

Humanitarian impacts of Nuclear Weapons, Address by Ms. Linh Schroeder, ICRC Head of Mission in Japan, 61<sup>st</sup> Pugwash Conference on Science & World Affairs Nagasaki, 1 November 2015

Excellences, Mr. Chairman, distinguished guests,

Let me first thank the organizers for inviting the International Committee of the Red Cross to speak today, to such a prestigious audience, on a subject that it is at the heart of our humanitarian mission.

The ICRC and the International Red Cross and Red Crescent Movement have been concerned about NW ever since they were used in Hiroshima and Nagasaki. As we commemorate this year the 70<sup>th</sup> anniversary of the atomic bombings of these 2 cities and their inhabitants, it is an important moment to remind the world about the destructive power and the severe human cost of NW.

Indeed, NW are unlike any other weapon in the scale of destruction, and horrific human suffering and agony they can cause, and because of the quasi-impossibility to control and limit their immediate and long-term effects on civilians and on the environment, particularly when used in or near populated areas.

The horrible consequences of blast, heat and radiation released by NW on non-combatants, civilian objects and the natural environment have been vividly shared this morning by *Hibakusha*, so I will not attempt to describe them.

In their testimonies, everything happened within a few seconds. But for many of those who survived, those few seconds have had a life-long impact. Professor Tomonaga explained to us the evidence collected these past decades on health effects, and Japanese Red Cross hospitals are still treating thousands of cancer and leukemia patients attributed to radiation.

In addition to the constant physical suffering survivors endure, the psycho-social effects are less talked about but can be as painful. We still don't fully know all the long-term needs of the survivors.

Based on cases where NW were both used and tested, the consequences on their children are now being studied, including children of atomic bomb survivors who were born in the years following their parent's direct exposure.

Other important new information on the health and environmental effects has come out of international conferences of Oslo, Nayarit, and Vienna.

The environment is impacted by both radiation and non-radiation effects of nuclear detonation, which would vary depending on the type of NW used, the location of the explosion, type of terrain and weather conditions. However, we know for certain that one of the major challenges in the longer term would be the restoration of livelihoods, as vast areas of land where the detonation occurred become unusable for a very long time. We also know that the impact of nuclear detonation would not be limited by national borders and would cause damages to the environment and global climate.



Recent research has projected that the use of "only" 100 Hiroshima-sized bomb, which is less than 0.5% of current arsenals, would cause more than 5 million tons of soot from urban and industrial fires to be lofted into the upper atmosphere, making global temperatures fall by an average of 1.3 degrees Celsius for several years, and dramatically shortening the growing season in key agricultural areas.

As a result, there would be severe decrease of the global food production and supplies: 20% lower in the years immediately following the event, 10% lower even after a decade. The world is already ill-prepared to deal with much smaller declines in food production. In this scenario, more than 1 billion people around the world might face starvation.

Excellences, Ladies and Gentlemen,

The International Red Cross and Red Crescent Movement is known for its responses to disasters and crises, both natural and man-made.

Together with the Japanese Red Cross Society, the ICRC learnt much from its experience in Hiroshima, and in the past years, we have sought gain a better understanding of the current degree of preparedness of Red Cross and Red Crescent National Societies, other international agencies and States to bring aid to the victims of a nuclear explosion.

The ICRC analysis, as well as a survey conducted in 2014 within the UN system, showed that there is no effective and adequate international response capacity with which to assist the victims in the immediate aftermath of a nuclear explosion, while protecting those delivering assistance.

The number of victims will vary greatly, depending on the type of NW used and the location of the explosion. It is however highly likely that the sheer number of casualties and level of destruction will exceed the response capacity of any first responder, whether State or humanitarian agency, especially if it occurs in highly populated areas. An overwhelming number of people would need immediate treatment for severe and life-threatening wounds, but no such treatment or assistance, nor any adequate place to provide them, would likely to be available in the short-term.

The *Hibakusha*'s accounts included extremely graphic illustrations of how people sought assistance, but the hospitals had been damaged, medical doctors and nurses were killed and medicine was contaminated. As noted by the first foreign doctor to arrive in Hiroshima to assist the victims, the ICRC head of delegation in Japan, Dr. Marcel Junod, the city's capacity to treat victims had been wiped out.

Anyone seeking to provide essential services to the survivors would face unique dangers and difficulties following any nuclear explosion, and the inability to safely access the affected area would further hamper any rescue operation. There would be significant challenges in prioritizing the needs, allocating the few resources available, organizing the transfer of victims outside contaminated areas, and coordinating relief efforts. The suffering of survivors will only increase.

It is also very important not to create a situation where nuclear powers somehow place the responsibility for coping with the human impact on humanitarian organizations.



Ladies and gentlemen, the use of NW also raises a number of concerns under International Humanitarian Law.

IHL seeks to alleviate the effects of armed conflict for humanitarian reason, by imposing limits on the choice of means and methods of warfare. IHL does not specifically prohibit NW. It does not regulate their development, production, possession or transfer. But the use of NW, as with the use of any other means of warfare, is regulated by the fundamental principles of IHL applicable to all armed conflicts.

These general rules are, firstly, the rule prohibiting indiscriminate attacks requires the parties to distinguish at all times between combatants and non-combatants, and between civilian objects and military objectives. According to this rule, weapons that are not, or cannot be, directed at a specific military objective, or that have effects that cannot be limited, are prohibited.

NW are designed to release heat, blast and radiation, and can disperse these forces over very wide areas as we have seen in Nagasaki and Hiroshima, raising questions as to whether such weapons can be directed at a specific military target. Furthermore, given the variety of factors influencing the effects of NW, it would probably not be possible to control or limit the consequences on civilians and civilian objects, as required by IHL.

Serious issues are also raised by the rule of proportionality in attack, which requires that the concrete and direct military advantage anticipated outweigh the foreseeable incidental impact on civilians. The ICRC's view is that the party intending to use NW would have the responsibility to take into account not only the immediate deaths, injuries and damages, but also the foreseeable long-term effects of exposure to radiation.

The obligation to take all feasible precaution in attack requires that, in the conduct of military operations, constant care be taken to minimize incidental loss of civilian life, injuries and damages. This obligation would also require to assess the immediate and long-term consequences on civilian life and objects.

Finally, under the customary rule on the protection of the natural environment, any decision to employ NW must be done with due regard to the potential impact on, and damage to, the environment.

The ICRC was already questioning the lawfulness of atomic weapons and calling on States to reach an agreement banning their use less than one month after the bombings of Hiroshima and Nagasaki. In 1996, in response to the International Court of Justice's Advisory Opinion, the ICRC concluded that "it is difficult to envisage how any use of NW could be compatible with IHL."

These doubts have only strengthened with evidence that has emerged since. To the ICRC's view, with every new piece of information about the health and environmental effects of NW and the absence of an adequate assistance capacity in most countries, we move further away from any hypothetical scenario where the use of NW could be compatible with IHL.



Ladies and gentlemen, the hour is one of great concern.

Yesterday, for the very first time, the President of the ICRC and the UN Secretary General made an unprecedented joint appeal to States and other actors engaged in armed conflict and other situations of violence to respect and protect the principle of humanity, mirroring a deep worry in both institutions. The world has entered in a new era of armed conflicts that are greater in complexity and number of actors, longer in duration, wider in their regional impact, broader in tactics and weapons used and, above all, more atrocious in the human suffering they create.

The ICRC considers that the risk of the use of NW occurring are real and that the lack of significant progress in this field increases the risks. We are also convinced that adequate facts-based information about the catastrophic humanitarian consequences of NW is available. We expect these concerns to be taken seriously by political leaders, and that they reassess these weapons in legal and policy terms. States should commit themselves now to translating international humanitarian law and the fundamental principle of humanity into meaningful action.

I thank you for your kind attention.