# Some Current Approaches to the CAF Chemical Corps Potential Employment in Operations for Elimination of Weapons of Mass Destruction

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## Abstract

Important role in the implementation of a proactive approach represents operations dedicated to elimination of weapons of mass destruction. It is obvious that if trained and adequately equipped military forces carried out an operation to eliminate weapons of mass destruction, it significantly reduces the need to organize extensive CBRN defence measures for military forces or protection of civilians. Measures to implement the tasks of defence against weapons of mass destruction (CBRN defence) recently change. The security environment influences the perception and attitude of the Alliance to address global problems associated with state or non-state ownership of weapons of mass destruction. The focus of the Chemical Corps is gradually expanding from the current passive (reactive) approach to proactive approach.

**KEY WORDS:** prevention, chemical corps, weapons of mass destruction, elimination, capability, CBRN, proliferation, exploitation

## 1. Introduction

The events surrounding the current situation in Ukraine clearly demonstrate that weapons of mass destruction are not a settled issue. Information suggesting that the use of Weapons of mass destruction (WMD) is real and possible appears in the press and in the media space practically every day. This fact points to the need for permanent preparedness for the threats associated with WMD. It is also evident that the treaties that are supposed to guarantee the processes associated with WMD disarmament have not been and are not being enforced effectively. Everything that has been stated so far should be seen as a permanent challenge to the contemporary world and to the bodies responsible for the disarmament of WMD. Now, we have to work with the reality of the contemporary world, namely that this type of weapons still exists and that it represents a real and very dangerous threat against whose effects it is unrealistic to provide perfect protection.

A threat of WMD spreading and related technologies, an effort of state and non-state participants about production of chemical, biological and nuclear (CBRN) materials or presence of real arsenals of WMD on the territory of problems states in an indisputable fact and a security reality of the current time.

Programs for WMD production are launched with enemy states or even non-state subjects for determent or the threat of any opponents to a certain degree. From that reason elimination of enemy abilities in gaining, storage and usage of these weapons can be a key task for achievement of the final state of extended military operation. The question is to what degree the Czech Armed Forces (CAF) Chemical Corps (CCs) dispose of the ability to participate on such as operation.

## 2. The place in a doctrines system

An essential and basic source for development of a framework of operation for WMD elimination in an existing complex approach of the North Atlantic Treaty Organization (NATO) for prevention against WMD proliferation and CBRN defence [1]. In accordance with this approach NATO should not rely on measurement for decreasing of forces' vulnerability entirely after a CBRN incident. Activities for prevention against successful usage of enemy WMD become very actual while the CAF CCs traditional areas of interest are not left out. A reflection of this principally approach is division of tasks of CBRN defence into three pillars. Prevent, Protect, and Recover. As a significant prevention measurement is nevertheless marked the operation for WMD elimination in NATO terminology known as "WMD Disablement". Its implementation into national military doctrines and publications will probably constitute a huge challenge for a lot of NATO member countries. Some nations obviously retain their original capabilities corresponding the break of the 20th and 21st century, other ones, however, will follow real security threats and to conform their operational capabilities to them. An example of a sophisticated system of a WMD fight is the United State of America (USA) CCs. Above mentioned type of operation they named as "WMD Elimination" [2].

#### 2.1 North Atlantic Treaty Organization

The NATO declares a few directions to realization of preventive measurement in the framework of a comprehensive approach. In the first case it associates both political and partner activities for prevention against real smuggling, WMD technologies and scientific knowledge physical achievement or proliferation, thus a dialogue. Measurements for potential aggressor's deterrence are the second direction and the third one is conducting operation for WMD elimination. The last named is marked as WMD Disablement in NATO. The Czech equivalent, however, has not been embedded in the Czech terminology yet.

Although this approach may appear to be new, in another terminological form - CBRN Render Safe - has emerged already in 2005 [3]. This term, however, stopped to be used because of the collision with the terminology used in the field of pyrotechnic disarmament of ammunition. The new edition of the Alliance Doctrine for CBRN Defence [4] not only defines the term of WMD Disablement but also explains it in a very detailed manner. In accordance to this: "Operations focused on systematic locating, securing, characterizing, eliminating or disposing of weapons of mass destruction, CBRN material and CBRN facilities and/or potential enemies' ability to research, manufacture, test, store, deploy or use such weapons, equipment and material".

The WMD elimination is an operation that will help reduce the ability of a potential aggressor to use WMD or CBRN devices. This is done before the hostile actions are carried out. It includes all activities that will ensure and disable CBRN material, weapons, equipment and infrastructure including dual-use devices. It also associates the capabilities and activities needed to remove, secure and demonstrable destruction and disposal of dangerous material, weapons, equipment, and infrastructure. It is therefore a combination of specific capabilities that lead to the systematic elimination of CBRN material, weapons, equipment and/or hostile abilities to develop, test, manufacture, store, deploy or use them. It also allows their temporary storage, creation of conditions to prevent possible leakage, eventual their misuse, destruction, or theft.

In operation for WMD elimination there are applied international conventions and other conventions related to the prevention of WMD proliferation and disarmament control.

#### 2.2 United States of America

Although the doctrinal concept and division of CBRN Defence in the US Army may in some ways be different from NATO divisions, the term "WMD Elimination" is in terms of content identical to what NATO interprets as "WMD Disablement". According to the doctrine of the Multiservice Doctrine for CBRN Operations [5], these are activities that involve locate, characterization, secure, disable or destroy existing programs for WMD production and related capabilities.

The WMD elimination operations are expected to include activities that are conducted in enemy or uncertain environments. It may be carried out in the territory of a state which owns WMD or terrorist programs in the territory of a third country and may also be required to ensure the safety of deployed forces, to ensure freedom of movement (maneuver) or to protect non-combatants.

Primarily, it focuses on security issues, thus the guarding of sites and the prevention of alienation of WMD or related materials, and the disposal of ammunition, equipment, highly toxic substances and means of transport on the target, which represent an immediate and direct threat to the forces and the civilian population. Another priority is to provide evidence and collect information that responds to the issues of enemy capabilities in WMD and create a basis for prosecution, which is likely to best describe the meaning of "Site Exploitation" [6]. This is understood as providing evidence and collection information, which is the systematic search and gathering of information, material and persons from a particular site and their analysis in order to obtain the required information, facilitate subsequent operations, or promote criminal prosecution.

#### 3. Cases of the use of force to eliminate weapons of mass destruction

To illustrate the potential deployment of WMD elimination forces, four possible typical scenarios have been drawn up by the authors to create a framework and justification for the will to carry out such a military operation. The actual WMD elimination can only be a partial operational task of a larger campaign. The cases below are based on real experience from operations.

#### 3.1 The case of "dropping regime"

The first case is the intervention of multinational military forces aimed at overthrowing the WMD regime. Such an operation took place, for example, in 2003 in Iraq.

In the Iraqi Freedom operation (in the British code designation of Operation Telic), one of the main objectives, in addition to the Saddam Hussein's overthrow, was to find, provide and eliminate WMD, including a related program and related capabilities. From a strategic point of view, it was a key mission. To this, the Americans created the ad-hoc structure of the 75th Exploitation Task Force ("75th XTF"), reorganized into the Iraq Survey Group in the post-conflict phase of the operation. The Task Force Disablement/Elimination ("TF D/E"), which has been collocated since the 1970s with the 75th XTF, has been deployed by the British for this task.

The concept of their deployment was in general terms as follows. Once the terrain was free of large enemy units, the 75th XTF Task Force coordinated its planned operations with the appropriate maneuver divisions to inspect the "targets." Each division has been assigned the so-called Site Survey Team or the Mobile Collection Team as the primary "sensor." Objectives included sites (major objects) that were preferred by operational and intelligence staff at CENTCOM Central Headquarters and Land Component Command (LCC) during the operations to which the 75th XTF was subjected. Specifically, in the C5 Future Operations (FUOPS), LCC has developed a Sensitive Site Exploitation Cell that utilized the targeting methodology [7] to assess significant objects. Targeting is here understood as a process of determining the effects needed to achieve the master's objectives, identifying the activities needed to produce the desired effects based on available resources, selecting and determining the order of importance of the goals and timing of the fire with other military capabilities, and then evaluating their overall effectiveness and repeat activities. Tasks synchronization with areas and their implementation into operating commands was performed here.

#### 3.2 The case of "counter-proliferation"

In the case of an operation aimed at preventing the spread of WMD (counter-proliferation), it is usually about military activities directed against state or non-state actors who own WMD or their components and may seek to disseminate them to third parties. Such a possible actor is Al-Qa'ida which has openly declared the will to produce and use WMD or improvised CBRN equipment in connection with the events of September 11, 2001 [8].

Operations for WMD elimination also include so-called WMD interdiction. These actions are undertaken to indemnify CBRN facilities, warheads and other means of transport to the target; the dual technologies needed to put the equipment or heads into operation, their manufacturing precursors or related materials and technologies; financial intermediaries facilitating trade in WMD components; and individuals associated with the above activities [9]. In fact, such action would probably have special powers. It is possible to see the possibility of real connection of capabilities and competencies between special forces and units of the chemical corps, commonly referred to as the abbreviation SOF-CBRN. Advanced Armed Forces already have specialist teams and narrowly profiled CBRN experts who are mutually interoperable in favor of special forces. Examples are Canada, Australia, Great Britain, USA and others.

With regard to WMD counter-terrorism operations, one of the many cases of the use of chemical corps teams for supporting Special Forces took place shortly after September 11, 2001, when specialists of the CBRNE Response Team (CRT), which is the part of the Battalion Technical Escort, to Karshi-Khanabad, Uzbekistan to support Operation Enduring Freedom. The unit was assigned to the JSOTF Dagger Task Force to locate, confirm and secure locations for which Al-Qa'ida was a precondition for use as a chemical and biological weapons factory [10]. The Task Force was built to conduct special operations in Afghanistan, running north of the connecting artery between Herat and Kabul. During its engagement, the Task Force, beyond its original predetermination, was included in many grounds, unconventional and humanitarian operations [11].

#### 3.3 The case of "state disruption"

The collapse of the WMD-holding regime would undoubtedly pose a fundamental problem from the point of view of international security. If there were a political disruption in a state like North Korea or the overthrow of the head of a nuclear great power such as Pakistan or India, it would be quite critical from a security point of view to provide WMD against possible abuse. Such an operation would not only include the search for and the indemnity of WMD. Many precursors and other "inputs" to the WMD production process are in themselves dangerous, so this material and technical equipment for WMD production would have to be secured and eliminated.

The USA openly declares its leadership in the process of destroying or guarding WMD that it is likely to possess in the fallout of North Korea in the political upheaval [12]. It argues against the threat of spreading to third countries that could use WMD against the USA or its allies. Such a solution is undoubtedly easier than efforts to mitigate the effects of WMD use or the complex search for these weapons in a network of criminal and terrorist organizations around the world [13]. The United States is active in this regard. Together with the armed forces of the Republic of Korea, specialists prepared for WMD elimination operations are being prepared, with CRT teams closely cooperating with the South Korean counterpart of these specialized units [14].

#### 3.4 The case of "international cooperation"

This is a situation where the state changes its approach to the issue of WMD ownership; the international community publicly declares its destructive arsenal and goes into the disarmament process. In this case, the option is to use forces destined to eliminate WMD to assess the real status of the respective objects and equipment, to support the implementation of control and disarmament mechanisms, and to enable the international community to destroy WMD.

Cases that have recently occurred on the territory of Libya and Syria in particular are very similar. The latest case, when Syria was acceding to the Chemical Weapons Convention in September 2013 [15], was a welcome international action. The Framework for the Elimination of Chemical Weapons was rapidly implemented, and a joint operation of the United Nations and the OPCW-UN Joint Mission, which ended in September 2014, was launched [16].

#### 4. The Czech Armed Forces Chemical Corps development

#### 4.1 Importance of the NATO Response Force

The NATO has a Combined Joint CBRN Defense Task Force (NATO Response Force, NRF) for the NATO Response Force (CJ-CBRND-TF). The task force includes two main elements: the CBRN Defence Battalion (CBRN Bn), and the Joint Assessment Team (CBRN JAT). The CJ-CBRND-TF Task Force provides a quick and flexible response to the potential, threatened or already existing enemy threat. It implements CBRN comprehensive response measures in a short reaction time, both for military operations under Article 5 of the Washington Treaty and for operations outside this article.

Regarding the task of collecting information, providing evidence and accountability for CBRN incidents, the battalion has a unique CBRN Multirole Exploitation and Reconnaissance Team (CBRN-MERT). It is designed to provide technical evidence and negotiates an indisputable identification of CBRN material for forensic investigation purposes.

The CBRN-MERT unit can perform important tasks such as exploration of objects and equipment, characterization of CBRN material or relevant technical infrastructure and provision of evidence. Sampling must be done in accordance with the legal requirements for the highest degree of credibility and for the transport of the material taken over the national boundaries. With its specific equipment, it can provide initial identification of toxic substances, complete decontamination of its own team and material, or strategic communication with the NATO CBRN Reach-Back capabilities. It is a team that has the ability to integrate into the specific operations of the Special Operations Task Unit (SOTU) as part of technical evidence-gathering or, among others, the ability to work with the Weapons Intelligence Team (WIT) [17].

From the above, it is obvious that the CAF CCs does not have such a unit. It is certainly not a unit of CBRN reconnaissance or a sampling team, which are elements of the current organizational structure. Works of a CBRN-MERT type unit at the CAF CCs will allow CJ-CBRND-TF to become a Lead Nation, as the NATO should provide the NRF rotation for this unit.

In addition to the involvement of the CAF CCs in the NRF, it is above all a unit that can contribute to the WMD elimination by its specific capabilities. Especially at the stage of the operation, which aims is characterization locations, collect evidence and identify the findings, the unit would be an invaluable contribution and confirmation the role of a leading nation in expertise.

#### 4.2 New concept of CBRN Defence in the Czech Armed Forces

The current perception of the CBRN Defence and chemical support in the CAF [18,19] still did not recognize a reflection on NATO's comprehensive approach, above all in its first pillar - prevention. As the CAF CCs is increasingly or less oriented towards responding to the incident and eliminating its consequences, it seems appropriate to consider the possibility of expanding the scope of the CAF CCs in relation to the fulfillment of all three pillars of the CBRN defence, thus including the aspect of WMD elimination.

Within defending the need to adopt a new concept of CBRN Defence in the CAF, it is necessary to learn from the successes and failures of the NATO partners from the current military operations and the fight against international terrorism. Elimination of WMD is a type of operation that is so critical that it can be a supportive argument for considering the acceptance of the "prevention" and merging of CBRN Defence and chemical support into one coherent system that is compatible with NATO interpretations. The NATO documents that already embodying CBRN comprehensive NATO's approach, should be the basis for adopting such a new concept of CBRN Defence in the CAF.

## 5. Conclusion

Elimination of WMD will most likely be the part of future military operations. It seems to be beneficial to create a national legislative framework for these tasks, to create an organization with a clear command and control structure and with trained staff composed of both permanent and volatile but pre-identified elements. The area of WMD elimination is too important for its executive units to be set up on an ad hoc basis, which is one of the main conclusions of the operations so far carried out.

With regard to the application of a comprehensive NATO's approach to the prevention of WMD proliferation and to the protection of CBRN threats and the real demand of NATO for the emergence of new specific CCs capabilities, the issue of WMD elimination and the development of relevant capabilities is very timely. This is clearly an attitude that potentially dictates the future of development in the field of CBRN Defence.

## Used abbreviations:

Table 1.

Abbreviation	English name
75 <sup>th</sup> XTF	75 <sup>th</sup> Exploitation Task Force
CAF	Czech Armed Forces
CBRN Bn	CBRN Battalion
CBRN JAT	CBRN Joint Assessment Team
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
CCs	Chemical Support
CENTCOM	Central Command
CJ-CBRND-TF	Combined Joint CBRN Defence Task Force
CRT	CBRNE Response Team
FUOPS	Future Operations
LCC	Land Component Command
MERT	Multirole Exploitation and Reconnaissance Team
NATO	North Atlantic Treaty Organization
NRF	NATO Response Force
OPCW	Organization for the Prohibition of Chemical Weapons
SOTU	Special Operations Task Unit
TF D/E	Task Force Disablement/Elimination
UN	United Nations
USA	United States of America
WMD	Weapon of Mass Destruction

#### Used abbreviations

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