



Civilian Collective Defence CBRN 1/2

General Military Review No. 54

le capitaine Benjamin NEUVILLE

Published on 19/03/2019

Histoire & stratégie

In its most recent prospective publication, the SGDSN predicts the possible evolution of terrorist modes of action, including CBRN aggression capabilities, before 2030. In a context of increasing government CBRN defence capabilities, Captain Benjamin Neuville considers that the citizen has not, for the time being, been prepared to experience such an attack.

Formerly fostered by military competition between States, the proliferation of nuclear, radiological, biological and chemical threats will undergo profound change over the next fifteen years. Access to the technical knowledge required for the use of radiological, chemical or biological substances is greatly facilitated by the porosity of geographical areas and the development of online knowledge sharing. This observation was established by the SGDSN in its 2017 prospective study. Thus, by 2030, the terrorist nebula could have acquired a sufficient base of knowledge to carry out a spectacular CBRN attack on a territory considered as an enemy, a fortiori in the West. In spite of the announced victory against the "Caliphate" in the Iraqi-Syrian zone, it should not be forgotten that Islamist inspired terrorism is already disseminated worldwide and present within our borders.

As a natural target of this threat, is the citizen prepared for it? Is our level of collective protection sufficient? Is public policy mobilized to respond to this dual problem?

CBRN Terrorism

CBRN threats of terrorist origin can be characterized by their modes of action and the origin of the poisons used. Recent history has revealed some of this typology. Some

works of fiction have fantasized others with, in some cases, disturbing credibility. Specialized literature provides guidance on other possibilities. In order to present the whole spectrum, the NR, C and B scenarios will be discussed in turn, with a discussion of the likely supply chains for each case.

The case of nuclear and radiological terrorism has been precisely described by Pierre Laroche and Hubert de Carbonnières in their book *Terrorisme radiologique*⁴⁰. They describe five scenarios presented here by increasing probability of occurrence. The radiological dirty bomb, aimed at dispersing radionuclides from a source by explosives, is a scenario so often mentioned that it seems to be the most obvious. Less documented, the hypothesis of abandoning a high-energy radiological source in the public space in order to cause radiological burns presents more dangers in terms of health and psychological impact.⁴¹ The deliberate attack on a nuclear site, which has recently received wide media coverage following the incidents at the Cattenom and Cruas power plants.⁴² The Commission believes that the nuclear industry, if the level of internal security at nuclear facilities remains at its current level, is unlikely to attract the attention of a serious terrorist undertaking. Radiological poisoning of a food or water supply presents few media radiation prospects compared to previous scenarios. Finally, the hijacking of a piece of nuclear arsenal seems unrealistic, but is taken very seriously by the Strategic Defence and Security Review, 2017, which notes North Korea's worrying role in the transfer of proliferating technologies and the uncertainty about the security of Pakistan's arsenal. The first two scenarios, characterised by a high degree of ease of implementation relative to any other CBRN hypothesis, can only be prevented by effective control of radiological and nuclear material inventories. This effective control, reasonably achievable in France in the industrial environment, is already more difficult in the medical sector, which is an open space. On the other hand, the safety of nuclear materials is correlated with the level of stability of states. In this respect, the former USSR satellites constitute a supply chain that is already monitored.⁴³

Channel C has already amply demonstrated the interest of terrorist groups in it. Public opinion widely remembers the attack by simple evaporation of Sarin gas in the Tokyo subway at a rush hour in 1995, killing twelve people and injuring fifty. In February 2017, the dispersion of tear gas through the air-conditioning system at Hamburg airport opened up a worrying avenue of optimization by causing the intoxication of some fifty people. On the other hand, in the Iraqi-Syrian theatre, the Islamic State has confirmed its interest in the manufacture of improvised explosive devices loaded with mustard gas, without it being possible to determine whether Daesh has mastered the synthesis. The latter is likely to be the limiting factor in the threat, as the use of chemistry requires complex technical expertise. The capture of knowledge and human resources by the jihadist nebula, however, suggests that the chemical threat is likely to increase over the next 15 years.⁴⁴

More broadly included in the issue of health risks, the biological threat could increase dramatically due to the resurgence of pandemics and the increased mobility of populations. Vectorization of a biological agent could be envisaged by the same means as a chemical agent or by the poisoning of food.⁴⁵ The acquisition of biological agents here also seems to be limited by the technical competence of the assailant or his ability to infiltrate a biological containment laboratory. However, the porosity of borders and the manifest willingness of some jihad candidates to die for the sake of their cause could lead to a new scenario of voluntary contamination by contact in a pandemic zone and vectorization of the threat by simple movement in the targeted geographical space.

State of play

In its prospective study to 2030, the SGDSN notes that terrorism is perceived by the French as the number one threat. In the same document, it mentions the manifest willingness of certain groups to acquire and use CBRN capabilities to achieve a transition and improve hitherto underdeveloped modes of action. Losing ground in its safe haven in the Levant, Daech could transfer an arsenal and tactical knowledge to use as a tool for terrorist pressure. The aim of this approach would then be to export this capability to the West to produce massive societal disorganisation by influencing the behaviour of the targeted populations who, no longer experiencing war, are likely to fall into affliction.

The recent French situation is symptomatic of the political awareness of this possible evolution. Thus, a great inequality has already been bridged since the mid-2000s between the armies, then the only ones with the means to combat the CBRN danger, and the other State services. However, in the civilian world, CBRN protection is still limited to qualified responders such as rescue teams, Ministry of the Interior forces, certain hospital services or employees in high-risk sectors.⁴⁶ The response to the terrorist threat is now widely regarded as an interdepartmental responsibility. Resulting in 2010 from the Piratox, Biotox and Piratome plans, the government's NRBC plan continues to live on and was revised in 2015. The activity of the national civil and military NRBC-E national centre, whose mission is to improve the response capacity of state services to NRBC threats by conducting exercises and training sessions for inter-ministerial audiences, is a manifestation of this. Equipped with advanced technological means and improving their capacity for coordinated action, can the State services, on the other hand, claim to represent alone the entire spectrum of the national effort to reduce France's vulnerability to terrorism when the terrorist's target is, after all, national cohesion through the moral strength of the citizen?

⁴⁰ Pierre Laroche and Hubert de Carbonnières: *Terrorisme radiologique*, éditions Elsevier, 2004.

⁴¹ SGDSN, *Étude prospective à l'horizon 2030, impact des transformations et ruptures technologiques sur notre environnement stratégique et de sécurité*.

⁴² Source www.asn.fr, Greenpeace [intrusion in](http://www.greenpeace.org/fr/fr/energy/nuclear/contaminated) Cattenom, Greenpeace intrusion in Cruas.

⁴³ According to CBRN E WORLD, February 2017 issue, Georgia reported the interception of 300 radiological sources within smuggling networks from 1990 to 2017.

⁴⁴ SGDSN, *Étude prospective à l'horizon 2030, impact des transformations et ruptures technologiques sur notre environnement stratégique et de sécurité*.

⁴⁵ Source Wikipedia. In 1984, Ma Anand Sheela was sentenced to 24 years in prison by the American justice system for having organised a bioterrorist attack using salmonella, poisoning 750 people.

Author (s) : le capitaine Benjamin NEUVILLE

Release date 13/03/2019
