Impact of Proliferation of WMD on Security

Zvonko OREHOVEC, Polytechnic College Velika Gorica, Croatia

Abstract. There is almost no international scientific, expert, political or economical meeting in which new threats of world and national security are not discussed. For all that, the threat posed by terrorism is of special concern and receives special attention, particularly when we talk about terrorism with radiological, chemical and biological warfare agents and weapons. After 11 September 2001, when the world could not avoid understanding that terrorism can cause mass casualties, weapons of mass destruction (WMD) that had been marginalized as a threat in the post-cold war period rapidly became significant. Politicians, security services, scientists and experts began to be concerned with WMD again, but in a different context. Nuclear, radiological, chemical, biological and toxin weapons are now considered weapons that terrorist will use if they want to cause mass destruction, disruption and casualties. Except possible nuclear weapons use in Asia (North Korea, India and Pakistan), there are almost no wars or armies mentioned as possible users of nuclear, biological and chemical (NBC), or also known as chemical, biological and radiological (CBR) or even CBR and nuclear (CBRN) weapons. For the remainder of this article we will use CBR instead of NBC and CBR unless referring to WMD policies.

It is a fact that terrorism, along with other new kinds of threats, threatens international security and environment, prosperity and human existence. Increasing possibilities of CBR agents purchase and production, and their use by terrorists, necessitate decreasing these possibilities and probabilities; this is the main role of the WMD nonproliferation policies.

Developing and implementing a project on nonproliferation of WMD in this contemporary era necessitates a consideration of all social, political, economic, scientific and technological realities that enable the proliferation of WMD.

Meetings of professionals may offer the best hope to surface, highlight and bring pressure to bear on governments to develop a political will to mandate dynamic attention to the problem, to provide adequate numbers of knowledgeable professionals to work the problems and to provide the necessary equipment and other resources to assist these professionals in preventing WMD proliferation.

Key words: WMD proliferation, WMD terrorism, Nuclear weapons, Biological weapons, Chemical weapons, Radiological weapons, EU security, Nonproliferation

Introduction

There is almost no international scientific, expert, political or economical meeting in which new threats of world and national security are not discussed. For all that, the threat posed by terrorism is of special concern and receives special attention, particularly when we talk about terrorism with radiological, chemical and biological warfare agents and weapons. After 11 September 2001, when the world could not avoid understanding that terrorism can cause mass casualties, weapons of mass destruction (WMD) that had been marginalized as a threat in the post-cold war period rapidly became significant. Politicians, security services, scientists and experts began to be concerned with WMD again, but in a different context. Nuclear, radiological, chemical, biological and toxin weapons are now considered weapons that terrorist will use if they want to cause mass destruction, disruption and casualties. Except possible nuclear weapons use in Asia (North Korea, India and Pakistan)
[1,2], there are almost no wars or armies mentioned as possible users of nuclear, biological and chemical (NBC), or also known as chemical, biological and radiological (CBR) or even CBR and nuclear (CBRN) weapons. For the remainder of this article we will use CBR instead of NBC and CBR unless referring to WMD policies.

CBR agents have become weapons for terrorists, and this has originated a series of local, regional and international meetings about CBR and other similar activities including WMD Nonproliferation programs and Counter Proliferation Policy and Implementation Issues.

It is a fact that terrorism, along with other new kinds of threats, threatens international security and environment, prosperity and human existence. Increasing possibilities of CBR agents purchase and production, and their use by terrorists, necessitate decreasing these possibilities and probabilities; this is the main role of the WMD nonproliferation policies.

Issues In Wmd Nonproliferation Policy

WMD nonproliferation policy is welcomed and necessary, but there is a discrepancy between political volition and scientific reality in its enforcement. "There is a consensus among nations that proliferation cannot be tolerated. Yet this consensus means little unless it is translated into action. Every civilized nation has a stake in preventing the spread of weapons of mass destruction." President George W. Bush, February 11, 2004 [3]

Definition of WMD

What does WMD mean? WMD as used now usually includes CBR weapons and agents. This creates additional confusion because the term does not recognize differences between the effects and modes of using CBR agents and weapons [4] and much of the policies are really nuclear nonproliferation policies to which CBR are added as an afterthought. WMD nonproliferation policy has accepted the definitions of WMD weapons as used in international agreements, conventions and protocols for nuclear weapons. This is understandable, but it is exactly this acceptance of unclear definitions that results in problems in enforcing WMD nonproliferation policy. Why?

International conventions addressing chemical and biological weapons, as well as nuclear proliferation agreements, are adopted by consensus of all states or parties. This includes understanding all notions and definitions and adjusting wording to be acceptable for all states - parties. If experts in CBR are not included in these discussions, the results can be agreements and conventions that do not really address CBR agents, weapons and their proliferation or use, although the wording may indicate that they do.

Subsequent revisions of conventions, amendments, changes and annexes, if they happen, happen very slowly. For these reasons, contemporary research and trends in CBR agents and weapons usage are not necessarily included in these conventions or in WMD nonproliferation policies. There are many possible chemicals and biologicals that can be used as agents. When this is combined with new and evolving trends in terrorist tactics, some of the resulting terrorist attacks are not addressed in these conventions.
**Evolving Nature of Terrorism**

Terrorism is evolving; the perception of the idea, tactics, forms and methods of terrorism is evolving. Previous research on terrorism as a phenomenon from the end of twentieth century, including actual terrorist acts, leads to a conclusion that today's terrorism is an instrument or form and method of warfare. This means that in the future we will have to face the fact that terrorism will be used not only by those who previously used it, but also by the states or organizations that practice using war as an instrument to achieve their goals.

The reasons for this lie in the following facts:

- Globalization has brought many changes in social, economic, psychological, technical and informational aspects that have changed life and culture. These changes make it easier to achieve changes in economic, political and social insecurity easier without warfare.
- Scientific and technological progress has made it easier to produce or procure instruments for performing terrorism (including WMD) than before.
- Industry increasingly uses toxic chemicals and microorganisms in the production processes and has thus created many more potential targets for terrorism and military actions.

**Unconventional CBR: Not Your Father’s WMD**

Existing WMD conventions and treaties do not consider attacks on chemical, oil, pharmaceutical and other facilities as CBR or WMD attacks, as part of their obligations despite the fact that such attacks cause mass casualties and destruction of plant and animal life. Consequently terrorists and some countries may use this kind of attack and avoid sanctions.

Because of this use of conventional weapons to achieve the same results as unconventional weapons, the industry series of CBMITS meetings originated an initiative of defining WMD as WMD in a limited sense and in a wide sense.

- WMD in a limited sense includes nuclear, chemical, biological and toxin weapons, agents and precursors. This definition is the same as that referred to by the phrase CBR agents or weapons.
- WMD in a broad sense includes all toxic chemical substances if they are used as means of attack or if they are the target of attack, all microorganisms and their products, all industrial facilities that use toxic chemicals (toxic industrial chemicals, TICs, or materials, TIMs) in their process of production, transport and stockpile if they are a target of military or terrorist attack. This goes beyond the current definition of CBR.

Present WMD nonproliferation policy includes only CBR or WMD in a limited sense.

**Increased Awareness of the Importance of the Environment**

The world increasingly has recognized the importance of protecting the environment, ecological protection. This includes physical surroundings, water, air, soil, energy sources and their exploitation, critical infrastructures, transport and logistics, safety of air and naval sectors, chemical, biological and radiological contamination, and explosive materials. Once the environment has been disrupted, subsequent military and economic threats and actions...
Ecological protection is a new target for many contemporary threats. The goals of war are no longer simply the loss of territory, relieving royal families from their throne, or conquering or retaining new colonies. Those who control life’s environment are real masters of all forms of business, of their nation’s prosperity, and of its democracy, culture and lifestyle. Terrorism threatens life’s environment. Those who do not have a safe life environment cannot count on the continuing prosperity of their nation and state.

Two types of threats can be used to disrupt ecological protection. One is the classic, overt terrorism that can be easily recognized as an act of aggression. Its motives and goals are clear, described many times in literature and confirmed in practice. The second type is the so called "camouflaged or silent" terrorism characterized by covert actions. In the era of world globalization, it is unnecessary and dangerous to initiate an open conventional military conflict. Even overt terrorist attacks to achieve goals may be risky. It is much more efficient to weaken the state by "silent" or covert actions (without publicity and without revealing that the action even occurred) using the weaknesses in the state or region so that it is never clear if the incident is the act of aggression or an accident. Examples of such inherent weaknesses can include existing political conflicts, social problems, economic problems, endemic diseases of crops, animals and humans, technically undeveloped and unsafe industrial facilities using toxic chemicals in their production processes. Clearly in these cases, it will be the ability of the intelligence services to determine whether or not such incidents are accidents or acts of aggression. Both overt and covert terrorism can be countered at least in part using detection systems (detection of pathological microorganisms, detection of chemicals and toxins, radiological detection, detection of explosives and drugs, and detection and management of suspicious persons), biometrics, traveling and tourism issues, protection of global logistics, protection of food and water, and protection of information, data and communications.

**Lack Of International Approach Towards Wmd Terrorism**

WMD nonproliferation policy is also characterized by the lack of unity of international policy towards WMD terrorism. The reasons may lie in different opinions on international terrorism, definitions of WMD, and different approaches to nonproliferation. The creation of a uniform international policy in fighting CBR terrorism is further thwarted by wider political-economic interests and formal alliances between key individual international subjects. There are no common policies in fighting CBR terrorism or common responses on international or even national levels. September Eleventh has only appeared to create a common international policy on WMD terrorism. Security Council resolution 1373 [5] established an antiterrorist committee and world antiterrorist coalition, but still there is no international consensus on policy as can be confirmed by the example of antiterrorist intervention in Iraq. Although NATO does consider CBR as part of WMD, the emphasis in WMD policy is nuclear. The CBRN battalion was established for defense, assessment, identification and decontamination of CBRN agents. [6] The lack of unity within NATO and the UN has established a deep gap in the wider international community and has made the creation of a common international policy against terrorism more difficult. International policy on both fighting terrorism and nonproliferation of WMD should be created and realized in close cooperation not only between all UN member states but also on regional levels.
Political Indifference

Still another issue confounding nonproliferation of WMD, its doctrine and strategy is the indifference of the political establishment of many of undeveloped countries and countries with economies in transition. Most of these countries do not possess CBR and do not seek to possess them. Since they do not have CBR, they do not consider WMD a threat to them and WMD nonproliferation policy is not taken serious. As a result of these opinions, these countries may sign international agreements on WMD nonproliferation as a formality, but it is without true political will and support, without the needed political and technical expertise, without adequate personnel, materiel, and organizational support. These countries do not have enough experts in the field of CBR weapons and protection, so a critical mass in public opinion cannot be formed that could give positive support to the opinion and actions of the politics. Yet these countries may be at a higher risk for WMD terrorism because of their lack of ability to respond. Additionally, political aptness may be more important than professionalism; so that with a change of government, the small number of security personnel in police and military educated in more developed countries changes also. The results of such situations are politicians not motivated to support WMD nonproliferation and without the science and professional to influence and support the country in such technological issues.

Influence of Security Agencies

WMD nonproliferation policies involve security and intelligence issues which, in undeveloped countries and countries with economies in transition, limit the contribution to only a few people; this results in limited awareness. Additionally, this generates a series of problems in any crisis or consequence management of a WMD incident, rescue systems which very often are left without the source information or any information, what results in inability to react in case of WMD crises which can be extend on neighboring countries, causing a regional problem. Instead of decreasing the possibilities of WMD proliferation, when governmental agencies do not manage in single cases to prevent WMD proliferation, this doctrine can generate problems and threaten the environmental security.

Lack of Adequate Response in All Countries

There is no country that can claim to be safe from or fully prepared to address the WMD threat. Even more disconcerting, each country and region addresses the preparedness differently. All places where the public may gather, such as in airports, undergrounds, bus and railway stations, churches, cinemas, theaters, squares, etc, are not and really cannot be adequately protected, especially in an open society. The facts are:
- There is no adequate detection security for each individual.
- There is no adequate physical protection,
- Exercise ASSISTEX 1 that took place in Croatia in 2002 showed that neither local nor state planners could provide adequate plans for security, evacuation, and consequence management in places of mass congregation.
- Insufficient education and training of personnel in security services for protection in public places and places of mass concentration, personnel in intelligence services, police, crime-police, public health services, firemen, and other rescue services.
Conclusion

Awareness of WMD nonproliferation policy can and will expand. The recognition that CBR is a part of WMD has included these agents in international policies that previously had focused only on nuclear weapons. International discussions which aim to involve as much of the scientific and professional public as possible can go along way towards raising awareness of the similarities and differences between different WMD. This can influence easier and quicker changes of international agreements, conventions and protocols. These international discussions can also become a way to involve and increase political will in undeveloped countries and countries with economies in transition and who do not possess WMD.

References