i>Civilian</i> [IDP, Local resident, Passing through, Pastoralist/nomad, Refugee], <i>Aid worker, Government official, International observer, Other, Unknown</i> )	<b>4.44</b>	<b>85.71%</b>	
4.14	Occupation <i>prior</i> to accident (includes same list as item 4.13 above)	<b>4.07</b>	<b>75.00%</b>	
4.5	Activity at time of mine accident (check box from list of 14, including <i>Tending animals/livestock, Passing/standing nearby, Collecting wood/food/water, Hunting/fishing, Demining, Military, Police, Playing/recreation, Tampering, Farming, Traveling, Household work, Unknown, Other: _____</i> )	<b>4.64</b>	<b>92.86%</b>	
4.6	How often did the person go there? (check box: <i>More than once a day, Several times a</i>	<b>4</b>	<b>67.86%</b>	



	<i>week or less, Once a day, Never before)</i>			
4.7	Did the person know that area was dangerous? (check box: <i>Yes, No, Unknown</i> )	4.32	85.71%	
4.8	If they knew area was dangerous, why did they go there? (check box: <i>No other access, Peer pressure, Economic necessity, Other</i> )	4.18	78.57%	
4.9	Did the person see the object before accident? (check box: <i>No; Yes, did not touch; Yes, touched it; Unknown</i> )	4	71.43%	
4.10	Did the person receive Mine Risk Education? (check box: <i>Yes, No, Unknown</i> )	4.57	89.29%	
4.11	Medical report reference (if available):	3.35	39.29%	
4.12	Was area marked? (check box: <i>Yes, No</i> )	4.64	92.86%	
5.0	<b>Received MRE:</b> <i>Use values from the lists provided in the Appendix*</i> (table provided with spaces for list of activities)  *Rather than ask you to evaluate the specific MRE activity section included on the form, just assess how important it is to include details such as type of activity, method and frequency of the MRE training received by the victim.	4.09	64.29%	Apparent confusion on this question, too. Relatively high number of “no answer” [blank] responses (5). Results unreliable.
6.0	<b>Other persons involved</b> (check box) How many others were killed? _____ How many others were injured? _____	4.33	78.57%	
	<b>List of other Victims</b> (table with spaces for list of names)			
6.1	Name	4.07	67.86%	
6.2	First name	3.92	57.14%	
6.3	Status (check box: <i>killed, injured</i> )	4.08	67.86%	
7.0	<b>Device that caused the mine accident</b> (check box: <i>Unknown; Anti-personnel mine; Anti-tank mine; Cluster munitions; Other UXO; Booby trap; Fuse; Specify device, if it is known:</i> )	4.37	78.57%	

\*% Agree determined to be “high” if three-quarters (75%) or more of respondents gave the field a 4 or 5. This “high” level of agreement corresponds to the rating used in the December 2001 MAIC study.

## Part 2: The Need for Supplemental Data Collection

The next section of this questionnaire explores the need to collect additional data on landmine casualties.

There are two parts to this issue. One involves whether an information management system like IMSMA should include more data fields relating to landmine victims and victim assistance and what

those essential data fields be. The second part involves indicating how these additional fields should be addressed. Should they 1) be added to the “Victim” form discussed above; 2) added to IMSMA as a separate “Victim Assistance” functionality (as is done for Mine Risk Education currently); or 3) collected by an authority such as a governmental health ministry as part of its public health oversight role.

1. Do the data fields listed above in the first section of this survey adequately cover the types of information on landmine casualties needed to plan mine risk education and victim assistance programs? Yes **35.71%** No **64.29%** (check one)
  - 1 respondent indicated **Yes** for MRE and **No** for victim assistance – counted as a “**No**” [respondent marked an option in the following question]
  - 2 respondents marked “**Yes**” but then marked an option in the following question; 1 respondent marked “**No**” but then did not mark an option in the following question
  - A total of 19 respondents marked an option in question 2 below [67.86%]
  
2. If your answer is **NO**, which of the following options do you think is best to address the need to collect additional data on landmine casualties:

<b>Mark the box of the <u>one</u> option you most favor</b>	<b># Responses</b>	<b>weighted %*</b>
Add 1-5 data fields to the existing IMSMA “Victim” form	<b>2</b>	<b>10.53%</b>
Leave the existing IMSMA “Victim” form as is but develop a more extensive supplemental “Victim Assistance” functionality for IMSMA	<b>4</b>	<b>21.05%</b>
Add 1-5 data fields to the existing IMSMA “Victim” form AND develop a more extensive supplemental “Victim Assistance” functionality for IMSMA	<b>4</b>	<b>21.05%</b>
Leave the existing IMSMA “Victim” form as is but promote the development of expanded victim databases by other entities such as national Ministries of Health	<b>5</b>	<b>26.32%</b>
Add 1-5 data fields to the existing IMSMA “Victim” form AND promote the development of expanded victim databases by other entities such as national Ministries of Health	<b>4</b>	<b>21.05%</b>

**\*weighted % calculated based on the number of responses for each option out of 19 total responses**

## Annex G – Comments on Data Fields

This is an edited version of the data field comments. Some data fields under the “General mine accident information” heading were removed since they were less directly related to victims and more with data entry issues.

ID	1.2: Date and time of mine accident
1	Time is not important
6	An important factor in data analysis to study the incident and victims trend in different time interval. Also this can be used to find out age of victim during the incident. Time is also important to see at which time of the day most of the incidents are happening and why?
15	Regarding the time it's OK but regarding the date sometimes people don't remember or don't know
16	Time possibly more important in some countries e.g. where night time mine laying
18	Information for MRE and potential planting of mines
19	The time of the accident is not important; the exact date is not essential; the month would be sufficient in most cases
24	better: separate date-time

ID	1.10: Province
5	Important for follow up and identify dangerous areas or movement towards dangerous areas
6	The location of mine incident shows the location of suspected minefield and UXO location. If no any comprehensive LIS is implemented in a country then this can be used as EOC to send team for further investigation of the area.
8	The most important infor is not what town is near but WHERE did the accident take place.
15	GIS requirement (In case there is no use of GPS)
16	For mapping / future HMA / targeting funding etc. (1.10-1.13)
23	ditto
24	can easily be assessed through computer tools (GIS)

ID	1.11: District
5	Important for follow up and identify dangerous areas or movement towards dangerous areas
6	The location of mine incident shows the location of suspected minefield and

ID	1.11: District
	UXO location. If no any comprehensive LIS is implemented in a country then this can be used as EOC to send team for further investigation of the area.
15	GIS requirement (In case there is no use of GPS)
24	can easily be assessed through computer tools (GIS)

ID	1.12: Subdistrict
1	or commune
5	Important for follow up and identify dangerous areas or movement towards dangerous areas
6	The location of mine incident shows the location of suspected minefield and UXO location. If no any comprehensive LIS is implemented in a country then this can be used as EOC to send team for further investigation of the area.
15	GIS requirement (In case there is no use of GPS)
24	can easily be assessed through computer tools (GIS)
26	whatever the name used in each country, the location should be described as precisely as possible; the names of the village, where the accident happened has to be included too.

ID	1.13: Nearest town
5	Important for follow up and identify dangerous areas or movement towards dangerous areas
6	The location of mine incident shows the location of suspected minefield and UXO location. If no any comprehensive LIS is implemented in a country then this can be used as EOC to send team for further investigation of the area.
15	GIS requirement (In case there is no use of GPS)
18	NearestTown/village
24	can easily be assessed through computer tools (GIS)
26	same remark as above

ID	1.14: Municipality
5	Important for follow up and identify dangerous areas or movement towards dangerous areas
6	In most of mine affected countries municipality is not available.
15	GIS requirement (In case there is no use of GPS)

ID	1.14: Municipality
16	Often hard or unnecessary to translate directly, but useful field to have if the field name is adapted to be appropriate to the country situation e.g. in Iraq there are collective towns, the name of which can go in 1.13 and these are divided into 'blocks' which can go into 1.14
18	Within a town or municipality
24	can easily be assessed through computer tools (GIS)
26	same remark as above; there should be a box for the "village"
28	Addition: name of the village

ID	1.20: Distance from nearest town
6	This item of the data can explain the severity of impact on community. It shows whether the suspected area is in village, around village or far away of the village.
9	what defines a town? Why "town" (locality with first medical facility or proximity of mine/UXO threat as determinant?)
13	"Village" or "commune" or any landmark would be more accurate than "town"
15	To know the location of the dangerous area (In case there is no use of GPS)
16	May influence priority. Attached sketch map should also show this information clearly
20	0-1 Km, over 1-5 Km more than 5Km
23	ditto
24	much better coordinated (importance:5)
26	this should be much more detailed and precise; accidents should be located within "villages"
27	if QA'd

ID	1.21: Direction from nearest town
6	For the geographical demonstration of exact location of incident.
15	To know the location of the dangerous area (In case there is no use of GPS)
16	Proven to confuse. Prefer to get this information from the sketch map. Can live without it.
18	GPS reading better MRE more and more are doing GPS readings
24	much better coordinated (importance:5)
26	same remark as above

ID	2.1: Victim ID
5	Important! If forms a reference point
6	This is an IMSMA generated ID for victims and is usually written on the form after data entry. Most often the data collector become confused about this ID. In some cases the data collector generate a kind of ID system. Apart from that this cannot be used in any data analysis. It is only used for future referencing of a victim for search or edit purpose.
14	This is an IMSMA internal field that is filled out by the system. It is not intended to be filled out during data collection in the field.
15	Victims should have number in case of names duplications
16	At a data entry level
18	This would be good to become a personal identifier so can cross reference in the future if countries set up a separate database. Confidentiality and a formula of how work would be essential
22	to indentify the victim, because names can be common.
26	when available

ID	2.3: Family name
1	Need to add additional name: in some countries people go by other names
2	Confidentiality issue should precluded this
5	Important to avoid duplication
6	If there is not any political reason behind it is important to collect this data on country level. In some circumstances people (army, police) do not want to reveal information about them. Most often duplicated information can be extracted through out queries of the data set.
8	It is vary Important to be able to identify precisely the person. However confidentiality should be guaranteed, therefore all this personal info should not be entered into the computer. Give a code to each victim, so that they cannot be recognized
15	In Sudan we don't use family name, sometimes it confuses
16	Assists in avoiding duplication of reports. May assist VA organizations with follow up support, but even if this info is unavailable or someone is unwilling to give it, then the report is still very valid and useful (2.3-2.4)
18	Or Father's name whichever system is used. In many countries a different process and then would use Grandfather's name and then does not cross reference

ID	2.4: First name
2	Confidentiality issue should precluded this
5	Important to avoid duplication

ID	2.4: First name
6	If there is not any political reason behind it is important to collect this data on country level. In some circumstances people (army, police) do not want to reveal information about them. Most often duplicated information can be extracted through out queries of the data set.
10	Surname also is important to include, because of easier to find of survivor/ victim' s home
15	Should be replaced by full name

ID	2.5: Sex (check box: <i>Male, Female</i> )
5	Important to analyze characteristics of people at risk
6	Very important to see the pattern of sex involved in mine accident and to help the mine action program in selecting the accurate proportional target selection.
15	To know the most effected and then to design gender sensitive MRE programs
16	MRE purposes
18	Gender
22	for priortitization, and analysis

ID	2.6: Date of Birth
5	Important to analyze characteristics of people at risk
6	With date of birth we can easily know the age at time of incident and find out the children and adults who got accident.
9	Age as alternative people often do not know
15	It's important to know what ages are most affected, but in Sudan people always don't know their exact date of birth and they can just give you age estimate. Thus it's better to add age
16	Need choice of age categories rather than exact age
18	In some countries not known- if not available approximate age in years
19	Year of birth is sufficient
20	Year of Birth, as most of the victims does not know excat date of birth nor it is that important for MA program
24	better: year of birth

ID	2.7: Address
1	Could ask if address was different at time of accident...
2	Confidentiality issue should precluded this

ID	2.7: Address
4	Victims were dislocated a lot during the war, so by mine opinion better question or to ad the question would be : Address at the time of an accident
5	Important for follow up and identify dangerous areas or movement towards dangerous areas
6	In most cases there is not firm address for the victims like those who are living in IDP or refugee camps under tent.
9	does not have to be exact
11	Current or permanent address?
15	Not in all cases that people have specific address especially for IDPs and refugees. Moreover, in some areas it's impossible to get address. It's better to be replaced by contact persons such as name of community chief
16	For possible follow up support
18	Current address If no specific address sub-region, local structure and village and PO Box if available
20	Adress (Town/ village, district and province)
22	To find the victims for assistance

ID	3.1: Was the person injured or killed (check box: <i>Killed, Injured</i> )
6	It should be known if the victim is injured of killed to see the pattern of killed versus injured and study the severity of incident.
15	If injured to provide them with different types of assistance, If killed to assist his/her family
23	Ditto

ID	3.2: If killed, location of death (check box: <i>In situ, At health care facility, During transport to health care facility, Other: _____</i> )
6	It is important to include this data to study the severity of incident, status of health facility, status of transportation.
15	To know if the person died before receiving medical assistance
16	Maybe more significant for medical/VA organizations. Also useful to highlight the relative importance of giving 1st aid training in rural areas.
19	This is not very important.
20	Also add in the check box, after medical treatment

ID	3.3: Loss of: (check box on diagram of human body)
1	There is little value in reporting an amputated finger
2	This type of injury is of no importance to a deminer, surveyor or MRE



<b>ID</b>	<b>3.3: Loss of: (check box on diagram of human body)</b>
	worker
6	This is very important for victim assistant program to study the pattern of various type disabilities caused by mine/UXO incident in different locations and to make appropriate planning based on the victim data. I am flexible of changing the diagram with text selection but we have to make many check boxes, which will make it more difficult than the current time.
7	As we never see the completed forms, only compiled data, this is not important, If there may be a medical need for this type of information that practitioners may deem useful
8	It helps both the interviewee and the interviewer to precisely describe the injury
10	It's advisable to include this section in an additional Mine Survivor's Needs Research Form, which will be introduced below.
13	may be to put this information in the VA special form
15	it's important to know what assistance is needed to be provided such as prosthetics or wheelchair ..etc
16	Easy to use. Minor potential confusion with LHS/RHS. Info useful for all parts of HMA.
18	This is not very valuing to the person consider rewording
19	It is not very essential to know if the arm, finger or the leg was the right one or the left one. More emphasis should be put on actually gathering this information. It does matter in victim assistance whether an arm, leg, finger or an eye was damaged. Everyone in mine action should be more cognizant of this.
20	It helps in indicating loss or place of injuries
22	The diagram elucidative and factative, it is also straight forward
23	There have been mistakes in translation
24	these diagrams do not include partial loss damage/injury of these parts

<b>ID</b>	<b>3.4: Other injuries</b>
6	For further study of device type impact and VA it could be used.
10	The same as previous comment. Otherwise to elaborate and concretize type of injuries (for example: Cerebral Trauma, Bones' Fractures, Paralysis/ Paresis, Burns, Bruises, Fragment' Injuries and etc,)
15	Health facilities should be improved in dangerous areas to have surgery departments. We can not decide where to establish and where to improve surgery assistance without this question
19	Too general; "lower limbs" should be changed to "legs" and "upper limbs" to arms. Also, the person may have suffered an injury but healed, and therefore follow-up health care is not needed.Perhaps the question should center on whether the injury resulted in the loss of livelihood or a change in

ID	3.4: Other injuries
	jobs. The impact of the injury needs to be measured to have any value in collecting the information.

ID	4.1: First medical facility reached
5	Important for VA
6	If such data is available then we can see if medical facility is available or not.
7	4.1-4.4: these questions do not pertain to MRE related programming, but of high value in terms of emergency response planning
15	To what are the health facilities and can they deal with mine accident properly
18	How were you transported to the first medical facility? Type of facility? Were you stabilized there?
19	Why is this information needed?
21	Will be great to know what level of attention was provided- Hospital level

ID	4.2: Time until first facility reached ( ____ h)
5	Important for VA
6	If such data is available then we can see if medical facility is in what range of distance the incident.
15	How far is health facilities from the dangerous areas and how fast mine victims are provided with assistance
18	Length of time from the accident until you were seen by the first doctor or nurse

ID	4.3: Name of first hospital reached
5	Important for VA
6	If such data is available then we can see if hospital is available or not.
15	In Sudan hospital are having cities names. Through this question we can know if the person received the medical assistance in the area or elsewhere
18	Name of hospital taken to

ID	4.4: Time until first hospital reached ( ____ h)
1	Depending on injuries, some do not have to go to the hospital and the distinction between this and 'frist medical facility' can be confusing especially if the first facility is a hospital

ID	4.4: Time until first hospital reached ( ____ h)
5	Important for VA
6	If such data is available then we can see if hospital is in what range of distance the incident.
15	To know how long the comprehensive medical assistance Reached by the victim because most of the people died before receiving proper medical care
18	Length of time from when at first medical facility until surgery or clean up?3.2 would be more acceptable to put into this section of when died
20	Question 4.2 should be enough to ask.

ID	4.5: Activity at time of mine accident
1	Maybe need to added an additional question: what made the device explode? Stepped on it; hit it with something moving; etc. Take this scenario: a farmer is traveling down the road sees a grenade picks it up and it explodes...according to IMSMA thte cause of accident would be traveling...Also need to add a new dimension to the activity 'playing' sometimes they are playing with an explosive, which is really tampering but is often recorded as playing....
5	Important for VA and for MRE
6	MRE program can improve the training syllabus based on this information and use it to accurately define the proportion and type of target group. The question in most cases cannot obtain the required result. In order to get the actual reply from the victim, we can add a supportive question of how the incident happened.
7	This question should be followed by a question about what a person is during while tending, collecting etc. UXO incidents are not likely to occur by stepping on an item but by tampering whilst watching animals or other activities
8	One of most fundamental info for MRE, in order to target the activities
15	To know the dangerous behavior and activities which led the people to dangerous areas and how to design efficient MRE project in the future
16	'Tampering' is somewhat derogative in English. Connotations of victim having played around/interfered whereas likely to have had good reason to touch or handle the device. Suggest 'handling' but this may need sub categories to make it appropriate for the country e.g. handling in order to gain scrap metal, or handling as a result of returning to demolished building after an invasion. Require quite different MRE responses.
18	We found that these field did not match what we have in IMSMA/LIS This list does not match the occupations above in 4.13

ID	4.6: How often did the person go there?
3	These might not be known for persons with fatal injuries
5	Important for VA
6	No need to know such detail and will be difficult for the victim to tell you the exact information. Also a more relevant and more descriptive question is down if he knew the area is dangerous why did he go?
10	I doubt, that an information received thanks to these items (4.6-4.12) will be anyway useful for MRE to prevent mine accidents, Chances are it'll be more useful for dome-doctor's research...
15	It shows how important for the people to go to these place, moreover
18	mre
19	This is not important

ID	4.7 Did the person know that area was dangerous?
1	Don't know what you will do with the information
5	Important for VA
6	Important to know this and why he went to the area if he knew it is dangerous.
15	To if there are motives behind making the people endanger their lives
16	Worth asking, but should be cautious of truth of response as may feel pressured to answer in a certain way (4.7-4.10)
18	mre
19	See Pt.8. It's no longer an interesting question if responses are supposed to result in action plans.

ID	4.8 If they knew area was dangerous, why did they go there?
1	Don't know what you will do with the information
5	Important for VA
6	Important to find out the reason to go to a known dangerous area.
7	This question could follow question 4.5 as a follow up question
15	To know what are the motives lead the people to dangerous areas
18	I do not think you will get the truth here on this question or you need to reword it more
19	We used to be curious about this but now several years later the general answer is "People need to make a living", or "It's God's Will", etc. We should stop asking the question. We know people cross minefields even when they know it is one.
25	tricky to get data post festum

ID	4.9 Did the person see the object before accident?
1	Don't know what you will do with the information
6	Important to know if the victim saw the objects and devices before. Question should be reframed as did you see this device which cause the incident before the incident.
15	It's shows the knowledge and attitude towards suspicious objects
18	mre
19	Not very important.
25	who can say

ID	4.10: Did the person receive Mine Risk Education?
2	What would an answer to this question prove??
6	To know the impact of MRE in known population.
15	To prioritize the MRE activities and to enable people in dangerous areas to receive MRE. This question shows if there is need for MRE or the MRE projects were not effective
18	mre
19	This is a good question and directly impacts on planning.

ID	4.11: Medical report reference (if available):
1	Usually no available for casualties reported outside medical institutions
7	do not know this report
15	Loss and injuries Information is already included in the form but it can save time in the future provision of assistance
18	mre
19	This is not appropriate for a mine action survey.
27	?

ID	4.12: Was area marked? (check box: Yes, No)
1	Was clearance undertaken in the area is pretty important to check for missed mines
15	Do the people know marking signs, and if yes why are neglecting it. It benefit in designing efficient MRE programs
16	Official marking could be cross-checked with this info
18	mre

ID	4.13: Occupation
5	Important for VA
6	It is important to find out what the victim is doing now. I am not happy with the current options. The options should be revised and should be defined based on the requirement of data analysis.
10	As well, to included in the mentioned above an additional form provided a main acquirement of survivor
12	Regarding occupation/civilian, it could be worth it to indicate type of activities: farmer, Sheppard, teacher, worker.... That information can be used fro MRE purposes to target population through their activities (trade unions, cooperative..)
15	To know to what the victim's job before the accident
16	Dislike emphasis on officials as their stories are more likely to come out for people to learn from than ordinary civilians.
18	We found that these fields did not match what we have in IMSMA/LIS
19	The occupation choices here are way too narrow. What is the relevancy of these choices compared to knowing someone was a farmer, herder, nomad, teacher, etc?

ID	4.14: Occupation <i>prior</i> to accident
1	There seems no value in asking this question...what if the person is interviewed immediately after an accident compared to someone who may be interviewed months even years later...wouldn't this compromise the validity of the case
5	Important for VA
6	It is important to find out what was the victim occupation to find socio-economic impact of landmine/UXO on the community in general. How many job lost, change of job.I am not happy with the current options. The options should be revised and should be defined based on the requirement of data analysis.
8	Important to know what category of people to focus on for MRE activities
10	same as item 4.12
15	How victims life and job affected by the accident
16	Loses relevance when info is collected several years after the incident.
18	We found that these fields did not match what we have in IMSMA/LIS
19	Occupation prior to the accident is only important if it is compared to current occupation. Also, "activity at the time of the incident" and "occupation prior to the incident" are often mistakenly considered the same.
24	confusing....
28	As well, State actual occupation of the victim

<b>ID</b>	<b>5.0: Received MRE</b>
1	I don't understand this and the difference with 4.10
6	To assess how the MRE should be improved.
7	It would be lovely to assess the type of activities mine/UXO victims have had but unrealistic given circumstances of injury and the limited time of medical personnel
8	I don't see the difference with question 4.10
11	Could not locate the appendix
15	Shows what type of MRE activity he participated in and how effective was the MRE projects
18	mre
19	Same as 4.10
28	Addition, if applicable by whom?

<b>ID</b>	<b>6.0: Other persons involved</b>
10	Also to include in an additional form identifying survivors' contacts (address, Tel, etc.) if it is available
15	For collecting data of other victims involved in the accident
18	This is repeated below. Linkage with names more helpful
22	This would be another victim, which makes this information redundant
23	this is calculated by IMSMA
24	covered by additional reports/ entries
27	own reports no?

<b>ID</b>	<b>6.1: Name</b>
2	Not necessary for MA
7	Names are sensitive pieces of information. We guard them closely and do not use them for MRE activities
9	if names are not known, include gender and age
15	To know the name to inquire directly about the victim
20	It is fine, as long as this information is only to identify other victims. However, this information should not be counted as additional victims as it is more likely to lead to overestimation. Additional forms to be used to record new victims
24	covered by additional reports/ entries
27	own reports no? (6.1-7.0)

ID	6.2: First name
2	Not necessary for MA
20	see above
21	We think that in our case is better if we add the maiden name and family name
24	covered by additional reports/ entires

ID	6.3: Status (check box: <i>killed, injured</i> )
15	To know if killed to ask for family or relatives and if killed to seek fill in with the victim himself if possible
20	see above
24	covered by additional reports/ entires

ID	7.0: Device that caused the mine accident
2	Not really relevent
6	It is important peace of information but the options to be reconsidered and should be brought to a simple version of AP, AT,UXO and not known only.
8	Important both for MRE and demining
15	Very detailed information especially for the people who don't have any knowledge about mine/UXO
16	Quite reliable response as injury will assist in identification or confirmation of response.
18	Reported by whom? This information should be included in the mine report that you already have a link number to in field 1.1. My mind becomes suspect here as in the victim section if we say what did it and what injuries then people could find out which type of mines do the most injury. This is perhaps the opposite of what we are really looking for. The separation of this question into the other report would be helpful and if people need to know they can access the information.
20	Add type of device (if possible) as it would further enriches the information
26	many mistakes can take place in reporting this information; should be treated cautiously



## Annex H – Suggested Additional Data Fields

**This annex includes the data fields suggested by the respondents for either an expanded IMSMA “Victim” form or a supplemental victim assistance functionality or database.**

**8.2:** To be added to an expanded “Victim” form:

ID # 6

- What is the victim status or responsibility in the family?
- How is the victim supporting himself?
- What type of vocational training can the victim receive?
- Was the victim married prior to incident? If not, is he married now or is it expected for him to get married? If yes, is he still with his wife or divorced?
- What type of supportive devices such as wheel chair, artificial legs and arms does the victim need?

ID # 9

- Did the injured person receive mobility aids and/or other devices?  
Yes/No/Unknown
- Is the device received workable/still functional and is it regularly used by injured person? Yes/No/Unknown

ID # 12

- If the victim has any children (how many, age). Reason: for MRE statistics, if there is a high percentage of parents, then MRE shall focus on parents associations within schools...
- Has the person already been registered into another mine victim data base?

ID # 15

- Tribe
- Contact person
- Age
- Burns
- Madness or psychological problems

ID # 18:

- These questions will assist in developing an understanding of the socio-economics of being a landmine victim and also assist in the link with the Millennium Development Goals:
  1. Has this landmine survivor had access to an orthopedic workshop? Yes; Has not had opportunity to access service; Not needed
  2. Has this landmine survivor if under the age of 18 years accessed school/education? Successfully in school now in grade/class \_\_\_\_; Schooling

completed; Dropped out after accident; Never in school or dropped out before accident; Does not apply as too young or too old

3. What is the marital status of this landmine survivor? Married at time of accident and still married to same person; Married at time of accident and divorced; Married or remarried after the accident; Never married; Widowed; Does not apply as too young
4. The international poverty line is \$1.00 a day. In relation to the information you can gather on this landmine survivor does this family: Live significantly below the poverty line? Live slightly below the line? Live slightly above the line? Live above the poverty line?
5. Does this landmine survivor receive support from their community? Yes, including rehabilitation; Yes, from other people but no services; No community support
6. Has this landmine survivor been able to continue in the occupation they had before the accident? Continues in the same job; Had to change occupation but now working; Requires training/job/loan; Not needed
7. Was this landmine survivor the primary income earner for the family? Yes, Nuclear family; Yes, Extended family; No, not the main income earner
8. Was more than one family member affected in the accident? Yes, four or more \_\_\_ deaths \_\_\_ survivors; Yes, two or three \_\_\_ deaths \_\_\_ survivors; \_\_\_ No

ID # 20

- Education, check in box (*primary, high school, bachelor, above*): This assists victim assistance programmes in training and reintegration of landmine survivors
- Additional skills such as painting, driving, handcrafts, stitching etc. is also helpful and re-integration of landmine survivors.

ID # 23

- What do the survivors suggest to be done so there would be no more accidents?

ID # 27

- facilities and characteristics of target communities

ID # 28

- Family status
- Number of family members
- Current occupation (if applicable)
- Need assessment
- Recommended assistance

**8.3:** To be included in a supplemental “Victim Assistance” functionality or separate victim database managed by a national governmental entity

ID # 1

- Care received by survivors and # of follow-up visits

ID # 5

- Details of the injury
- Details of the service provided (prosthetics, etc)
- Referrals and follow up
- Range of services (medical treatment, psychological support, physiotherapy, prosthetics, etc)

ID # 9

- Did the person manage to return to her/his life sustaining activity (previous occupation) after an accident?
- Did the person receive any social support? If so, please specify? Food and non-food items; Cash contribution; Vocational training; Job placement; Others

ID # 10

- Medical care (needs of survivors)
- Physical rehabilitation (needs of survivors)
- Social adaptation (sight, hearing)
- Psychosocial care (needs of survivors)
- Economic assistance needs of survivors)
- Professional rehabilitation needs of survivors)

ID # 12

- Is the person a member of association (disability association, civil war victims...)
- Is the person already receiving any benefit as provided by the law linked to the disability categories
- Needs coverage of those benefits?

ID # 13

- All information allowing a follow-up of victim after accident from treatment to employment, if any, in order to get knowledge of VA problem within the country and estimate the efficiency of Victim Assistance programme

ID # 14

- Kind of assistance needed (medical, psychological, training...)
- Assistance received (kind, date, by whom)

- Available assistance facilities
- Material management (e.g. prosthetics)
- Effectiveness of assistance? (Is this measured? How?)
- Baseline data? (Is this measured? How?)

ID # 16

- As I don't work specifically in the area of VA I don't have any specific suggestions, but I think that detail to plan VA programmes is limited in the current form, so I would support VA org's if they feel they need more detail e.g. carer needed/available, economic situation, strategies for managing at present etc.

ID # 18

I really get bells and whistles going off when I see the word functionality. Can we look at another word. I have a question. Will this database be a medical database, an orthopaedic database a socio-economic database or a combination of all?

The indicators cannot be developed and reflected on until this question is clarified. Here in Eritrea we are developing indicators over the next three months for the orthopaedic database and a socio-economic database. The orthopaedic database will link with the larger socio-economic database. This will be downloaded and pared with IMSMA. We will be using the LIS as the spring-board. We are awaiting funding and these should be developed before the end of the year. We have slowed down the process waiting information on the Draft Comprehensive and Integral International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities. When we get to indicator development we will attempt to adjust and align with this human rights convention.

- Will respond later to this section after clarification

ID # 24

- Assistance program(s)
- Received assistance
- Assistance required
- Assistance promised/given
- Cost involved
- Govt support scheme etc etc

ID # 25

- Psycho-social data
- Aid received
- Employment/ reemployment status

ID # 28

- Rehabilitation
  1. Where and the period medical treatment was received?
  2. Details after the medical treatment with regard to injuries and convalescence: name the maimed parts of the body.
  3. Has the survivor been able to work after the medical treatment? State details:
  4. If counseling received, from when and for how long?
  5. If physiotherapy treatment was received, from when and how long:
  6. If crutches/prosthesis/ wheelchair/ any other aid was required, how long was it after the incident before it was fitted/ received?
  7. How often and how many times the prosthesis was changed?
  8. Occupation and the monthly income received prior to the incident
  9. Present monthly income:
  10. Details of educational qualification/skills
  11. Details of vocational training received
  12. Details of financial and physical resources available:
  13. Type of Occupation
  14. Details of assistance received
  15. Details of assistance expected
- If the victim is a child (<18) whether he/she attending school and if there is any special needs
- Details of dependents
  1. Age yr 1 to yr 5
  2. Age yr 6 to yr 18 details of schooling to be given
  3. Age yr 19 to yr 55
  4. Age yr > 55

#### **8.4:** Additional comments or suggestions

ID # 1

I think that the 'victim form' relates to the impact of mines and UXO and not service provisions under the sector 'victim assistance'. The data required for both needs is different and should not be mixed. Victim data as used in surveillance systems is used for broadly planning mine action and victim assistance measuring impact; but has

little use in following or providing for the treatment of survivors- this requires far more detailed patient records and should be undertaken by survivor assistance agencies. Practically, victim surveillance information had more potential uses for mine risk education, clearance and marking than for victim assistance programmes and it is rarely intended to service victim assistance agencies.

IMSMA requires a separate module to report on services which have been provided to survivors. This is what I understand to be victim assistance information

ID # 5

Data collection should take place more than once in order to see changing needs or to follow on interventions. For example, what about the assistance with income generating programs?

ID # 6

The questions I added could be used to find out what are the requirements of the victims. What type of rehabilitation program can be used in different geographical locations? How do landmines affect the families? How to promote and make the victims self-sufficient? What is the affect of landmines on very important aspect of the life, which is marriage? I am also pleased to see the landmine impact on the depression and mental diseases created not only to the directly affected person (victim) but also to his family and relatives.

ID # 7

Victim data is used by Mine Action programmes for MRE and occasionally for actual victim assistance programmes. Often this information is not even shared with other agencies outside mine action programmes. I would suggest that instead of spending more money on a rather internal data collection system we put our resources and collection mechanisms into the systems that will remain behind in our host countries. We could be expanding, developing and strengthening government health surveillance systems and data collection mechanisms that could track more than just landmine/UXO victims. We could be creating injury surveillance system. Most countries affected by landmines have more car accidents than mine injury and would benefit from a more useful tool and skills development that would be left behind when the Mine Action programme ends.

ID # 9

- 1) We recommed that in case data are collected "by an authority such as a governmental health ministry as part of its publiv health oversight role" this role should not be limited to ministries of health. For example, ministries of labour or/and social affairs should be targeted as well.
- 2) Include IMSMA victim assistance focal point (full time) to assist in collecting landmine casualty information at mine action level.

- 3) CTA's job description should include victim assistance or should be fully aware of issues related to victim assistance; or he/she should appoint victim assistance focal points (full time).
- 4) Setting up and running IMSMA in a country should include personnel specific to assist in collecting and analyzing MRE and victim data.

ID # 10

The most important part of this Questionnaire on Landmine Casualty Database is Mine Survivors Assistance. But this part is deficiently developed and doesn't identify real needs of survivors. And I don't exclude a possibility of joining of all 4 parts of the Questionnaire (including suggested by me part) in entire one.

So, a creation of real Database on "Mine Survivors and their Real Needs" is necessary to strengthening effectiveness of the whole Questionnaire.

To this end, I'd like to introduce you my own vision of this kind of questionnaire (it's attached below with instruction as well as a project proposal which our agency started to implement recently).

The Questionnaire aims to identify a wide range of mine survivor's needs in different types of assistance to them. It will give us possibilities to create a unified and reliable database on mine victim survivors, which will serve for easy to access for all stakeholders.

In its turn, analysis of this database will serve as a reason for creation and implementation of new Mine Survivors Assistance projects, extending and development of public health sector and rehabilitation services of any country.

P.S. Generally opinions are different. Experienced both in medicine and in work with survivors specialist should estimate suggested form. Probably this form needs any changes and advice, which are appreciative. If you'll be interested in I'll send you results of survey conducted by myself in one of the districts

ID # 12

National Authorities should be anyway the ultimate owners and users of the data base. But, an effort shall be made in making the data available to all "accredited" organizations working on disability, victim assistance and so on....The data base should also be located in an organization which has the means and the capacity to maintain it properly.

ID # 13

1. The Victim form must allow to collect easily the number and type of "accidents" in each location – village level for Cambodia if possible – to be consistent with data already collected with the Level One Survey. This information is crucial for planning of mine clearance tasks, rather than the number of casualties. Information about casualties is useful for MRE and VA.

2. Another useful information for planning mine clearance is to know if the device has been moved from its location by the victim or another person before the explosion (for tampering and selling explosive or using it for fishing, for instance). Indeed, many accidents occur in the center of villages, and kill or maim a lot of people, but the contamination is elsewhere because of the move of the device.

ID # 14

Depending on who uses the victim information, the importance of the data fields is very different. The answer to your main question from section 1 of this questionnaire (*How important is it to include this data in a general landmine casualty database that could be used to collect data in various mine-affected countries?*) strongly depends on the “customers” of the general landmine casualty database and cannot be answered generally. We therefore added two columns and rated the importance separately for the three main customer groups: demining, victim assistance and mine risk education related organizations.

The current IMSMA victim and accident forms try to cover the interests of all three groups and contain a “little bit of everything”. Our experience is that they do not fulfill all the information needs – especially for victim assistance - and are rarely used for this purpose. We suggest to keep the victim forms with a minimum content (reduce the current content to the basic information that is important for all three groups) and develop separate victim assistance and mine risk education modules that contain the detailed additional information needed.

We are very interested in input on what data is needed for these detailed victim assistance and mine risk education modules and look forward to the results of this survey.

ID # 16

As with all IMSMA type forms, I think that the crucial thing is to adapt it to the country – whether it be through changing field names or adding additional boxes – both of which can be done in country. I think that the decisions of what info to fill should relate directly to whether the information will be used (or real possibility of potential use) and whether it is manageable for the informant to answer i.e. the situation for hospital staff who may be required to fill these forms, the time taken with the informant in relation to the likelihood of the information being used to the benefit of current and future victims.

ID # 17

no further suggestion

ID # 18

With the draft international convention on the rights of people with disabilities there is a good chance that the concept of rehabilitation will be rethought. It appears that



this should broaden to include socio-economic indicators. It may be in the interest of this survey to suggest in point 3): collected by an authority such as the responsible governmental body for people with disability.

The need to link survivors onto information such as the Millennium Development Goals is critical as the indicators so far developed will not give this data by 2015. As the LIS is socio-economic by nature it seems that it is the best interest of mine action to look at socio-economic indicators. As the Draft Comprehensive and Integral International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities is one of the most important discussions for people with disability in many years it could be in everyone's best interest to look at this regarding international fields for reporting and coding.

#### ID # 19

There is no question on whether there are VA programs i.e. prosthesis, physical therapy, job training, credit programs, available in the community. This is asked in the LIS and has proven as useful as asking whether MRE or clearance has occurred. However, questions on VA should not refer to "rehabilitation" or "vocational training", since the former is technical and does not translate well while the latter is a stereotype answer that has proven to be a failure unless there is a flourishing economy that is creating jobs.

There is adequate data to develop MRE and VA programs although a VA program would need additional surveying and study. The real question is whether the local mine action office should be the national repository for landmine victims since very few of them implement victim assistance programs.

Many victims are found in locations other than where the accident occurred. Victims tend to find their way to where support can be found, including family support. This needs to be addressed.

Some surveys like the LIS gather victim data without interviewing the victims. This is sufficient for the purpose of the LIS. But additional information from victims themselves could include their future intentions on where they will live.

#### ID # 28

1. This exercise should be supervised by a trained counselor
2. The collection is done, in many countries, by mine action organizations but it should be done systematically by existing systems such as national programmes, health ministry etc. as they are the bodies that should ideally lead the provision and coordination of the Assistance to those victims and their families.