Civil society presentations to the First Preparatory Committee for the 2015 NPT Review Conference
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Risks/consequences of nuclear weapons and nuclear energy


Mr. Chairman, Distinguished Delegates:

We are here in Vienna, a city steeped in history and culture and surrounded by natural beauty, sheltered for the moment from the conflicts that are killing and maiming thousands of people in countries around the world. We are here, in a comfortable city largely removed from such violence, out of a sense of obligation to prevent present and future conflicts from escalating into something far more catastrophic.

Or so we say. As representatives of civil society, we are becoming increasingly frustrated with this ritual of NPT Review Conferences and PrepComs. We can almost predict what will happen. The nuclear-weapon states will characterize their activities as progress on disarmament rather than as the retention of large, modernized arsenals. Many states—nuclear- and non-nuclear alike—will point the finger at Iran and the DPRK rather than stigmatize the weapons themselves in anyone’s hands. Proliferation and alleged proliferation will be discussed in isolation as an obstacle to disarmament rather than as a consequence of the failure to comply fully with Article 6. Some states will change the subject entirely to the global promotion of a dangerous and obsolete technology for producing electricity, as though the NPT were first and foremost the midwife of the nuclear power industry’s dreams of global expansion.

The outcome of the 2010 Review, despite the collegial atmosphere and the sense of relief that the collapse of 2005 was not repeated, made little substantive advance over the 2000 outcome, although the final document did make welcome and overdue reference to the “catastrophic humanitarian consequences of any use of nuclear weapons”. The nuclear-weapon states once again evaded the question of when and how they will fulfill their disarmament commitments under Article 6. Another empty request was made for Israel, India, and Pakistan to join the NPT as non-nuclear-weapon states. And a full quarter of the document’s substantive language dealt with institutional support for an industry that, by its very nature, undermines both the disarmament and the non-proliferation goals of the NPT.

Meanwhile, the consequences of inaction are even more foreseeable now than they were two years ago, when the NPT states parties expressed their “deep concern at the continued risk for humanity represented by the possibility that these weapons could be used.” You spoke with real justification of “catastrophic humanitarian consequences that
would result from any use of nuclear weapons,” and we will come to those in a moment. Yet there are immediate consequences of inaction, even before these weapons are used militarily.

Mr. Chairman,

If the impasse over disarmament is not overcome during this Review cycle, we are sure to see a further weakening, if not the complete dissolution, of the NPT regime. There is already widespread criticism and distrust of the modernization plans of the nuclear-armed states, as well as indications that some states are reconsidering their decisions to remain non-nuclear. Related to this is the extremely disturbing tendency, in some quarters, to view military action as the policy of choice for dealing with proliferation, which exacerbates the divisions between the nuclear haves and have-nots still further, and could easily escalate out of control. Moreover, such threats of military action are likely to spur potential proliferators into all-out efforts to achieve a nuclear weapons capacity rather than deter them, a concern recently expressed by former IAEA Director General El Baradei.

Mr. Chairman,

Last November, the Council of Delegates of the International Red Cross and Red Crescent Movement adopted a new resolution, by acclamation, appealing to all States “to ensure that nuclear weapons are never again used, regardless of their views on the legality of such weapons,” and “to pursue in good faith and conclude with urgency and determination negotiations to prohibit the use of and completely eliminate nuclear weapons through a legally binding international agreement, based on existing commitments and international obligations.”

One clear and viable way to implement this resolution would be to transform the nuclear disarmament obligation embodied in Article 6 of the NPT into a global agreement to eliminate and abolish nuclear weapons—what many of the NGOs represented here have called a nuclear weapons convention. Many of us have addressed how this could be done. Why it must be done can only be fully appreciated if we pause to reflect on what the phrase “catastrophic humanitarian consequences,” present in both the 2010 Review document and the Red Cross/Red Crescent resolution, actually means.

Echoing the 1996 advisory opinion of the International Court of Justice, the resolution begins by citing “the destructive power of nuclear weapons, the unspeakable human suffering they cause, the difficulty of controlling their effects in space and time, the threat they pose to the environment and to future generations and the risks of escalation they create.” Indeed, as we learned from the US atomic bombings of Hiroshima and Nagasaki, even a single nuclear explosion over a modern city would indiscriminately kill tens of thousands — even hundreds of thousands — of people immediately. The immediate casualties of a nuclear war in which even a small fraction of today’s arsenals are used would reach into the tens of millions.
Moreover, nuclear weapons eradicate the social infrastructure required for recovery from conflict. Roads and transportation systems, hospitals and pharmacies, fire fighting equipment, and communications would all lie in rubble throughout a zone of complete destruction extending for miles. People in neighboring and distant countries having nothing to do with the conflict would suffer from the effects of radioactive fallout, even if they were at a safe distance from the blast and thermal destruction near ground zero. Nuclear weapons explosions also have extreme and long-lasting environmental consequences, including disruption of the Earth’s climate and agricultural productivity.

This disproportionate and indiscriminate destructiveness is clearly a violation of international humanitarian law, as was detailed in the Vancouver Declaration initiated by civil society and released in 2011. Endorsed by leading legal scholars, the declaration states: “The conventions banning chemical and biological weapons refer to them as ‘weapons of mass destruction.’ WMD are, by definition, contrary to the fundamental rules of international humanitarian law forbidding the infliction of indiscriminate harm and unnecessary suffering. [T]hat label is best deserved by nuclear weapons with their uncontrollable blast, heat and radiation effects.”

Mr. Chairman,

There is a great deal of anxiety in this room over what might happen were Iran to acquire a nuclear arsenal, or if the DPRK were to use its program to further the spread of nuclear weapons around the world, or if one state or another decided to abandon its non-proliferation commitment, possibly opening wider the floodgates. As representatives of civil society, we certainly share those concerns, and we recall to your attention that in January the Bulletin of the Atomic Scientists, with 18 Nobel laureates on its Board of Sponsors, announced, for these reasons among others, that they had moved the minute hand of the Doomsday Clock forward from six to five minutes to midnight.

In our view, however, there is not nearly enough anxiety about the existing nuclear arsenals (in particular the massive stockpiles of US and Russian weapons that still comprise 95% of the world total), the consequences of their possession and use, and the dangerous message they send about the political value of nuclear weapons.

If one bomb can destroy a city, the consequences of a war involving many nuclear explosions are on a scale larger than anything we have experienced previously in human history. India and Pakistan, which tested nuclear weapons and began to build their arsenals in 1998, now have an estimated 160-190 nuclear weapons between them. A classified Pentagon study conducted in 2002 projected that 12 million people would be killed outright in a nuclear war between India and Pakistan. Many additional millions would sustain injuries similar to those seen in Hiroshima and Nagasaki. Fallout from ground bursts would expose tens of millions more to lethal levels of ionizing radiation.

An India-Pakistan nuclear conflict involving 100 Hiroshima-sized bombs – a very small fraction of the world’s arsenal - would disrupt the Earth’s climate, causing precipitous
drops in temperature and reductions in rainfall worldwide. These climate effects would have significant and long-lasting implications for agriculture and food supplies. A new research study published just last week by IPPNW shows a 10% reduction in corn and rice production in North America and China, lasting a decade or more, and caused by a nuclear war confined to a region far from those agricultural centers, using a relatively small number of weapons. The worst case, which cannot be ruled out as long as these weapons exist, is a nuclear exchange between the US and Russia, in which hundreds of millions of people would be killed immediately and the Earth’s climate and other fundamental ecosystems would collapse in what has been called a nuclear winter, threatening the survival of all humanity and many other complex lifeforms. Again, we will pass over the details, which fill many reports that we have made available to you, and appeal to you to focus on what that evidence adds up to.

If a regional nuclear war between India and Pakistan were to result in the projected climate disruption and the significant radioactive contamination of one or more major food-producing countries, failed harvests combined with the necessity to take significant areas of crop land out of production would create global famine conditions. If such famine persisted for a year or more, it seems reasonable to fear that the total global death toll could exceed one billion from starvation alone.

Yet the 100 atomic bombs detonated in this hypothetical India-Pakistan conflict represent less than one tenth of 1% of the explosive power now contained in the nuclear arsenals deployed by the US and Russia, and less than one half of 1% of the number of weapons. Together the two countries have nearly 2,000 warheads ready for rapid launch, an operational posture that makes an accidental apocalypse not only possible, but in light of the numerous and terrifying near misses over the decades, leaves one asking if it might not be inevitable. There is no avoiding the fact that the nuclear weapons in the arsenals of the US and Russia have the capacity to make the world uninhabitable in less than an hour, whether by deliberate launch, error, miscalculation or cyber-sabotage.

Early last December President Medvedev announced that “the Russian Federation…will employ modern, offensive weapon systems…ensuring our ability to take out any part of the missile defence system in Europe.” Were Russia to “take out” these missile defenses, might not such an action lead to nuclear conflict between the U.S. and Russia? Do we want to find out?

Mr. Chairman,

This very abbreviated summary of the medical, humanitarian, and environmental consequences of the use of nuclear weapons is irrefutable proof that their continued existence is incompatible with the security and survival of everyone on Earth. Yet even if a nuclear weapon were never again exploded over a city and its people, there are consequences to the production, testing, and deployment of nuclear arsenals that are experienced as an ongoing, personal and community catastrophe to those who have been and continue to be harmed by the preparations for nuclear war.
The front end of the nuclear chain—the mining and processing of uranium that provides the fuel for nuclear weapons—has devastating health consequences for those who work in the mines and mills and for their families. Shamefully, the workforce for these dangerous and health-destroying occupations is largely drawn from marginalized and vulnerable communities who are typically uninformed (or misinformed) about the dangers of exposure to radiation and toxic substances, are sent to work with inadequate protective equipment, and are poorly cared for when they develop exposure-related illnesses.

Between 120 and 153 million curies of iodine-131 were released into the atmosphere by the 215 aboveground US nuclear tests between 1945 and 1962. The fallout from those tests, according to the US National Cancer Institute and the Institute of Medicine has been responsible for tens of thousands of excess cases of thyroid cancer. Between 1949 and 1989, the former Soviet Union conducted 116 atmospheric nuclear explosions at its Semipalatinsk test site. The incidence of cancer among residents in eastern Kazakhstan, who received the greatest exposures to radiation, is 25-30 percent higher than elsewhere in the country.

The industrial sites in the US, the former Soviet Union, and other countries where nuclear weapons and the fissile material to fuel them have been manufactured are among the most contaminated places on Earth. Workers at nuclear weapons production facilities have suffered disproportionately from cancers and other illnesses, including leukemia, lymphoma, and cancers of the prostate, kidney, salivary glands, and lungs. The problem of nuclear waste, whether from weapons production or commercial reactors, is compounded by the absence of options for safe, reliable, long term storage over the geological aeons of time required.

Mr. Chairman and Distinguished Delegates,

We feel obliged to remind you that Japan and the rest of the world are still reeling from the nuclear reactor disaster at Fukushima, which has released the largest quantities of radioactive isotopes into the environment since the 1986 Chernobyl disaster. The human, environmental, and economic toll of Fukushima is a terrible reminder that the damage and suffering caused by the meltdown of one or more commercial nuclear reactors merely hints at what would happen if one or more nuclear weapons were exploded over one or more modern cities.

The twin attempts to provide security with nuclear weapons and to meet global energy needs with nuclear power share the same flawed premise: that we can prevent the most dangerous technologies ever created by human hands from ever failing. The premise regarding nuclear weapons is that deterrence works and will never fail. The premise with nuclear energy is that plant designs and safeguards keep getting better, and will stop failing. Neither premise holds up to logical scrutiny or to experience. The lesson of Hiroshima and Nagasaki is that nuclear weapons must be abolished before they abolish us. The lesson of Fukushima—and of Chernobyl before that—is that we can no longer afford to roll the dice on a technology that cannot be allowed to fail, when failures are
inevitable, with catastrophic consequences.

One final humanitarian consequence of nuclear weapons that cannot be overlooked is the enormous diversion of resources into the research and development, production, and deployment of warheads and their delivery systems, at the expense of real human and social needs that are inexcusably underfunded. Global Zero estimates that world spending on nuclear weapons surpasses $100 billion every year. By contrast, the Stockholm International Peace Research Institute has estimated that it would take $135 billion annually to fully achieve the Millennium Development Goals. Instead, each nuclear-armed state is engaging in large, expensive programs to modernize its nuclear forces and to ensure that they will continue to endanger us all for decades to come.

For the first time in the 40-year history of the Non-Proliferation Treaty, the NPT member states in 2010 explicitly referred to negotiations on a nuclear weapons convention as a way to fulfill the nuclear disarmament obligation contained in Article 6 of the Treaty. UN Secretary-General Ban Ki-moon called such a convention “a good point of departure” for achieving a world without nuclear weapons, and has included it as an element of his 5-point disarmament action plan.

Real progress on such a convention, at as rapid a rate as possible, needs to be pursued as a human survival imperative.