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Closing the Circle

The authors present a critique of the International Mine Action Standards currently in use. After highlighting gaps in IMAS related to assessment and survey, an improved aspect of mine-action planning methodology is presented, which includes a prioritization component using a socioeconomic approach. The result is LIRA: landmine impact combined with a new measurement of risk assessment. This updated model can contribute to improved safety, quality and productivity of landmine action through more effective strategic planning tools.

by Eddie Banks [EOD World Services] and Rob Shahmir [Environment and Infrastructure Group of Companies]

The vast majority of mine action is paid for with donor funds, but are these funds always utilized for the optimum benefit of the affected population? Any money spent on bureaucracy lessens what is available for reducing the physical, social, psychological and economic effects of conflict. Many argue, with some justification, that attempting to impose international mine-action standards (or even International Organization for Standardization [ISO] standards)¹ on populations clearly unaccustomed to these methods can, without appropriate managerial training and support, jeopardize lives for the sake of attaining a standard they may not be capable of achieving. Any increase in safety and quality requirements must be measured against productivity; in other words, any funds used to pay for stringently high safety and quality standards must be measured against the lives lost and injuries inflicted by the consequent reduction in clearance activities.

The original intention for standards such as the International Mine Action Standards² was that they should form a baseline by which pragmatic implementation of a foundation of “standards” would take into account the particular situation in each affected country. However, recent interpretations of the text illustrate that the IMAS have now become a vehicle for those who wish to impose standards. The cost of some projects has been dramatically increased by those using IMAS as a quality-assurance/quality-control vehicle to increase demands on or delay the work, whether through a lack of understanding, a difference in interpretation of the text or by design. In some cases, the IMAS documents seem to confuse rather than clarify due to unclear text and a plethora of paperwork. In one specific area—assessment and survey—the IMAS appear to have lost direction.³ The aims and objectives of these standards (and the number of other documents and references) made throughout the IMAS are the subject of this article.

Reviewing the Present Policy, Standards and Documents

While we acknowledge the IMAS have created a sound foundation, they have also created a mountain of documentation. For example, in *IMAS 08.10—General Mine Action Assessment and 08.20—Technical Survey*,⁴ references are made to other documents such as the Technical Notes for Mine Action series.⁵ In addition, guideline documents such as the *Socio-Economic Approaches to Mine Action*⁶ and others illustrate the number of documents available just on this subject, all providing a snapshot and additional text but none of them providing a complete answer. Indeed if one collects all the relevant IMAS information and the associated documents, it amounts to a small library. Added to these are the organizational documents such as standard operating procedures, safety handbooks, documents for training courses and related lesson plans. All these documents also need to be translated into the national language, so the quantity is doubled and anyone involved in national programs will understand the effort, time and cost of obtaining accurate translations and maintaining such a library (to ISO standards). Having produced a multitude of documents, it appears that there is a need to review the very premise for some of these documents.

Getting the Right Premise

The various documents referred to above all make the right noises. However, if the aim of mine action is to strive for effectiveness and efficiency, then there is still much work to be done. If another aim is national ownership of clearance programs, more work is needed here also.

First, we need to reduce duplication and simplify documentation. In addition, we need to understand that in order to create a “standards mentality,” documents must be in national languages. There is also a need to ensure donations are measured for their cost

and effectiveness. Finally, there is a need to look at those issues requiring modification; take for example IMAS 08.10. *IMAS 08.10—General Mine Action Assessment* outlines the principles, process, collection, evaluation, analysis and interpretation of information used for mine-action assessment and touches on broader management issues. It states, “The general purpose of a GMAA [general mine action assessment] is to continually gather, evaluate, analyze and make available sufficient information to assist and update strategic planning of the national mine action program.”⁷

The question is: Why do we need this information? Obviously it is necessary for strategic planning, and by strategic one assumes crucial, critical and important. However, the IMAS are rather general in what crucial information is required, tend to concentrate on local aspects and fail to address several of

Commercial or Social Precedence

The IMAS and GMAA concentrate on the local issue, and admittedly this is where the greatest impact is perceived, from the economic repercussions for families, small communities and medical facilities to the emotional aspect of injuries and deaths; but is this perception correct? Take for example the mines and UXO in Kuwait, Iran, Iraq and Angola, to name just a few. The local communities in these countries are as devastated as anywhere else in the world, with injuries, deaths and economic hardships, among other problems. Yet, mines and UXO in these and other countries also delay or have delayed regeneration of national commercial activities such as oil and gas exploration and extraction, denying the affected country millions of dollars each and every day, which could be used to help solve the mine and UXO problem.

infrastructure during the emergency phase, a time when medical services and accessibility to clean water are considered essential requirements. But who measures this, by what mechanism, when is it done and how is the task priority decided? In IMAS, GMAA, LIS and socioeconomic approaches, these crucial aspects are missing.

Socioeconomic Approach

For many more years than mine action has been undertaken, Environmental Impact Assessments have been implemented, redefined and developed, of which socioeconomic elements (e.g., the Social Impact Assessment) are but one small part. EIAs are now the fundamental assessment without which development activities throughout most parts of the world cannot even start.⁹ This process is designed to define the problems and decide on a direction and course of action. The socioeconomic approach and LIS, while attempting to adopt the SIA mechanism, fail to undertake the assessment or approach in a systematic manner and therefore fall short of identifying and providing a series of actions directed toward more effective management of the problem.

Fundamentally, the LIS process lacks a risk-assessment phase that is measurable to some initial condition (a baseline). The integration of this risk-assessment phase in conjunction with the comparative analysis component of risk/impact reduction versus a measurable baseline condition allows for a defensible Landmine Impact and Risk Assessment. The methodology required for the proper definition and clear illustration of a prioritized risk-based clearance program such as a LIRA necessitates a systematic approach that is defined with the following three core values:

1. **Integrity:** The LIRA process conforms to agreed standards.
2. **Utility:** The LIRA process provides balanced, credible information for decision-making.
3. **Sustainability:** The LIRA process results in proper safeguards.

The LIRA, as a component of a Strategic Landmine Assessment, should be a systematic and transparent process; be an instrument for decision-making; address socioeconomic effects of strategic clearance operations; include policy, plans and program decisions; be undertaken when alternatives are still open; and be a flexible, diversified process. The key objectives of the SLA would be to facilitate informed decision-making, contribute to socioeconomically sound and sustainable clearance decisions, and identify and address cumulative effects.

Within this SLA framework, the LIRA process should be:

- **Purposive**, meeting its aims and objectives
- **Focused**, concentrating on the effects that matter
- **Adaptive**, responding to issues and realities
- **Participative**, fully involving the public
- **Unambiguous**, being clear and easily understandable
- **Rigorous**, employing “best practice” methodology
- **Practical**, establishing mitigation measures that work
- **Credible**, carried out with objectivity and professionalism
- **Efficient**, imposing least-cost burden on proponents

The LIRA process should be comprised of a series of phases including: screening, to decide if and at what level LIRA should be applied; scoping, to identify the important issues and prepare terms

judgment (see Table 1). Ultimately, the choice of a LIRA method would depend on a number of factors, including the type and size of the activity, the type of alternatives being considered, the nature of the likely impacts, the availability of impact-identification methods, and the experience of the LIRA team with their use. In addition, the resources available would impact the method of LIRA used as cost, information, time and personnel inevitably vary with each specific case.

Information required for establishing the measurement tool and/or baseline conditions (often elicited through a baseline survey) includes current conditions, current and expected trends, effects of activities already being implemented and the effects of other activities yet to be implemented. Information gathered as baseline data

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the most important issues. The assessment tendency is to concentrate on mine-action elements such as local communities, local climate, locations of mines and unexploded ordnance, drainage and soil types, etc. The *Guide to Socio-economic Approaches to Mine Action*⁸ states, “The true measure of success of mine action is based on its impact on the local population,” and goes on to emphasize the needs of local communities. A number of Landmine Impact Surveys also concentrate on the needs of the local community. This trend to follow the IMAS approach with an over-emphasis on the local community is surely incomplete. While they are essential elements, the General Mine Action Assessment, LIS and others fail to take an overall view; an assessment should not only take into account local needs but also the regional and national requirements, addressing them all in a balanced manner.

In all mine-action programs, the number of resources available is almost always fewer than what is needed to address the mine and unexploded ordnance problem immediately and thoroughly. Therefore, the act of prioritization, another issue that the GMAA, LIS and others fail to address, is one of, if not **the** most important aspect of strategic planning. It is not just about where to demine and for whom, and not just about equipment, training and resource availability, but in what order the tasks should be undertaken.

Allowing an emotional response or local considerations alone to dictate clearance requirements in effect delays the economic recovery of the country, maintains dependency on donor funds, and restricts the development of local and regional areas. A national priority that creates economic regeneration and growth cannot be totally ignored due to local and social considerations, in just the same way that death and injuries cannot be totally disregarded due to the demands for national commercial precedence.

Commercial and social aspects are important but they have to be considered both separately and collectively; indeed, prioritization in order to create regional and national economic growth may well be applied in some cases to establish the sustainable finance for future mine-action activities. Each country and each region within a country is different and these differences need to be defined. The defining process must be realistic, coordinated and integrated with all authorities. It must address short-, medium- and long-term requirements, provide a decision-making basis, be capable of being implemented, and be built on experience and practice.

Some believe a number of activities cannot be accurately measured. An example is the importance in community areas of communications and transportation

of reference; impact analysis, to predict the effects of specific clearance activities and evaluate their significance; mitigation, to establish measures to prioritize high-, medium- and low-impact activities; reporting, to prepare the information necessary for decision-making; review, to check the quality of the LIRA report; decision-making, to approve or reject the specific clearance activities and set conditions; follow-up, to monitor, manage and audit post clearance impacts; and public involvement, to inform and consult with stakeholders.

The “impact analysis” or detailed study phase of LIRA should involve three activities: identification of impacts more specifically, prediction of the characteristics of major impacts, and evaluation of the significance of residual impact. In this process, a number of impact-identification methods might be utilized. These could include checklists, matrices, networks, overlays and geographical information systems, expert systems, and professional

would include but not be limited to general zones of contamination (national, provincial and local), social issues (provincial and local), economic issues (national, provincial and local), environmental factors (provincial and local), stakeholder expectations (international, national, provincial and local), and political issues (international, national, provincial and local).

Areas where it is deemed necessary to utilize a Strategic Landmine Assessment program would include:

- Sector-specific policy, plans and programs
- Spatial and land-use plans
- Regional development programs
- Natural-resource management strategies
- Legislative and regulatory bills
- Investment and lending activities
- International aid and development assistance

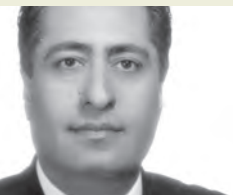
	Advantages	Disadvantages
Checklists • Simple • Ranking and Weighting	<ul style="list-style-type: none"> • Simple to understand and use • Good for priority setting 	<ul style="list-style-type: none"> • Do not distinguish between direct and indirect impacts • Do not link action and impact • The process of incorporating values can be controversial
Matrices	<ul style="list-style-type: none"> • Link action to impact • Good method for displaying EI/RA results 	<ul style="list-style-type: none"> • Difficult to distinguish direct and indirect impact • Significant potential for double-counting of impacts
Networks	<ul style="list-style-type: none"> • Link action to impact • Useful in simplified form to check for second-order impacts • Handles direct and indirect impacts 	<ul style="list-style-type: none"> • Can become very complex if used beyond simplified version
Overlays	<ul style="list-style-type: none"> • Easy to understand • Good display method 	<ul style="list-style-type: none"> • Address only direct impacts • Do not address impact duration or probability
GIS and Computer Expert System	<ul style="list-style-type: none"> • Excellent for impact identification and analysis • Good for experimenting 	<ul style="list-style-type: none"> • Heavy reliance on knowledge and data • Often complex and expensive

Table 1: Advantages and disadvantages of impact-identification methods.



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Conclusion

Some years ago the major issue in mine action was about safety and quality verses productivity. Now is the time to take a more pragmatic approach and look at all three subjects in a balanced manner. A foundation based on standards has now been accepted by the international community as essential to maintaining quality and safety. However, control must be exerted by donors not to fund studies and improvements that fail to provide a noticeable improvement in the quality of life of those whose daily struggle is one of survival.

What is critical is the need to modify the present IMAS and the other documents in order to conduct strategic planning in a systematic manner. Policies concentrating on local aspects need to take a broader view and a recognition of the importance of prioritization is needed, which must be initiated at the earliest possible opportunity. Even with the best intentions, demining that is less effective in some places than it is in others is simply demining in the wrong place and is an ineffectual use of time, effort and limited financial resources. Currently the documentation presented does not complete the picture or provide a coherent approach; there is now an urgent need to "close the circle" by providing and utilizing the missing information. ♦

See Endnotes, page 109

News Brief

To Walk the Earth in Safety Chronicles U.S. Mine-clearance Efforts

The U.S. Department of State's Bureau of Political-Military Affairs recently published the sixth edition of *To Walk the Earth in Safety*, a comprehensive report on U.S. mine-action efforts. The report covers landmine action in 30 countries for fiscal years 2004 and 2005 by the interagency U.S. Humanitarian Mine Action Program.

Department officials announced that, owing in part to U.S. assistance, Costa Rica, Djibouti, Guatemala and Honduras would not appear in the report because they have become free from landmine impact. Attention is also paid to U.S. policy toward landmines and total U.S. contributions to landmine action, which exceed \$1 billion.

The Office of Weapons Removal and Abatement, divisions of the Department of Defense and U.S. Army, James Madison University's Mine Action Information Center and several in-country centers are profiled in the report. There is also coverage of the DOS Quick Reaction Demining Force, the only standing humanitarian-demining unit with worldwide deployment capabilities.

A PDF version of the sixth edition is available at <http://snipurl.com/xj0e>. To request a printed copy of *To Walk the Earth in Safety*, e-mail your complete mailing address and postal (or ZIP) code to John Stevens at steveje@state.gov.