



Cambodian Mine Action Standards (CMAS)

Chapter 07

Clearance Requirement ERW

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Introduction

The target of clearance in Cambodia is the identification and removal or destruction of all mine, cluster munitions and other ERW hazards from a specified area to a specified depth and in accordance to agreed quality. The specified area to be cleared and the depth of clearance shall be determined by a baseline survey, an assessment of the post clearance land use, technical survey or from other reliable information, which aims to establish the extent of the mine, cluster munitions or other ERW hazard area and the depth of the hazard.

Clearance requirement assessment aims to ensure that appropriate tasks are selected for clearance; that the post clearance land use and beneficiaries are well defined; the specific hazards, technical details and extent of a task are identified, accurately recorded and that effective clearance and quality management processes are applied.

The beneficiaries must be confident that the cleared land is safe for their use. This requires management systems, clearance procedures and well documented QA/QC processes which are appropriate, effective, efficient and safe. It must also be established that cleared land is appropriate for its intended use through consultation with the beneficiary community and the Provincial Mine Action Committee (PMAC), Mine Action Planning Unit (MAPU and Cambodian Mine Action Authority (CMAA). The local community/client should also receive regular briefings and explanations during the clearance operation from the clearance organization. This acts as a very effective confidence building measure.

The external quality management of mine action activities in Cambodia involves the accreditation, licensing and monitoring of the clearance organization before and during the clearance process, it will also be necessary for the CMAA to oversee the internal quality management systems of the clearance organization. To achieve this, clearance organizations must establish an effective management organization, develop and maintain procedures, and apply these procedures in a safe, effective and efficient manner. Management procedures should be transparent and auditable. The aim of the quality management process is for the CMAA to achieve an acceptable level of confidence that cleared land is safe for its intended use. The quality of clearance must be acceptable to the both the CMAA and the local community that benefits, and it shall be measurable and verifiable and accurately recorded.

The combined process of the identification of land use requirements and the quality management of clearance tasks will contribute to achieving an acceptable level of confidence that the correct land is cleared to the highest standard, and that it is safe for its intended use.

Clearance Requirements ERW

1. Scope

This standard defines 'clearance', and clearance requirements for cluster munitions and other ERW (requirements for AP/AT mines are outlined in CMAS 06). If AP or AT mines are found during survey, the clearance requirements for demining shall be applied.

2. Terms and definitions

A complete glossary of all the terms and definitions used in the CMAS series of standards is given in CMAS 30

3. Specification of clearance

Land shall be accepted as 'cleared' when the clearance organization has ensured the removal and destruction of all cluster munitions and other ERW hazards from the specified area, to the depth specified in this clearance standard and all quality management processes have been carried out and fully recorded.

The specified depth of clearance shall follow agreed minimum standards but the type of cluster munitions and other ERW shall be further evaluated by a risk assessment of the area which includes history and data checking, or from other reliable information which establishes the depth of the hazards and an assessment of the intended land use.

For subsurface clearance in Cambodia the minimum clearance requirements are:

- Cluster munitions: 20 cm
- Other ERW: determined based on the expected hazard and the intended land use

For clearance tasks involving a threat of other ERW deep buried and evaluated as a hazard, specialist detecting equipment such as large loop detectors, magnetometers and geophysical survey technologies should be considered.

Clearance organizations shall ensure that all utilized equipment has the capability to achieve the clearance depths required in Cambodia. Detectors must be tested and recorded daily to ensure they meet these depth requirements. Detectors failing daily tests are to be removed from operations until repaired.

Detectors shall be tested against specified target at minimum depth.

4. National Government Clearance Projects Planning

The planning process for clearance aims to ensure that appropriate tasks are selected for clearance; that the post clearance land use and beneficiaries are defined; the specific hazards, technical details and extent of a task are identified; and that effective clearance and quality management processes are applied.

4.1. Validation of clearance task and task selection

It is necessary to ensure that the end product of proposed clearance tasks is consistent with national and provincial priorities, and has a suitably high socio-economic impact on local communities. Appraisals in consultation with the beneficiary community and the Provincial Mine Action Committee (PMAC), Mine Action Planning Unit (MAPU) shall be carried out

to ensure that the cleared land is to be used in an effective, fair and sustainable manner, and that the post clearance land use has been defined.

4.2. Clearance task planning

Technical survey/assessment shall provide sufficient technical information to enable the efficient and safe clearance of those confirmed hazardous areas identified. Specific information such as types and depths; terrain; soil characteristics, particularly ferrous content; scrap metal contamination; and vegetation levels, shall be key factors for managers to consider when designing clearance plans. Clearance of cluster munitions shall only be allowed on Confirmed Hazardous Areas following technical survey. Clearance of the other ERW need not be proceeded by Technical Survey. Clearance plans shall include the clearance tools and methods to be applied to sections of a task that may have varying hazards and clearance depth requirements.

5. Community liaison

The beneficiaries of clearance programmes must be confident that cleared land is safe and appropriate for their intended use. Community involvement in the identification of high impact and high benefit land shall be implemented through consultation with the beneficiary community, the Provincial Mine Action Committee (PMAC), Mine Action Planning Unit (MAPU) and development agencies. The local community should also be kept informed of clearance activities and progress through regular briefings and explanations from the clearance organization during the clearance operation. Community involvement in the clearance process is an activity that shall be monitored as part of the quality management process. If the community is not satisfied with the clearance process, the matter shall be referred to the MAPU for resolution.

6. Clearance quality

This shall be achieved in Cambodia by:

- a) Using only accredited clearance organizations with licensed certifications in required specialties, such as EOD Clearance (Commercial or NGO certification), manual clearance, mechanical systems, animal detection systems, Training/MRE certification and liaison teams.
 - b) Using equipment that can conform to the clearance requirements and ensuring all detectors are tested and recorded daily
 - c) Effective planning of clearance tasks based on defined technical criteria and clearance depth requirements.
 - d) Using sound management practices and applying safe, appropriate and effective operational procedures.
 - e) Internal quality management, monitoring and recording by the clearance organization and its sub-units.
 - f) External quality management and monitoring by the CMAA
 - g) Conducting a strict post-clearance QC inspection of cleared land in accordance with
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7. Clearance contracts and agreements

Clearance contracts and/or agreements should be drafted after the post clearance land use has been defined, beneficiaries if applicable have been identified and, if possible, after technical survey/assessment has been carried out. Contractual arrangements or agreement should specify the area to be cleared, the clearance depth, and the requirements for monitoring and inspection. These requirements should be specified in consultation and concurrence with the CMAA during the preparation of agreements or contracts. The required clearance depth may be adjusted as clearance work progresses and this should be allowed for in the clearance contract or agreement. Any amendment shall be agreed in consultation with the CMAA, the PMAC/MAPU. The clearance depth requirement shall be reviewed and recorded if there is a change to the planned land use. For commercial contracts where the outcome is not to fully clear the land then the clearance contract and or clearance certificate is to state what if any clearance has been conducted. If the full clearance requirements have not been met then the area is not to be treated/sold as "clear".

8. Responsibilities and obligations

8.1. CMAA's responsibilities

- a) Advise on the standards and guidelines for quality assurance and quality control to be applied to clearance contracts and agreements.
- b) Accredite and license clearance organizations.
- c) Maintain a registry of cleared land and of uncleared land showing the clearance status for each hazardous, contaminated or suspect area.
- d) Monitor the clearance organization and its approved sub-units in accordance with CMAS 03 and to the requirements of the relevant clearance agreement or contract.
- e) Maintain and make available to legitimate interested parties documentation relating to site visits and inspections.

8.2. Clearance organization's responsibilities

- a) Gain (from the CMAA) required accreditations and licenses
- b) Apply clearance procedures in compliance with Cambodian Mine Action Standards and organizations SOPs.
- c) Maintain and make available documentation of clearance in a timely manner as specified by the CMAA.
- d) Apply management practices and operational procedures, which aim to clear land to the requirements specified in the clearance contract(s) or agreement(s).

8.3. Donor responsibilities

Donor agencies have a responsibility to ensure that the projects they are funding are managed effectively and safely in accordance with CMAS. Donors are also responsible for ensuring through the CMAA and PMAC/MAPU, that the tasks and projects to be funded are consistent with national and provincial priorities. This involves strict attention to the identification of clearance projects, creation of agreement documents and ensuring that demining organizations chosen to carry out such agreements meet the accreditation, licensing criteria and standards of the CMAA.

8.4. Clients responsibilities

- a) Use only accredited clearance organizations with the required licenses.
- b) Ensure liaison with the national authority CMAA on clearance requirements.
- c) Ensure clearance reports and certificates are passed to CMAA in a timely manner to ensure records are maintained in the national database.

Phnom Penh 27 October, 2014
Secretary General

PRUM Sophakmonkol