

CEN/BT/WG 126
Humanitarian Mine Action



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

ABSTRACT

Report from CEN/BT/WG 126

Jan-Ole Robertz (SWEDEC Box 1003, 575 28 Eksjö, Sweden)
(jan-ole.robertz@swedec.mil.se)

1. BACKGROUND AND REFERENCES

In accordance with the new “Regulation (EC) N° 1724/2001 of the European Parliament and the Council of 23 July 2001 concerning action against anti-personnel landmines in developing countries”, the EC endeavours to establish a coherent and transparent strategy at European level regarding mine action.

The EC addressed to CEN in 2000 a Programming Mandate (M 306) for the necessary standardisation in that domain. The formal contribution to that Mandate (in the form of an Action Plan) has been duly addressed to the EC in March 2002, and was well appreciated.

An effective and officially confirmed co-ordination with the GICHD ensures that there is no duplication of standardisation activities between CEN and UNMAS, and that the standards and specifications produced by CEN will eventually be disseminated by GICHD in the form of IMAS standards.

1.1 Overall Aim

The overall aim is to transfer the CEN Workshop Agreement (CWA) or part of it into the IMAS during year 2003 and the standards to be implemented in the Mine Action community.

2. DEVELOPMENT OF AD HOC GROUPS:

CEN/BT/WG 126 formed four Ad Hoc Groups (AHG) to examine various specific task areas in the field of Humanitarian Mine Action (HMA):

AHG 1	-	Test and Evaluation of Equipment.
AHG 2	-	Technical Training Assessment and Certification
AHG 3	-	Existing Standards, Terminology and Definitions
AHG 4	-	Risk and Quality Management and Performance Indicators

These four groups have been, covering all aspects and Humanitarian Mine Action (HMA) components.

These ad hoc groups were asked to (BT/WG 126 Resolution. 3/2001):

- a) identify and prioritise the needs of standardization in these working areas (Need for new work?)
- b) determine the kind of deliverables in each field of activities
- c) suggest which CEN structure is deemed capable of producing said deliverables
- d) provide title and scope of each recommended standards/other deliverables as required

This achievement has been obtained by the dedicated work of the members of WG 126 and of its Ad Hoc Groups and by excellent co-operation from GICHD, JRC and CMC.

WG 126 as such has given the highest priority to those recommendations where the necessary resources are available.

All the recommendations of BT/WG 126 are all aimed at avoiding any kind of double work and producing results that can ultimately be transformed into the UN International Mine Action Standards (IMAS) or used as a foundation for an IMAS.

As requested in resolution BT C 204/2000, UNMAS, GICHD, EC/JRC, ITEP and CMC have all been deeply involved in the entire process.

3. Future :

At the 4th meeting, a document concerning the future of WG 126 was tabled, discussed and approved. This document contains the following draft resolution (BT C 23 /2002) now presented to CEN/BT

QUOTE

Subject: BT/WG 126 on "Standardisation for Humanitarian Mine Action"

BT,

- noting resolution BT C204/2000 (applicable as from 2001-01-31) whereby this BT/WG 126 was created;
- noting the recent delivery of the CEN response to the EC "Mandate to the European Standardisation Bodies on Technologies for Humanitarian Demining" (M/306), interpreted to cover humanitarian mine action;
- recognising the possible added value that standards for technologies and management can have in this domain;
- noting the need for further identification of subjects where endorsement as standards or commonly agreed specifications by CEN (CENELEC and ETSI) can support this domain;
- noting the continued need for proper allocation of work and responsibilities to the most appropriate structure and mechanism for rapid "standardisation" activities, taking into account the priorities and the relevant expertise;
- noting the need for continued co-ordination between CEN (CENELEC, ETSI), ISO (IEC, ITU), the EC (mainly DG JRC, DG RELEX and DG AIDCO) and the UN;
- confirms the continued activities of BTWG 126, in order:
 - for CEN and its members to improve the network on the subject, including the establishment of contacts with industry, technical centres and national non-governmental associations;
 - to constitute in this way the co-ordination element for the standardisation node in a network of excellence for Humanitarian Demining;
 - to monitor and support the implementation by CEN (in co-operation with CENELEC and ETSI) of the response to the Programming Mandate M/306:

- to further support and advise the CMC and the EC/JRC in their promotion and co-ordination role in this area;
- strongly recommends for continuity reasons that the Convenorship of this BT/WG 126 remains entrusted to SIS (Mr. Jan-Ole ROBERTZ - SWEDEC) and the Secretariat to DS (Mr Carl-Michael ILVING), membership being the CEN Members, and invites the CEN Affiliates, CENELEC and ETSI as well as EC and EFTA Secretariat and GICHD (Geneva International Centre for Humanitarian Demining) to continue their observership.

4. Present situation and future work.

Below find the prioritised WG 126 activities running for the moment and in the near future.

4.1 AHG 1 - TEST AND EVALUATION (METAL DETECTION)

Within the area of “testing and evaluation of all equipment”, this subject has been identified as an urgency and priority. Work on this subject has already started in a CEN Workshop since December 2000, aiming at achieving a CEN Workshop Agreement (CWA). This workshop is well attended by the research and donor community, participation by field practitioners could be improved. Costs of attendance could prohibit the essential input from the field.

Standards for test and evaluation of metal detectors are required:

- to provide a suggested selection of standard test targets and soil backgrounds for metal detectors;
- to provide a preliminary set of definitions, parameters to be controlled and standard test conditions for characterisation and assessment tasks;
- to investigate the possibility of developing a performance effectiveness measure for metal detectors;
- to specify a measurement system to ensure standard test conditions;
- to provide an uncertainty estimate for the measurement process; and
- to assess reliability by means of statistical and modular methods

The resulting CWA from the CEN Workshop should be transferred into a related IMAS document (maybe a TN first).

The beneficiaries of this process will be field operators, manufacturers, researchers and developers within the global mine action community. The results of this work should ensure that, for the first time, there is a baseline standard against which to judge all performance aspects of metal detection equipment. This will improve safety, reduce risk and ensure the maintenance of high standards of clearance quality. It will make a major contribution to the reduction of risk to operational deminers and hence save lives.

4.2 AHG 2 - TECHNICAL TRAINING AND CERTIFICATION OF HMA PERSONNEL

A first planning meeting was held in Denmark in February 2002. At this meeting it was agreed that research was essential to look at the Competency Standards for HMA Personnel, rather than detailed training programmes. The utilisation of Competency Standards for the measurement of professional competence and the formulation of qualifications is the most efficient and effective process possible.

Competency standards for mine action personnel are required:

- to provide guidance and to set minimum standards for all HMA training activities, whilst maintaining the integrity of the qualification process by clearly defined performance criteria. Competency Standards will not dictate the training process and will accommodate all national and organizational training objectives.
- to be able to utilize Competency Standards for the measurement of professional competence and the formulation of qualifications.

It is proposed to establish a CEN Workshop structure for this work, backed up by the necessary consultancy research in this groundbreaking area. The driving force must have already done preliminary professional field work for a certain time in this area. The driving force must have the full acceptance and trust from the Mine Action community (especially amongst the end users).

Costs of attendance should not prohibit the essential input from the real field practitioners. Without their attendance the result (CWA) will not have achieved field approval and could largely miss its purpose.

The final product will again be the development of a CWA¹. This resulting CWA will support the requirements of IMAS 09.30 - EOD and for the first time clearly define the competency standards necessary to reach EOD Levels 1, 2, 3 and 4 contained within the IMAS.

The beneficiaries of this work will be the national mine action authorities and demining organisations, who will for the first time have a global set of competency standards against which to ensure that personnel engaged in field mine action programmes are appropriately trained for the work.

4.3 AHG 1 - TEST AND EVALUATION (Demining Machines)

SWEDDEC as the driving force has the following plan to achieve the aim with the CWA²:

Initial meetings have been held for planning and finalise the draft Business Plan as well as an Agenda for the coming activities.

The work achieved and the Business Plan during this preparation will be presented at a Kick- Off Meeting in November this year.

¹ This CWA will support the requirements of IMAS 09.30 - EOD and for the first time clearly define the competency standards necessary to reach EOD Levels 1, 2, 3 and 4 contained within the IMAS.

² A CEN Workshop Agreement (CWA) is an official CEN document, published by CEN. It is achievable in the shortest period of time, rather than the 4 year estimate to achieve full EN status.

The purpose of this CEN Workshop is to define specifications for:

- test methodology;
 - critical criteria's to be tested,
- in a 3-step process, establishing:
- specifications for performance-test and survivability-test in repeatable conditions;
 - performance specifications for target mines;
 - specifications for "field test" including field performance, logistics, safety for operators, classification of different machines.

The main objective therefore is to develop widely accepted and applied specifications for the testing and evaluation of Demining Machines in humanitarian mine clearance, in order to have secure operations and equipment that are safe, reliable and fit for purpose.

- The first meeting will be dealing with performance tests, using test mines in repeatable conditions and dynamic blast test. SWEDEC is responsible.
- The second meeting will be dealing with performance standards for test mines. GICHHD is responsible.
- The third meeting will be dealing with Standards for "field test" including logistic, field performance, safety for operators, classification of different machines etc. CROMAC is responsible.

Please note that SWEDEC has the overall responsibility of the CW.

The three workshop meetings will be well attended by the research and donor community as well as field practitioners. However, the costs of attendance might prohibit the essential input from the field. Without such attendance the final product will not have achieved field approval and could therefore be argued to be flawed.

The beneficiaries of this process will be field operators, manufacturers, researchers, developers and Mine Action Programmes within the global mine action community. The results of this work should ensure that, for the first time, there is a baseline standard against which to judge all performance aspects of mechanical equipment.

This will improve safety, reduce risk and ensure the maintenance of high standards of clearance quality. Users of mechanical systems will be able to decide what action is to be taken after the mechanical systems has operated. It will make a major contribution to the reduction of risk to operational deminers, and hence save lives.

5. References

- (1) the EC Programming Mandate M/306,
- (2) the CEN/BT Resolution BT C204/2000 (2001-01-31)
- (3) the Report to EC, CEN/BT/WG 126 N019