

Questionnaire on Current Standards

(Version 2, July 7, 2000)

Introduction

A questionnaire was prepared to inform work currently being undertaken on the review and revision of the UN International Standards for Humanitarian Mine Clearance Operations.

The questionnaire was published on the project website on 22 November 1999 with a return date of 17 February 2000.

UNMAS issued the questionnaire to all mine action centres with a covering letter from Chief UNMAS. GICHD sent the questionnaire to major demining NGOs and commercial contractors while JMU used their mine action database to inform 'over 1000' organisations and individuals. The project manager informed the MgM forum about the project website, and invited organizations and individuals to complete the questionnaire.

JMU collected and collated information from the completed questionnaires, and has provided a preliminary analysis of the results.

Observations and comments

Thirty-seven organisations and individuals responded to the questionnaire on the review and revision of mine clearance standards and guidelines. This sample, while not statistically representative, included a variety of Mine Action Centres (MACs), governments, NGOs, commercial contractors and other interested organisations (see [Figure 1](#)). The persons from those organisations that completed the questionnaire generally hold the position of director or senior technical advisor, although deputy technical advisors and operations officers also are included (see [Figure 2](#)). Almost all of the respondents reported that they were required to use the current International Standards (89%) and had used them in the preparation of local mine clearance Standard Operating Procedures (SOPs) and/or codes of practice (73%). Of the respondents, 63% said that during the preceding 12 months they had frequently referred to the current International Standards, while 32% had referred to them occasionally. It can be concluded then that the respondents generally were familiar with the current standards and their application to mine clearance activities.

The most critical respondents were those associated with national mine action centers. However, not all of the MAC-affiliated respondents were highly critical nor were the MACs the only organizations to voice significant criticism of the current standards. Many of the respondents included detailed observations and comments which will guide the review and revision work.

While recognizing the differing views on the content and format of the revised standards, it has been possible to identify common themes which will inform the drafting of the revised standards.

There was agreement that:

- a. International standards and/or guidelines for mine clearance are essential (93.8% to 100% across the sections). *
- b. Each section needs to be more complete and/or appropriate to assist with the preparation of national/local SOPs (61.8% to 85%). *
- c. Each section needs to differentiate more clearly between standards and guidelines (68.8% to 91%). *

* Percentage of responses that were "strongly agree" or "agree" in each of the sections 1-8.

The replies to the questionnaire indicate that:

- a. There is strong support to maintain and enhance the existing standards although certain areas are less useful than others and require improvement (see [Table 1](#)).
- b. There is a need to improve the layout and structure of the existing standards with the view to improving on detail and clarity (see [Table 2](#)).
- c. There is a need to expand the current set of standards to include standards or guidelines covering, inter alia, planning, mine detection dogs, mechanical mine clearance systems and information management.

The questionnaire yielded extensive written comments on each section. These comments were not analyzed by JMU's MAIC, but are held by GICHD and are being used by the Project Manager and Author in the revision of each standard.

The Way Ahead

Provisional findings based on responses to the questionnaire were discussed and developed at the second meeting of the Users' Focus Group (UFG) on the review and revision of mine clearance standards at the Geneva International Centre for Humanitarian Demining (GICHD) on 2 and 3 March 2000.

It was agreed at the UFG meeting that the questionnaire confirmed the need for revised international standards and guidelines for mine clearance, that the new standards and guidelines need to be more fully developed and user friendly, and that a common understanding needs to be reached on the distinction between an international standard and a guideline for mine clearance. Alastair McAslan of the GICHD (Project Manager for the review and revision of mine clearance standards) undertook, in the first instance, to identify prevalent themes and trends in the response to the questionnaire in order to draw out comments and recommendations that will inform the revision process.

The mine clearance review drafting team will apply the International Organization for Standardization (ISO) "Rules for the structure and drafting of International Standards" as a guide to drafting this next release of the International Standards. The application of these rules should produce a document which clearly separates normative elements (those elements setting out provisions to which it is necessary to conform in order to be able to claim compliance with the international standard) and informative elements to standards. (Informative elements may include supplementary elements, optional elements, recommendations and statements providing information and instructions that convey an action which should be performed.)

Section-specific comments on the existing mine clearance standard

In discussion of "Scope" questions, percentages given refer to the combined total of "strongly agree" and "agree" responses.

The responses for the "Accuracy" questions included: 1=entirely accurate, 2= some errors or omissions, 3=many errors or omissions, 4=dangerously inaccurate, 5=don't know/no opinion. The mean score was computed by dropping the "don't know/no opinion" responses and taking the mean ("average") of the remaining answers. A "low" mean score would indicate greater accuracy. The lowest mean for all questions was 1.47 (14a) and the highest was 2.50 (17b). The mean is a useful measure by which to compare responses but can obscure the

distribution of responses for a question, so we also make reference to any noteworthy trends in the distribution of responses and provide figures with that information.

Section 1 – Safety.

Responses to questions

a. **Scope** (Question 4)

100% agree that standards are essential (4a)

High level of agreement on 4b – 85% and 4c – 91%

• **Suitability** (Question 5)

Accuracy: Views on probing procedures (5c): 18 respondents say "entirely accurate" (highest incidence in section 1), 11 say "some errors", 5 say "dangerously inaccurate" (also highest incidence in section 1). Although the mean is a relatively low 1.76, indicating that most view the probing procedures standards as accurate, it should be noted that this question has the highest number of "dangerously inaccurate" responses for section 1. The highest mean for any question in this section is 1.91 (5a and 5b). Overall, this section was viewed as relatively more accurate than most of the others. (see [Figure 3](#))

Necessity: Nine "no" responses for explosive storage construction (5f) – tied for highest number of "not necessary" responses for all the sections (along with 23g and 26b)

Comments

Respondents suggest a need to focus on improving standards and guidelines (in priority order) on:

- a. Personal protection levels and equipment, safety distances, and site standards and procedures.
- b. Probing procedures, storage and transportation of explosives, and handling visitors to a demining worksite.
- c. Explosive storage construction.

On the issue of worksite safety, comments indicate that there should be a clear separation of standards and guidelines for various worksites (survey, EOD manual clearance worksite, mine detection dog worksite and mechanical clearance worksite).

The review of standards should also include standards for reporting and investigation of clearance worksite incidents/accidents.

Section 2 – Training and qualifications

Responses to questions

a. **Scope** (Question 7)

100% agree standards are essential (7a)

Strong agreement on 7b – 74.3% and 7c - 82.9%

70.6% agree that there is a need for centralised accreditation of courses (7d)

55% agree that too much emphasis is given to formal training and too little to field training (7e)

b. **Suitability** (Question 8)

Accuracy: Viewed as one of the least accurate sections: some of highest means for all sections: 8a – 2.34 and 8b – 2.24. Seven respondents view standards for qualifications and experience (8a) as "dangerously inaccurate", 6 chose "entirely accurate" (see [Figure 4](#)).

Comments

The comments suggest that the qualification's standards should focus on describing core competencies required of staff rather than a mix of qualifications and experience. Guidance on training should focus on the objectives and standards to be achieved during training rather than the length of the training period (competencies attained rather than courses attended). Guidelines may be needed to assist programmes, demining organisations or training institutions in the development of training considered necessary for staff to attain the core competencies identified in the standards. The standards should be expanded to include staff not addressed in the existing standards (e.g., dog handlers).

Section 3 – Survey

Responses to questions

a. **Scope** (Question 10)

100% agree standards are essential (10a)

Strong agreement with all scope questions (from low of 77.1% [10c] to high of 88.6% [10d])

b. **Suitability** (Question 11)

Accuracy: Relatively few chose "entirely accurate". (See [Figure 5](#))

Team composition, training and qualifications (11e) has one of poorest ratings for accuracy in all the sections (mean of 2.35). Minefield marking and area reduction (11g) has the highest number of "dangerously inaccurate" responses (4) for this section but the second highest number of "entirely accurate" responses (12) [with a mean of 2.07]. Coordinate systems and GPS (11f) also viewed as relatively more inaccurate (mean of 2.19 and with only 5 "entirely accurate" responses).

Comments

Responses indicate strong agreement that this section of the existing standards is essential. They also identify significant opportunities to improve both the scope and accuracy of the standards related to mine action survey activities.

Issues to be addressed include:

- a. the categorisation of suspected or contaminated land in terms other than risk (threat may be a better term);
- b. the need to examine area reduction methodologies used to achieve area reduction;
- c. the application of GPS technology in the survey process; and
- d. contaminated area marking and information systems.

The review of existing standards should address these issues through the development of individual standards for different "levels" of survey. This approach should facilitate the development of more clearly defined standards supported by implementation guidelines.

Section 4 – Minefield marking

Responses to questions

a. **Scope** (Question 13)

100% agree standards are essential (13a)

Majority agree with other scope questions but at a slightly lower level:

13b – 64.7% and 13c – 73.5%

66.7% agree that greater effort needed to develop and use long-term marking (13d)

b. **Suitability** (Question 14)

Accuracy: Few chose "many errors" or "dangerously inaccurate". (See [Figure 6](#)) Mine clearance marking (14a) had lowest mean of all the sections (1.47). The highest mean for this section was only 1.71 (14c). Overall, this section viewed as one of most accurate.

Comments

Responses indicated a strong preference for maintaining this section of the standard with some areas of improvement. Recommendations included the need to ensure flexibility in approach to take into account country-specific circumstances. There should be guidance on the development of contaminated area marking strategies which should be adapted to country specific requirements and specifications.

Section 5 – Minefield clearance operations

Responses to questions

a. **Scope** (Question 16)

100% agree standards are essential (16a)

General agreement on all other scope questions (73.5% - 77.1%) except for 16e: less than half (48.6%) agree that current definition of clearance is being achieved.

b. **Suitability** (Question 17)

Accuracy: Weakest areas are clearance standards and levels (17b – mean 2.50); clearance equipment, tools, methods and techniques (17d – mean 2.25); and medical (17g – mean 2.14). On clearance standards (17b), most common answer was "many errors or omissions"; its mean of 2.50 was the highest recorded for all the sections. (See [Figure 7](#))

Comments

Responses to this section of the questionnaire contained the most divergent views and comments on the existing standards. Responses indicate the need to maintain the section of the existing standard but to revise it substantially.

Many responses indicated the need to:

- a. Better define clearance standards (99.6% - What does it really mean? 99.6% of what? How are we to measure compliance? Is it appropriate?);
- b. Identify an appropriate standard for the depth of clearance;
- c. Once we have identified an appropriate specification for the depth and variance from the target of 100% clearance (please do not interpret this as a proposal for the clearance standard), the international standard should provide separate standards and guidelines for the application of processes used in clearance operations;
- d. The requirement to provide standards and guidelines for safety in the application of different techniques or technologies; and
- e. The need to address quality assurance and quality control issues.

Section 6 – Explosive Ordnance Disposal

Responses to questions

a. **Scope** (Question 19)

97.1% agree standards are essential (19a)

General agreement on other scope questions: 19b - 73.5% and 19c – 76.5%

b. **Suitability** (Question 20)

Accuracy: This section viewed as relatively more accurate with no mean score above 1.89 (20c and 20d). Only Section 4 (Marking) has lower mean scores while Section 1 (Safety) has similar mean scores. (See [Figure 8](#))

Necessity: Overall more "no" responses than for most sections (range from 4 to 8).

- c. More "no opinions" than in previous sections.

Comments

Responses indicate that this is the most accurate and complete section of the existing standards. Comments identify some opportunities for improvement in clearly identifying levels of qualifications needed to deal with various munitions and bulk disposal operations.

Many respondents address the issue of destruction of UXO and render safe procedures (RSP)– staff qualification requirements for both destruction and application of RSP and the need to specify RSPs.

Section 7 – Medical

Responses to questions

a. **Scope** (Question 22)

100% agree standards are essential.

Agreement on scope questions 22b, 22c, and 22e but at lower levels (61.8%-68.8%)

Only 35.3% agree standards should be based on UN medical support manual (22d)

b. **Suitability** (Question 23)

Accuracy: Weakest areas are medical equipment (23c) and deployment of medical resources (23e) -- both had relatively high mean scores of 2.14.

On medical equipment, most common reply was "many errors". (See [Figure 9](#))

Necessity: Nine "no" responses for rehabilitation surgery (23g)

c. Relatively high number of "no opinions".

Comments

Responses indicate that topics covered in this section of the existing standards are necessary. They indicate concerns about the completeness and accuracy of the information provided and the need to specify standards which are technically achievable in the most mine affected countries. Standards should be the "minimum acceptable standards" rather than the "ideal".

Section 8 – Communications

Responses to questions

a. **Scope** (Question 25)

Lowest agreement that standards are essential (93.8%).

Agreement on scope questions 25b and 25c but at lower levels (68.8%)

Strong agreement (81.3%) that standards should reflect increasing availability of alternatives to radio communications in many mine affected countries.

b. **Suitability** (Question 26)

Accuracy: Slightly more chose "some errors" than "entirely accurate" Fewer chose "many errors" and there was only 1 "dangerously inaccurate" response (26b). The means ranged between 1.6 for frequency allocation (26a) and 1.75 (for 26c and 26d) except for a mean of 2.07 for medical frequency (26b). (See [Figure 10](#))

Necessity: All of the questions had relatively high numbers of "no" responses, ranging from 5 for frequency allocation (26a) to 9 for medical frequency (26b).

Comments

Responses indicate that there is a need to maintain communications standards and guidelines. Recommendations include more guidance on the application of alternatives to radio communications in demining operations.

Section 9 - Information management

The questionnaire indicated that this section of the existing standards would be completely rewritten to reflect the introduction of the UN's Information Management System for Mine Action (IMSMA).

No specific questions were asked in this section.

Comments

Respondents advocate a complete rewrite of this section of the existing standards. Recommendations include advice that this section should not assume that all regions will be using IMSMA. The section should provide standards and guidelines on principles of information management and not specify particular software.