

## **THREATS POSED BY CBRN TERRORISM AND THE ROLE OF THE SEDM-CBSC WORKING GROUP IN THE PREVENTION AND RESPONSE**

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**Abstract.** The South-Eastern Europe Defence Ministers on December 2001 endorsed the establishment of a Working Group on ‘Defence/Military Support to Weapon Mass Destruction (WMD) Counter-Proliferation, Border Security, and Counter-Terrorism’ (CBSC) as a result of a decade of changes in South-Eastern Europe (SEE), the terrorist events of Sep. 11 in the USA, and the related NATO process of adaptation to the new security environment, reinforced awareness within the international community of the need for preventing and countering WMD proliferation, strengthening border security, and taking concrete steps to combat and deter international terrorism in all its forms. The changing international security environment and the emergence of asymmetric and non-conventional threats in SEE created the need for a regional approach to develop common plans and strategies through enhancing coordination among the different security agencies. This initiative fully supports current international efforts to promote CBSC in SEE, taking also into account other initiatives in the region sponsored by the UN, EU, NATO and OSCE. Since the establishment of the CBSC WG, the WG members participated in a lot of activities including a number of relevant seminars and conferences organised by SEDM nations, and they also push forward measures to improve transparency and visibility of the WG, by opening up to cooperation with other organisations and processes. The main threat today undoubtedly is CBRN terrorism. International terrorism includes spreading of WMD technology and expertise. WMD information is widely accessible and highly-trained engineers and physicists employed spreading throughout the world. Organised and general international crimes include the smuggling of WMD and related material, dual-use goods and transfers of NBC technologies, equipment, agents and knowledge.

*Keywords:* global proliferation threat, treaties and agreements towards CBRN, scientific and technical realities, threats posed by CBRN terrorism, practical levels of non-proliferation policy.

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## AIMS AND BACKGROUND

Each nation laws should prohibit development, acquisition, or transfer of weapon mass destruction (WMD)-critical items and should make it a crime to violate that prohibition for hostile purposes. Thus, WMD proliferation should be illegal everywhere, powerfully reinforcing the norm against acquisition of such weapons as well as facilitating law enforcement and trans-national legal cooperation. Provisions applicable to threats should be harmonised. National laws should address threats and should ensure prosecution of offenders or extradition to another State for prosecution. The scope of legal jurisdiction over such crimes should broadly reach the behaviour of legal entities in trans-national smuggling and weapons development conspiracies.

When a country needs to protect its borders against terrorists, illegal transfers, but at the same time must make it easier and quicker for authorised passengers and cargo to enter or exit a maximum performance border control and management system is vital. Today, 95% of the world cargo is transported by sea and more than 200 million containers are exchanged every year between major international ports. Border control system should be designed to detect and thwart border intrusion attempts, prevent illegal transfers of WMD, as well as to monitor and control high-risk installations, airports, seaports, stationary or mobile land border checkpoints and other security sensitive areas. Border control projects aim to develop a system for rapid and non-destructive detection and analysis of high-risk substances hidden in containers without opening them, and they are a response to concerns about safety and the fight against CBRN terrorism.

CBSC WG Project will have one of the main roles in support to border security with the aim to improve border control systems as well as define and distribute European standards for border security.

The basic purpose of the South East European Simulation (SEESIM) project is to promote cooperation, coordination and interoperability among the SEDM nations and SEDM initiatives and projects through the effective use of computer modelling and simulation.

If WMD proliferation is criminalised, each State law enforcement officials must work jointly with their counterparts in other States by sharing information, conducting investigations, and prosecuting apprehended terrorists. State cooperation both in gathering intelligence and using that information to prevent criminal activity is undermined, however, by lack of coherent legal instruments. Currently, there is no integrated database of State laws concerning production or use of WMD; it is difficult to know what gaps exist, much less fill them.

All this suggests that to fulfil obligations under UNSC Resolutions 1540 and 1373, States must enact harmonised criminal prohibitions and authorisation for law enforcement cooperation in order to establish a seamless web of security

among all nations. Failure to do so implicitly poses a threat to international peace and security.

This paper also presented the concept of the CBSC WG Website, which would encourage companies to post and share new border security technologies, as well as funding sources for government programs, and also define and distribute European standards for border security, and which will be more focused on detection and identification of WMD and related materials in real time.

#### RISK OF USE OF CBRN WEAPONS

‘Risk’ is scientifically defined. It is a function of two variables, namely the probability of an event occurring and the effects of that event. The risk assessment, presented in this paper, relates to the probability and effects of 11 different possible uses of CBRN weapons anywhere in the world. It differs from a risk assessment of all possible CBRN events. This is based on a retrospective analysis of how frequently certain weapons have been used in the last hundred years, the current perception of experts of the likelihood of use and our understanding of the interface of technical, tactical and political considerations.

It has given these 11 risks, as compared with each other, a rating of high, medium or low probability. The risk assessment<sup>1</sup> pertains to use of:

- Nuclear weapons (Low);
- Improvised nuclear devices (Low);
- ‘Radiological device’ (Medium);
- Highly infective and contagious anti-human biological agents with global implications (Low);
- Bacterial agents which are infective but whose effects can be treated and of which human-to-human transmission is controllable (Low);
- Non-contagious agents or toxins (Medium);
- Infective and contagious agents against animals or plants (Medium);
- Chemical warfare (Low);
- Limited or small-scale use of chemical weapons (High);
- ‘New’ chemical weapons (osmium tetroxide) (Medium);
- Riot control agents (High).

One of the main issues which deserve to be further addressed and which prompts the continuation of the South-Eastern Europe Defence Ministerial Working Group on Defence/Military Support to WMD Counter-proliferation, Border Security and Counter-terrorism (CBSC WG)<sup>2,3</sup> is to harmonise national laws and regulations that deal with deterring, detecting and interdicting WMD.

Inventory of relevant CBSC subject-related laws of the Southeast Europe countries, including Export Control Laws was created and prepared for further consideration and harmonisation by judiciary experts, with the aim to develop ‘model laws’.

Today it is very important to consider of the content, promulgation and adoption of codes of conduct for scientists in the field of CBRN research<sup>4</sup>. The threat of scientific and technological developments being used for destructive purposes, such as the development of novel biological weapons, is a real one. Codes of conduct can help to reduce the risk that scientific research will be misused. Codes of conduct for CBRN scientists are crucially necessary because of government can not oversee all scientists and experiments across the nation. Codes of conduct offer greatest opportunity for improving security of research at the level of individual scientists and also increase understanding of security, improve moral and ethical responsibilities, create a ‘culture of responsibility and accountability’, and set professional standards that may have legal implications. Practical measures should be established to prevent hostile use of the life sciences and ‘dual-use’ research. Much basic knowledge is potentially ‘dual-use’. Sensitive research results and information should be presented very carefully and research results for application must be classified.

The potential threat from misuse of current and future dual-use research in the field of CBRN Defence is challenge to which scientific community must respond. The rapid advances in the life sciences and the worldwide growth of biotechnology industry only add urgency of this task<sup>5</sup>.

Biotechnology is intrinsically ‘dual-use’ and dual-use items are covered under the Export control regimes. Australia Group promotes harmonised export controls for technology relevant to chemical, biological weapons (CBW), but limited utility in combating terrorism. ‘Dual-use’ research includes life sciences research with legitimate scientific purpose and that may be misused to pose a CBRN threat to public health and national security.

The channels for communicating knowledge are numerous and diverse and we have today over 10 000 journals in life sciences. The number of trained biologist is huge and they work in many different kinds of institutions.

To minimise the risk of dual-use it may be (will be) necessary to restrict publication of data, which immediately and feasibly could lead to such a misuse. Careful education of students and offensive and special training of graduate students and post-docs is crucial for future protection of scientific sensitive information. Self-control of science and scientists on local, national and global level is also very important.

## DISCUSSION

### FUTURE CHALLENGES INCLUDE:

- Stop the transfer of WMD expertise, technologies, and materials,
- Slow the spread of missile technology,
- Interdict movement of WMD-related materials,

- Hold countries accountable that routinely violate treaties,
- Counter tools of proliferate states,
- Covert weapons development, manufacturing and sales,
- Front companies,
- Networking,
- Develop cooperative measures to disrupt and destroy sub-state proliferation networks.

#### ADDRESSING THE PROBLEM IN SEDM NATIONS

- Euro-Atlantic integration and Border security requirements for EU entry,
  - the Schengen acquis,
  - Achieve ‘high level of external border control’ as determined by the EU,
  - NATO counter proliferation goals,
  - Capable of responding to and operating in a biological or chemical attack situation,
    - Supporting efforts to counter countries that may be developing chemical or biological capable missile systems,
    - Border security and counter proliferation efforts cooperative and growing,
    - Joint border patrols,
    - Jointly operated border stations,
    - South-Eastern Europe Cooperation Initiative – Anti-Crime Center,
    - Enhance capability and integration of border security, law enforcement, and crisis response institutions.

#### CONCLUSIONS

Although significant progress has been made, the national security requirements for efforts to combat Weapons of Mass Destruction and Weapons of Mass Disruption will be of the highest national priority for the foreseeable future.

An integration of a number of approaches is essential. Enabling systems and processes, engineering, science and technology, policy, medical, and emergency response are essential to reduce the threat from the proliferation and use of weapons of mass destruction (WMD).

Improved coordination between international, public and private security entities is also essential task to hopefully prevent the terrorist attacks.

Improved export control regimes, dual-use technologies export control and border security can greatly assist in controlling proliferation of materials needed by states or terrorist to make WMD.

The most important issue is harmonisation of regional national laws and regulations to deal with deterring, detecting and interdicting WMD.

SEDM SEESIM and CBSC projects have much contiguous issues and very successful cooperation within the South-Eastern Europe Defence Ministerial Process.

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