



EAPC
+
CPEA



EAPC WORKSHOP ON CLEARING EXPLOSIVE REMNANTS OF WAR (ERW) WITH A FOCUS ON CLUSTER MUNITIONS



19-20 April 2010

NATO Headquarters, Brussels
Luns Room

SUMMARY REPORT

**EAPC WORKSHOP ON CLEARING EXPLOSIVE
REMNANTS OF WAR (ERW) WITH A FOCUS
ON CLUSTER MUNITIONS**

19-20 APRIL 2010, NATO HEADQUARTERS

INDEX

BACKGROUND AND AIMS OF THE WORKSHOP	3
SESSION I: BATTLE AREA CLEARANCE OF SUBMUNITIONS	3
SESSION I AFTERNOON: EXCURSION TO MEERDAAL	5
SESSION II: DEMILITARISATION OF CLUSTER MUNITIONS.....	5
SESSION III: EXISTING STANDARDS AND BEST PRACTICES.....	7
SESSION IV: PANEL DISCUSSION AND EXPERIENCES	8

Background and Aims of the Workshop

On the 19-20 April 2010, the Euro-Atlantic Partnership Council (EAPC) held the Workshop on Clearing Explosive Remnants of War (ERW) with a Focus on Cluster Munitions, as mandated in the 2010 Work Programme of the EAPC Ad Hoc Working Group on Small Arms and Light Weapons and Mine Action.

In recent years, the problems and dangers posed by ERW, including cluster munitions, have been highlighted by the international community. These efforts have led to new international agreements and obligations regarding ERW and cluster munitions, such as, *inter alia*, Protocol V on ERW to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (CCW). Such conventions aim at strengthening and reaffirming nations' commitments in seeking to address the problems associated with ERW and cluster munitions.

In order to facilitate nations in destroying any unwanted stockpiles of cluster munitions and/or clearing areas contaminated with ERW, the primary aim of the Workshop was to provide a forum for experts who were engaged in practical activities involving the stockpile management and destruction of unserviceable cluster munitions and ERW clearance, in this way enhancing information exchange and the sharing of best practices. The Workshop thus aimed to tackle the issue of ERW and cluster munitions from a technical and practical perspective.

Attendance to the Workshop was seriously affected by the massive disruptions to all transport services and the total closure of Brussels airport over the weekend as a result of the volcanic activity in Iceland. The number of participants and guestspeakers able to attend in light of the situation was severely reduced thus impacting the agenda for the Workshop. Nevertheless, participants had ample opportunity to discuss the issues at hand and pose their questions to the available experts.

WORKSHOP PROCEEDINGS

Session I: Battle Area Clearance of Submunitions

The Workshop was opened with welcoming remarks by the Chairman, **Dr. Fred. C. Parker IV**, Head of the Arms Control and Coordination Section of the Political Affairs and Security Policy Division of NATO. Dr. Parker highlighted the aim of the Workshop as endeavouring to explore and examine the practical and technical elements that were central to the clearance and demilitarisation processes, as well as giving the possibility for participants to exchange views and experiences on the subject.

The morning session featured two presentations that focused on the subject of battle area clearance of submunitions. The purpose of this session was to examine some of the techniques and methods employed during the clearance of areas of terrain that have been littered with unexploded munitions.

The first presentation, given by **Mr. Colin King** on behalf of **IHS Jane's**, aimed to give an overview of explosive remnants of war (ERW) and cluster munitions. Mr. King provided a historical summary of the problem of ERW over the years, giving examples of past wars and conflicts, from World War II to the Middle East. He highlighted the development of the various forms of submunitions over the years, including dual-purpose improved conventional munitions (DPICM) and various forms of cluster munitions. Mr. King then provided an overview of the development of the Oslo Process, focusing on the main issues which guided the process leading up to the Convention on Cluster Munitions (CCM), indicating that problems could still be expected in the implementation of the Convention, in particular with relation to clearance and demilitarisation of affected areas. Following his presentation, Mr. King answered questions from participants. In particular, responding to why it took so long for the issue of cluster munitions to come to the fore, he indicated the initial focus of public opinion on the landmines issue. He also stated, following a question, that although some States were developing improved designs for more reliable cluster munitions, it was very difficult to achieve and ascertain specific failure rates, since these were dependent on many factors, such as, *inter alia*, the ground conditions and the terrain types as well as the condition of the cluster munitions being used.

The second presentation was given by **Mr. Claude Peffer** who was briefing on behalf of the **NATO Maintenance and Supply Agency (NAMSA)** on the different disposal techniques of ERW. Mr. Peffer first provided an overview of the activities of NAMSA in the field of ERW clearance, including projects in Afghanistan, Georgia and Jordan. He outlined the guiding principles and tools required for the success of clearance projects, such as the need for information about the history and types of contamination, the context and future land use, the access to the area, training of personnel, technical documentation, equipment, etc. He stressed the fact that 'proper planning prevents poor performance' and that the success of such efforts also depended on good coordination and communication at all levels, including the engineers, the supporting units and the local authorities. Mr. Peffer stressed the high importance of including the local community in project discussions in order to maximise the effectiveness of such programmes, by ensuring that all relevant information was passed onto the local stakeholders and in turn by ensuring that their specific needs were met. Further details were provided on the various types of equipment used in clearance activities and Mr. Peffer took time to emphasise the significance of appropriate resource use and resource allocation in ensuring project success. Responding to questions from participants, Mr. Peffer indicated that the manpower requirements carried depending on the type of contract and that the experts were trained to nationally accepted standards. In addition, he stated that the issue of future land use carried the potential for future problems and that it was important for the beneficiary to consider the issue from both the military as well as the humanitarian perspectives.

Session I Afternoon: Excursion to Belgian MoD Facility at Meerdaal

As stated on the agenda, the afternoon session saw participants being taken to the Belgian facility at Meerdaal where two demonstrations had been organised and coordinated by the MoD

The first demonstration was a dynamic display, led by the Clearance team and the Explosive Ordnance Disposal (EOD) team, whereby participants were shown a simulation of the types of installations, equipment and techniques that would be established on sites where battle area clearance was taking place. Participants were briefed on the different components that constituted the installation, such as the work zones, the living zones and the rest zones. Following this, participants were led into the 'contaminated' workzone to watch the clearance experts at work in the detection of submunitions. Whilst being provided with a demonstration of the types of equipment used during such activities, participants were also given the opportunity to observe the 'excavation' processes used to uncover concealed submunitions. Upon returning to the living zone, the group was briefed by the EOD team on the requirements for in situ destruction. Once more, a recreation of the processes employed for the disposal of detected submunitions was re-enacted and a simulated explosion ensued.

The second demonstration was a static display of an array of cluster munitions ranging from the First World War up until present day models. Participants were briefed on some of the distinguishing features of each model before having the opportunity to pose questions to the Belgian experts.

The excursion to Meerdaal proved to be a highly constructive and insightful element of the event adding another, more practical dimension to the Workshop. The Euro-Atlantic Partnership Council is extremely grateful to the Belgian MoD for all its efforts in organising and coordinating such a successful event.

Session II: Demilitarisation of Cluster Munitions

Mr. **Claude Peffer** from **NAMSA** once more took the podium to give a briefing on the industrial demilitarisation of cluster munitions. Participants were given a detailed overview of the range of services offered by NAMSA, which have been employed in over 100 projects dealing with the demilitarisation of ammunition, ranging from small arms and light weapons to cluster munitions. The briefing went on to give details about specific types of cluster munitions and the different contractors that had thus far been charged with their demilitarisation, stating that in ten years of such activities, a total of over 67 million submunitions had been successfully demilitarised. The next half of the presentation outlined the different technical processes used for demilitarisation, such as underground detonation; controlled detonation; reverse engineering; cryofracture; controlled incineration; and other processes. Mr Peffer took time to emphasise the importance of environmental responsibility and NAMSA's commitment to pollution prevention during such demilitarisation activities, outlining a number of ways in which certain bi-

products could be recycled. In the last section of the presentation, the subject of government quality assurance was reviewed including issues such as the contractor's obligations and the importance of close interaction with the customer to ensure that projects suited individual client needs. To conclude, the briefing covered some of the challenges and constraints that faced the international community regarding the demilitarisation of cluster munitions. These included, the high costs associated with these activities in the age of the global financial crisis and the increased demand for such services worldwide due to the obligations laid out in the Convention on Cluster Munitions, which commit States Parties to destroying existing stockpiles within a given timeframe. It was noted that whilst the industrial capacity existed, it would likely be unable to cope with the surge in demand for such services stemming from the CCM obligations.

During the final briefing of the session, Mr. **Colin King** on behalf of the **Norwegian People's Aid (NPA)** presented on the technical solutions to self-help demilitarisation programmes. During this presentation, participants were given useful insights into how relatively small scale demilitarisation projects could be carried out in the absence of large-scale funding or sophisticated equipment. The presentation focused on the project recently undertaken in Moldova whereby a group of experts from the NPA agreed to assist and support Moldova in the stockpile destruction of cluster munitions. Mr. King demonstrated that it was possible, for the mostpart, to demilitarise certain cluster munitions and submunitions with basic tools that could be sourced locally with relative ease, thus cutting costs substantially. The briefing outlined the processes involved in the demilitarisation of several different types of cluster munition and submunition through simplified techniques of disassembly and open burning, though it was stressed that the particular types of munition being dealt with were relatively simple compared to others for which the same basic destruction techniques would not be suitable. Colin King took time to stress the absolute importance of safety during such projects, emphasising that the techniques and practices employed during these activities should always fit the skill set of the team performing them, adding that safety incidents could undermine the sustainability of such projects. The briefing concluded by underscoring the success of this particular project noting that future projects of this nature were subsequently feasible. Mr. King also stated that whilst it had been demonstrated that certain models of submunition and cluster munition could be demilitarised through these simplified techniques, there was still a need to examine whether other weapons types could be demilitarised in the same way.

Session III: Existing Standards and Best Practices

Session III focused on some of the existing standards and best practices that could potentially be applied to cluster munitions. Due to the relative novelty of viewing cluster munitions as a distinct and separate category, standards and best practices for these types of weapon are primarily subsumed under mine action and the storage of conventional ammunition in general. Thus the main objective of this session was to attempt to examine which standards and best practices in particular apply to cluster munitions.

The session was kicked off by **Mr. Faiz Paktian**, Head of the Standards and Quality Management Section of the **Geneva International Centre for Humanitarian Demining (GICHD)**, who briefed on the applicability of the International Mine Action Standards (IMAS) to cluster munitions. Mr. Paktian provided a detailed account of the background, framework, principles and framework of the IMAS, highlighting its aim to improve safety and quality efficiency and to ensure confidence in mine action. Participants were then given a more detailed review of the terms and definitions of the IMAS with a special focus on those elements that pertained to cluster munitions. It was indicated that future work could either consist of amending the existing IMAS or producing new ones, either or which would incorporate more specific guidance on the survey and clearance of cluster munitions, as well as reviewing and amending the IMAS on stockpile destruction and other IMAS as needed. Participants were also briefed on how they could access these standards.

The following briefing was given by **Ms. Aurora Martinez**, Programme Officer at **GICHD**. She provided a detailed and informative presentation on the Information Management System for Mine Action (IMSMA), an automated tool to assist in the implementation of the UN Programme for Mine Action. Having given participants a visual overview of what the tool looked like from a user perspective, she went on to note the wide use of the programme, alerting participants to the fact that there were over 2000 users used by over 40 mine action programmes worldwide. Ms. Chen explained the capabilities of the tool outlining its uses for recording and mapping, planning and monitoring, and analysis and reporting. The adaptability and flexibility of the IMSMA was highlighted and participants were informed of the varied and numerous potential uses outside mine action, such as missing persons, SALW and even bird tracking. Ms. Chen, after explaining the capabilities and uses of the system, took time to highlight some of the information management challenges that were associated with the possible use of IMSMA for cluster munitions.

The final briefing of Session III was given jointly by **Mr. Thomas Taylor** who presented on behalf of NATO's **Munitions Safety and Information Analysis Centre (MSIAC)** and **Mr. Stephane Charlier** of the **Belgian Ministry of Defence**. The presentation addressed the issue of the applicability of the NATO Standardisation Agreements (STANAGs) on storage and transport to cluster munitions. The first half of the presentation focused on the STANAG related to the storage of conventional ammunition whereby it was stressed that for the purposes of storage and transport, cluster munitions were no different to conventional ammunition and therefore required no special arrangements. The presenters detailed the relevance and importance of hazard classification and the need to apply these accurately. Participants were then briefed on some of the issues to be taken into consideration when transporting cluster munitions in tactical situations.

Session IV: Panel Discussion / Experiences

Session IV deviated slightly from the proposed agenda in that a panel discussion replaced the 'Experiences' session as many of the participants who had expressed an interest in making a statement during the session were unable to attend. All experts who had briefed during the morning session were asked to take their seats at the podium to receive questions and comments from the participants. An initial discussion on the role of civilian agencies in the field ensued and a number of the guestspeakers emphasised the high levels of expertise relating to clearance and disposal that exist within this sector, remarking that whilst military agencies provide some of the available services, civilian agencies should not be overlooked in this context. Also noted, were the heightened levels of danger associated with the clearance of cluster munitions and how these types of activities often proved to be more dangerous than the same sorts of activities carried out for landmine clearance.

A question regarding the necessity and relevance of developing a set of international standards unique to cluster munitions was raised. It was noted by the panel that the timeframe for developing international standards was a long and often arduous process that required passing through many levels of bureaucratic procedure. Also emphasised was the fact that, by definition, best practices and international standards required extended periods of time in which to develop as they have to be based on a wide number of experiences, the types of which are often unavailable in short timeframes. Whilst it was generally agreed that the IMAS and other existing standards could incorporate many elements related to cluster munitions within them, it was noted that there were other issues which perhaps would be best addressed by new standards, or even by developing supplementary clauses to add to existing standards. Issues such as protective equipment and fade-out were some of the subjects highlighted in this context.

Another issue that was touched upon was the potential for 'cross-fertilisation' with regards to the IMAS and the NATO STANAGs. It was generally agreed that there was the potential to enhance the cross-over and to strengthen synergies regarding the two types of standards and that the opportunity to further bolster information exchange between NATO and GICHD in this regard could be explored in the future. However, it was noted that currently, the STANAGs do not as of yet deal with deployment issues, such as battle area clearance.

Following the panel discussion, the Chairman handed the floor to **Herr. Gerhard Dahm** from the German **BWB**, who made a statement detailing Germany's achievements from 2000-2009 in the destruction of their cluster munition stockpiles. He briefed participants on some of the companies that had thus far assisted Germany with these destruction efforts, stating that roughly 130,000 tonnes of ammunition had been destroyed between 1995-2009, of which 20,000 tonnes were cluster munitions. He concluded by noting that the destruction of Germany's cluster munitions stockpiles was due to be completed by 2015.

To conclude, the Chairman thanked all participants for their attendance and for their valuable contributions to the event. It was noted that despite the severely reduced attendance resulting from the disruptions to international travel, the main objectives of the Workshop had been achieved in that information and expertise had been shared and the potential for future collaborations, coordination and cooperation had been discussed and explored.

