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Humanitarian mine action - Follow-on processes after the use of demining machines

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

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Foreword

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which was supported by CEN following the public call for participation made on 27 November 2006.

Participants in the process were drawn from the following sectors with interests in humanitarian demining: non governmental organisations, other international organisations, national mine action authorities and manufacturers and users of demining machines. The following organisations have been actively participating in the process: Geneva International Center for Humanitarian Demining (GICHD), Switzerland. Active contributions have also been received by representatives from ANAMA, CMAC, CTRO, INTERSOS, PNDHD, SWEDEC, UNMACA, UNMAS, Norwegian People's Aid, Idea Group, Cranfield, DOK-ING, MineWolf Systems AG and Scanjack AB.

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The final review/endorsement round for this CWA was started on 2007-12-21 and was successfully closed on 2008-02-21. The final text of this CWA was submitted to CEN for publication on 2008-03-27.

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Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN Management Centre.

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Introduction

Demining machines are essentially used for two functions, ground preparation or ground processing. To operate effectively in either role it is fundamental that the machine must be “fit for purpose”. For example, a vegetation cutter that does not engage the ground/soil cannot effectively be used to process ground if the intent of the operation is to disrupt the soil to a depth of 20 cm.

The concept of “intent” is very important and, before the application of any machine, it must be agreed /decided exactly what is expected/anticipated of the machine in the specific operation, i.e. what is intended to be achieved.

In *ground preparation* operations intent can be relatively straightforward: vegetation cutting and/or clearing, removal of tripwires, loosening of soil, removal of metal contamination, removal of building debris, boulders, rubble, defensive obstacles etc, and the sifting of soil and debris.

However, in *ground processing* the intent can be more complex. For example the demining machines can be used to:

- find mines;
- clear mines; or
- prove there are no mines.

The role against which the machine’s performance is to be measured must be decided early in the planning stages.

1 Scope

This agreement analyses the follow-on processes after the use of demining machines. It makes a general statement about follow-on processes after the use of a demining machine in a *ground preparation* role when the operation is carried out within an area of suspected hazard. More specifically, this agreement focuses on follow-on after the use of machines in the *ground processing* roles of finding mines, clearing mines and proving that no mines exist in a given area.

This document seeks to define the requirement for follow-on behind a demining machine. It does not describe the method of follow-on activities that are already well known and understood by the mine action community.

2 References

The CEN Workshop Agreement CWA 15044 established guidelines that are recommended to be considered before a demining machine is deployed in a hazardous area.

Users of this CEN Workshop Agreement should also refer, in particular but not only, to the following CEN Workshop agreement, International Mine Action Standards (IMAS)¹⁾ and standards from the International Standards Organisation (ISO):

CWA 15044, *Test and evaluation of demining machines*;
 IMAS 03.40, *Test and evaluation of mine action equipment*;
 IMAS 04.10, *Glossary of mine action terms definitions and abbreviations*;
 IMAS 07.10, *Guide for the management of demining operations*;
 IMAS 07.30, *Accreditation of demining organisations and operations*;
 IMAS 07.40, *Monitoring of demining organisations*;
 IMAS 08.20, *Technical survey*;
 IMAS 09.10, *Clearance requirements*;
 IMAS 09.20, *Guidelines for sampling*;
 IMAS 09.40, *Guide for the use of MDD (mine detection dogs)*;
 IMAS 09.50, *Mechanical demining*;
 IMAS 10.20, *Safety and occupational health (S&OH) demining worksite safety*;
 EN ISO 9000, *Quality management systems – Fundamentals and vocabulary (ISO 9000:2005)*;
 EN ISO 9001, *Quality management systems – Requirements (ISO 9001:2000)*;
 EN ISO 9004, *Quality management systems – Guidelines for performance improvements (ISO 9004:2000)*.

In addition readers should refer to the National Mine Action Standards (NMAS) and/or the National Standard and Technical Guidelines (NSTG) which are in force in their country of operation. They should also refer to any other relevant country-specific technical notes.

The guidance in this Workshop Agreement on follow-on processes after the use of demining machines should be used to augment the guidance offered in the above documents. Other useful references are the CEN Workshop Agreement CWA XXXXX²⁾ *Quality Management – Quality Assurance and Quality Control for Mechanical Demining*, and the 2004 The Geneva International Centre for Humanitarian Demining (GICHD) publication *A Study of Mechanical Application in Demining*.

1) IMAS can be accessed through www.mineactionstandards.org.

2) Result from CEN/WS 29, under publication.