





Destruction by Turkey of all remaining 120mm mortar munitions containing CS

A briefing note for CWC States Parties¹

12th September 2011

Introduction

In July 2011, Turkey confirmed that it had recently destroyed all of its remaining CS MKE MOD 251 munitions - 120mm mortar shells containing 2-chlorobenzalmalononitrile (CS). Furthermore in correspondence with Bradford Non-Lethal Weapons Research Project (BNLWRP), the Omega Research Foundation (ORF) and the Institute for Security Studies' (ISS), 'Africa's Development and the Threat of Weapons of Mass Destruction' project, Turkey has detailed its previous production and past possession of CS MKE MOD 251 mortar shells, its clear prohibition of such munitions and its ongoing efforts to halt the promotion, trade and brokering of such items.

BNLWRP, ORF and ISS very much welcome the transparent, honest, robust and comprehensive actions taken by Turkey. Turkey's approach underlines the importance of addressing the issue of RCAs and large calibre delivery systems within the OPCW. This paper reviews the new information² provided by Turkey, draws attention to the important implications for CWC States Parties and highlights areas that would benefit from further clarification.







Promotion of the CS MKE MOD 251 at AAD 2010, in Cape Town, South Africa, 21 - 25 September 2010 (Photograph: © Robin Ballantyne/Omega Research Foundation)

Summary of initial concerns

- The use of riot control agents (RCAs), such as CS, as a method of warfare is prohibited under the 1997 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC).³ Such RCAs are, however, allowed to be used in law enforcement including domestic riot control.
- In November 2003, Jane's Defence Weekly reported that the Turkish (State-Owned) arms manufacturer, Makina ve Kimya Endustrisi Kurumu (MKEK)⁴ had developed a 120 mm mortar round the CS MKE MOD 251 filled with 2-chlorobenzalmalononitrile (CS).⁵ The CS MKE MOD 251 mortar round weighed 17.34 kg with a maximum range of 8,132 metres.⁶
- In September 2005, researchers attending the 7th International Defense Industry Fair (IDEF)⁷ in Ankara, Turkey, recorded the promotion and marketing of this munition. Following correspondence from Bradford Non-Lethal Weapons Research Project (BNLWRP) to the Turkish government and MKEK highlighting concerns about this munition, all information concerning the CS MKE MOD 251 mortar round was subsequently removed from the MKEK website.⁸
- 4. However, in September 2010, the CS MKE MOD 251 mortar round was again found being promoted on the MKEK exhibitor stand at the Africa Aerospace and Defence (AAD) exhibition held in Cape Town, South Africa. (See photographs on preceding page). Two additional Turkish companies Furkan Defense Industry and ASCIM Defense Industry were found to be promoting these munitions on their websites. (Following notification by BNLWRP, ISS and ORF all relevant promotional information was subsequently removed from both company websites.

Information provided by the Turkish Government

BNLWRP, ORF and ISS have been in correspondence with representatives of MKEK and the Turkish Ministry of Foreign Affairs regarding the development and promotion of CS MKE MOD 251 munitions. On 29th November 2010, a BNLWRP representative highlighted these issues during a presentation given at the OPCW Open Forum attended by a number of CWC States Party delegations, representatives from the OPCW Technical Secretariat and civil society organisations. During the subsequent question and answer session, a representative of the Turkish Delegation stated that Turkey was investigating the issue and would publish its results in a transparent manner. Correspondence, dated 25th February 2011, was received from His Excellency, Mr Ugur Dogan, the Turkish Ambassador to the OPCW (a copy of which is attached to this paper). Following further correspondence by BNLWRP, ORF and ISS, a second letter, dated 8th July 2011, was received from Mr Cem Utkan, Turkish Counsellor to the OPCW (a copy of which is also attached to this paper).

Turkey is to be commended for the rigorous manner in with which it has sought to address this matter, and for the clear, comprehensive and forthright nature of its responses and actions.

We believe there are a number of issues raised in both the Ambassador's and Counsellor's letters which have important potential ramifications for the Organisation and its Member States in terms of interpretation and implementation of the Convention in this area, which should be brought to the attention of the CWC States Parties.

Turkey states its clear prohibition of CS MKE MOD 251 under the CWC: In his letter of the 25th February, the Turkish Ambassador included an unequivocal statement of Turkey's position regarding the prohibited nature of the CS MKE MOD 251 and similar munitions under the CWC. He states that: "Turkey,

having ratified [the CWC] in 1997, took legislative and administrative measures to implement the Convention at the national level...Turkey is committed to its CWC obligations and in no way condones or facilitates the production, transfer or use of mortar ammunition containing tear gas or any other prohibited substance...". This statement is underlined by the fact that once Turkey ratified the CWC, production of the CS MKE MOD 251 "was discontinued". The Ambassador further states that "since the R&D activities conducted by MKEK...in 1996...no company in Turkey has in any way been involved in the development, production or transfer of 120mm munitions containing CS or other chemical irritants" and that "the Turkish Armed or Security Forces have never used 120mm munitions containing CS or any other chemical irritants".

Turkey details previous production and past possession of CS MKE MOD 251 munitions: In his February letter, the Turkish Ambassador states that 1,000 CS MKE MOD 251 munitions were produced in 1996, prior to Turkey's ratification of the Convention and that "around 150 of the said ammunitions were used for testing purposes during the initial R&D phase in 1997". In his July correspondence, Counsellor Utkan, states that "At the time of ratification, there remained 850 pieces of CS MKE MOD 251 type munitions in the inventory of the Turkish Armed Forces. The facility for their production was discontinued after 1997." The Counsellor explains that: "Reporting details of the work pertaining to the development and testing of the CS MKE MOD 251 to the Technical Secretariat was not considered at the time, as all research & development work and testing had ceased before Turkey's ratification of the Chemical Weapons Convention (CWC), and no such work was conducted by any company in Turkey, including the MKEK as of that period. No tests have been conducted using live subjects at any time."

Turkey is to be commended for providing such a full account of its previous production and testing activities, which has done much to address previous concerns. From the Counsellor's statement it is unclear whether Turkey has formally declared the existence of the outstanding 850 munitions or provided details of the relevant production facilities to the Technical Secretariat or is now intending to do so. Such a declaration would appear to be required under Article 3, Paragraphs 1(a) and (c) of the CWC. Clarification on this issue would therefore be helpful. Furthermore, in the interests of developing best practice with regard to reporting and confidence building measures, it would be beneficial if Turkey could consider providing the Technical Secretariat and CWC States Parties with full details of past activities with regard to the development, testing, stockpiling and promotion of these munitions.

Turkey destroys all remaining CS MKE MOD 251 munitions: In his February letter, the Ambassador states that: "The remaining 850 [munitions], whose dates of expiry have passed, are stored at the Turkish Armed Forces ammunition destruction facility awaiting disposal." Subsequently in his July correspondence, Counsellor Utkan reports that: "The destruction of CS containing canisters of the remaining CS MKE MOD 251 munitions has now been completed at our state-of-the-art munitions disposal facility located near Ankara." This is very welcome news and Turkey is to be highly commended for its decisive action in this regard. Under Article 3.1.a.(v) of the Convention, a State that has declared chemical weapons is required to "provide its general plan for destruction of chemical weapons". It is unclear whether Turkey provided the OPCW with such a plan, prior to destruction, and whether the appropriate verification measures were subsequently instituted. Clarification on this issue would be also beneficial.

Turkey halts trade, promotion and brokering of CS MKE MOD 251 munitions: In his February correspondence the Turkish Ambassador confirms that although no CS MKE MOD 251 munitions were exported or transferred, "information concerning this type of ammunition continued to be displayed in the catalogues and web-site of the company." Furthermore, epoxy copies of the munition reflecting "the

actual size, weight and appearance of real munitions" were displayed by MKE "at all the exhibitions including those at 2005 IDEF in Ankara and the 2010 AAD in Cape Town", although they contained "no chemical agents." Such promotional activities may have been in breach of Article 1, Paragraph 1(a) of the Convention and may have also breached the national regulations of, at least, some the "host" countries where such munitions were displayed.

In his July letter, Counsellor Utkan described Turkey's actions to halt all promotional activities: "MKEK has circulated a notice to all its distributors, reminding them of Turkey's CWC obligation and has asked them to remove all information relevant to CS MKE MOD 251 munitions from their catalogues and dispose of any epoxy copies of the said munitions that may exist in their exhibition kits. The ministry of defence has also begun sending reminders to all licensed arms brokering companies in Turkey that trading 120mm CS mortar ammunition is not permissible under Turkey's CWC obligations and all companies should make certain such items obtainable through suppliers outside of Turkey are not purchased, offered or displayed in their catalogues and web-sites." Once again, Turkey is to be highly commended for the robust and comprehensive manner in which it has sought to combat all inappropriate promotion of, and trade or brokering in, these munitions.

Issues for consideration by States Parties to the CWC

Under **Article 1.1** of the Chemical Weapons Convention:

"Each State Party to this Convention undertakes never under any circumstances:

- (a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;
- (b) To use chemical weapons;
- (c) To engage in any military preparations to use chemical weapons;
- (d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention." [Emphasis added]

Article 2.1 of the Chemical Weapons Convention, defines a chemical weapon as:

- "(a) toxic chemicals or their precursors, except where intended for purposes not prohibited by the Convention, as long as the types and quantities are consistent with such purposes;
- (b) munitions and devices specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;..." [Emphasis added]

Amongst the "purposes not prohibited" defined under **Article 2.9** of the Convention are:

- "(c) Military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare;
- (d) Law enforcement including domestic riot control purposes."

According to a number of international lawyers and arms control experts, a range of munitions containing RCAs which have military utility, such as cluster munitions, aerial bombs, mortar rounds and artillery shells would be inherently unacceptable for use in law enforcement activities. Such munitions would potentially breach the CWC 'types and quantities' provision and the prohibition on use of RCAs as a 'method of warfare'. To date, the OPCW has not formally addressed the regulation of large calibre RCA munitions under the CWC and until recently no State Party had publicly established its position in this regard. The information provided by the Turkish Government and its robust actions in this area are, therefore, of great importance as they provide a powerful precedent for developing common understandings and approaches to this issue.

The correspondence from the Turkish Ambassador clearly states Turkey's view that the CS MKE MOD 251 munition is prohibited under the CWC and that such prohibition would extend to other "mortar ammunition containing tear gas or any other prohibited substance..." This position is further elaborated in the correspondence from Counsellor Uktan that highlights the Turkish Ministry of Defence's actions to inform all licensed arms brokering companies in Turkey that "trading 120mm CS mortar ammunition is not permissible under Turkey's CWC obligations". Turkey's corresponding actions in destroying all remaining CS MKE MOD 251 munitions, together with epoxy models and promotional materials, and its attempts to halt the trade, promotion and brokering of such munitions clearly underlines this position.

Civil society attempts to raise the issue of large calibre RCA munitions

Civil society has sought to raise the issue of large calibre RCA munitions and to highlight specific cases of concern with the OPCW through a number of mechanisms. For example, MKEK's manufacture and promotion of the CS MOD 251 mortar round was publicly documented by the BNLWRP in October 2009¹⁵, was reported in the media thereafter¹⁶ and has been brought to the attention of CWC States Parties in consecutive Open Forum meetings held on the margins of CSP-14¹⁷ and CSP 15¹⁸. Similar concerns regarding a range of munitions containing RCAs produced by the Russian Federation, have been raised by the Federation of American Scientists¹⁹ and BNLWRP²⁰, were reported in the media,²¹ and are the subject of a recent briefing paper prepared by BNWLRP, ORF and ISS²². However, a review of relevant open source documents shows that no CWC States Party has yet raised the issue of large calibre RCA munitions publicly under the auspices of the CWC, nor initiated any of the Convention's Article IX provisions regarding specific munitions or programmes of concern.

On 6th July 2011, BNWLRP, ORF and ISS wrote to Ambassador Goosen, the current Chairperson of the Executive Council (EC), requesting that concerns relating to the development and promotion of a range of large calibre munitions containing RCAs be brought to the attention of the EC for its consideration. On 7th July 2011, Ambassador Goosen responded, stating he would in his "capacity as Chairperson of the Executive Council... raise the issue in the Executive Council Bureau in its preparations for the 66th Session of the Council, which is scheduled to take place in October 2011."²³

In a subsequent letter dated 22nd July 2011 Ambassador Goosen explained that "as indicated in my previous communications, I raised your request that the issue of "large calibre munitions containing riot control agents (RCA)" be included on the agenda of the Executive Council at a recent meeting of the Council's Bureau. The Bureau concluded that according to the rules and practice of the OPCW it would not be possible for either the Chairperson or the Bureau to include the issue on the Council agenda… Rule 16 of the Rules of Procedure of the Executive Council establishes that items may only be introduced on the agenda of the Council by the Council itself, the Conference of the States Parties, Members of the Organisation or, in specific circumstances, the Director-General."²⁴

Recommendations for CWC States Parties

Given the dangers of the proliferation and misuse of large calibre RCA munitions, we believe that the Convention's Member States should address this issue as a matter of urgency. However, it is clear that despite the efforts of individual Government officials and diplomats, appropriate and effective mechanisms allowing civil society to bring this matter to the attention of the policy making organs of the Organisation do not currently exist.

We are, therefore, calling upon individual CWC States Parties and/or the Director General to raise this issue with the appropriate policy making organs such as the Executive Council and/or during the forthcoming Conference of States Parties, with a view to the:

development of criteria and a suitable process for determining which forms of large calibre RCA munitions and other forms of RCA dispersal and means of delivery are inappropriate for law enforcement purposes and would breach Article 2.1 and/or Article 1.5 of the CWC, with States Parties consequently being prohibited from developing, producing, stockpiling, transferring or using such means of delivery or dispersal.

¹ This briefing paper has been produced jointly by Bradford Non-Lethal Weapons Research Project (BNLWRP), Omega Research Foundation (ORF) and Africa's Development and the Threat of Weapons of Mass Destruction Project' of the Institute for Security Studies (ISS).

² See previous Briefing Notes produced by the three organisations, available at: http://www.brad.ac.uk/acad/nlw/publications/CSP15pape_Crowley.pdf - The Production and Promotion of 120mm munitions containing CS: An updated briefing note for CWC States Parties, 4 April 2011; The Production and Promotion of 120mm munitions containing CS: A Briefing Note for CWC States Parties attending CSP-15, 29th November 2010.

³ OPCW, Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention); http://www.opcw.org/chemicalweapons-convention/articles

⁴ MKEK was established in 1950 under Turkish Law No.5591, for the "purpose of producing most of the equipment and tool requirement[s] of the Turkish Armed Forces", and also for "satisfying the essential needs of the civil industry". MKEK also takes part in "the International Defence Industry Market by exporting to more than 40 countries." For further details see MKEK website:

http://www.mkek.gov.tr/english/foHakkimizda.aspx (accessed 30th September 2010 and 4th April 2011).

⁵ Foss, C. Turkey details 120mm Automatic Mortar, Janes Defence Weekly, 12th November 2003.

⁶Turkish Defence Industry Catalogue (2007),

http://www2.ssm.gov.tr/katalog2007/data/24509/9/uruning/uruning34.html (accessed 30th September 2010)

⁷ The 7th International Defense Industry Fair was held by The Turkish Armed Forces Foundation under the auspices of the Turkish Ministry of Defense at the Ankara Hippodrome between 27th - 30th September 2005. Over 400 companies from 49 countries exhibited their goods and services at IDEF, of which 108 were from Turkey.

⁸ MKEK was promoting the CS mortar round till at least mid-November 2009 on its website, see http://mkekexport.com/ammunition.htm (accessed 16th November 2009).

(a) With respect to chemical weapons:

- (i)Declare whether it owns or possesses any chemical weapons, or whether there are any chemical weapons located in any place under its jurisdiction or control;
- (ii)Specify the precise location, aggregate quantity and detailed inventory of chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with Part IV (A), paragraphs 1 to 3, of the Verification Annex, except for those chemical weapons referred to in sub-subparagraph (iii);...
- (iv)Declare whether it has transferred or received, directly or indirectly, any chemical weapons since 1 January 1946 and specify the transfer or receipt of such weapons, in accordance with Part IV (A), paragraph 5, of the Verification Annex;
- (v) Provide its general plan for destruction of chemical weapons that it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with Part IV (A), paragraph 6, of the Verification Annex;

(c) With respect to chemical weapons production facilities:

- (i) Declare whether it has or has had any chemical weapons production facility under its ownership or possession, or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946;
- (ii) Specify any chemical weapons production facility it has or has had under its ownership or possession or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946, in accordance with Part V, paragraph 1, of the Verification Annex, except for those facilities referred to in sub-subparagraph (iii);...
- (iv) Declare whether it has transferred or received, directly or indirectly, any equipment for the production of chemical weapons since 1 January 1946 and specify the transfer or receipt of such equipment, in accordance with Part V, paragraphs 3 to 5, of the Verification Annex;
- (v) Provide its general plan for destruction of any chemical weapons production facility it owns or possesses, or that is located in any place under its jurisdiction or control, in accordance with Part V, paragraph 6, of the Verification Annex;

⁹ AAD 2010 was held at Air Force Base Ysterplaat, Cape Town, South Africa from 21st to 25th September 2010. For further information see AAD 2010 website, http://www.aadexpo.co.za/ (accessed 28th September 2010).

¹⁰ Furkan Defense Industry http://www.furkandefense.com/product_info.php?products_id=147 (last accessed 24th November 2010); ASCIM Defense Industry

http://www.ascim.com.tr/default.asp?inc=urun_detay&b=b&urun_id=78&Urun_kat=180 (Last accessed 1st March 2011).

¹¹ Crowley, M. Regulation of incapacitants, riot control agents and their means of delivery under the Chemical Weapons Convention, OPCW, Open Forum Meeting, 29th November 2010, http://www.cwccoalition.org/wp-content/uploads/2010/12/OPCWopenforumcrowleypresentation.pdf ¹² Article 3: 1. Each State Party shall submit to the Organization, not later than 30 days after this Convention enters into force for it, the following declarations, in which it shall:

¹³ For example see, Chayes, A. and Meselson, M. (1997) Proposed Guidelines on the Status of Riot Control Agents and Other Toxic Chemicals Under the Chemical Weapons Convention, Chemical Weapons Convention Bulletin, Volume 35, March 1997.

¹⁴ OPCW, Chemical Weapons Convention, Article 1.5

¹⁵ Crowley, M. Dangerous Ambiguities: Regulation of Riot Control Agents and Incapacitants under the Chemical Weapons Convention, Bradford Non-Lethal Weapons Research Project, University of Bradford, October 2009, pp.107-108, http://www.brad.ac.uk/acad/nlw/publications/BNLWRPDangerous1.pdf

¹⁶ See for example: Schneidmiller, C. Danger of "Nonlethal" Agents Grows Amid States' Inaction, Report Says, Global Security Newswire, 6th November 2009, http://gsn.nti.org/gsn/nw_20091106_8443.php; Crowley, M. Toxic traps - weaknesses of the chemical control regime, Janes Intelligence Review, December January 2009/10.

¹⁷ Crowley M. Dangerous Ambiguities: Regulation of incapacitants and riot control agents under the Chemical Weapons Convention, 2nd December 2009, Open Forum, CSP-14, OPCW, The Hague, Netherlands http://www.opcw.org/fileadmin/OPCW/CSP/C-14/open-forum/Dangerous-Ambiguities Regulation-of-Riot-Control-Agents-and-Incapacitants-under-the-Chemical-Weapons Convention Rev.1.pdf

¹⁸ Crowley, M. (2010) *Op.cit*

¹⁹ Hatch Rosenberg, B. (2003) Riot Control Agents and the Chemical Weapons Convention, Open Forum on Challenges to the Chemical Weapons Ban, Federation of American Scientists Working Group on Biological and Chemical Weapons, The Hague, Netherlands, 1st May 2003, http://www.fas.org/bwc/papers/rca.pdf

²⁰ Crowley, M. (2009) *Op.cit*, pp.108-110

²¹ Schneidmiller, C. (2009) *Op.cit*; Crowley (2009/10) *Op.cit*

²² The production and promotion by a Russian Federation company of a range of munitions containing chemical irritants: A briefing note for CWC States Parties, September 2011, prepared by BNLWRP, ORF and ISS. This briefing has been circulated to the Permanent OPCW Representatives of all CWC States Parties and is available on the websites of the three organisations.

²³ Correspondence dated 7th July 2011, received from Ambassador Goosen (copy on file with author).

²⁴ Correspondence dated 22nd July 2011, received from Ambassador Goosen (copy on file with author).