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# The Humanitarian Impacts of Nuclear Weapons: an Imperative for Achieving Disarmament\*

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The effects of a nuclear weapon detonation, irrespective of cause, will not be constrained by national borders, and will affect states and people in significant ways, regionally as well as globally.

—Espen Barth Eide, Norwegian foreign minister, Oslo Conference on the Humanitarian Impact of Nuclear Weapons, 5 March 2013.

Nuclear weapons should be stigmatized, banned and eliminated before they abolish us.

—Heinz Fischer, Federal president of Austria, High Level Meeting of the UN General Assembly on Nuclear Disarmament, New York, 26 September 2013.

Moral arguments have been a driving force for public movements advocating nuclear disarmament since people first learned of the massive levels of death, destruction, suffering and long-term impacts caused by the atomic bombs used in 1945 on Hiroshima and Nagasaki. Humanitarian-based arguments have been employed for over 150 years in diplomatic initiatives to question military justifications and get legal agreements to prohibit and eliminate certain kinds of weapons and practices deemed inhumane. In the past few years these two approaches have begun to come together in a potentially game-changing strategy aimed at achieving a universally applicable international treaty to ban the use, deployment, production, acquisition, transferring and stockpiling of nuclear weapons and require their total elimination.

Such a treaty would not replace the existing 1968 Non-Proliferation Treaty (NPT), but build on it in three important ways.

First, a global, non-discriminatory nuclear ban regime would reinforce the non-proliferation and disarmament obligations in Articles I, II and VI of the NPT, which are widely regarded as insufficiently spelled out and implemented

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for our collective security in today's world of sophisticated nuclear technologies and multiple actors, state and non-state.

Second, a nuclear weapons treaty would complement regional security initiatives and nuclear-weapon-free zones (which now cover over half the planet) by universalising essential prohibitions for activities that were not addressed in the NPT, notably on the use, threat of use, deployment, production and stockpiling of nuclear weapons. Such activities and operations are already banned for non-nuclear-weapon states, but the treaty would extend them to nuclear-armed states inside and outside the NPT. That would also address the long-standing demands by the Non-Aligned Movement (NAM) for an additional legally binding instrument on negative security assurances, as use and threat of use would be recognised as crimes against humanity and clearly prohibited under the new treaty. If desired, the new treaty could also broaden positive security assurances, thereby strengthening diplomatic, political and conventional means of deterrence against nuclear weapons use and threats of use. There would also be an opportunity to include requirements for relevant industrial and non-state actors, and to make it unlawful to assist anyone to use, threaten to use, deploy, produce or stockpile nuclear weapons.

Third, since it is no longer realistic to expect nuclear-armed states outside the NPT to accede as non-nuclear-weapon states (and legally and politically impossible to amend the NPT to admit them in any other way), a universally applicable treaty is clearly necessary in order to apply nuclear disarmament and non-proliferation obligations to all. Situating such a treaty approach in relation to the growing body of universal humanitarian law, rather than the arms control and non-proliferation agreements that dominated nuclear weapons theory and practice during the Cold War, creates new opportunities to accelerate implementation of long-standing disarmament commitments in the NPT and halt proliferation once and for all.

#### BUILDING ON THE NPT

The recognition that nuclear weapons are a fundamental security problem goes back to the first UN resolution in 1946. Since then, there have been numerous visions, ideas, proposals, agreements and steps to address this problem. The NPT, regarded as the cornerstone of non-proliferation, recognised that it would be impossible to prevent the spread of nuclear weapons unless states that already possessed them pursued nuclear disarmament 'in good faith'. In the depth of the Cold War, the United States and Soviet Union were able to focus the text more on stopping the spread to non-nuclear nations than on curbing the policies, operations and arsenals of existing nuclear-armed states. So the NPT did not prohibit the use, deployment, production or stockpiling of nuclear weapons as such.

In view of the military and political dominance of the United States and Soviet Union and the fact that China, France and the UK had also acquired national nuclear arsenals by 1968, the NPT defined two classes of states: the five 'nuclear-weapon states' (NWS) and the rest, deemed to be non-nuclear-weapon states (NNWS). It promulgated different obligations and oversights for these two classes. To persuade NNWS to sign up to such an unequal treaty, the NPT added in the Article IV incentive of assistance to develop nuclear technologies for 'peaceful purposes', which was described as an 'inalienable right'. The unintended consequence of that incentive provision has been to promote nuclear technologies that facilitate weapons acquisition and proliferation.

In view of the political conditions at the time, this is believed to have been the best that could be achieved in the 1960s—and then only because of the shock of nearly sliding into nuclear war in the 1962 Cuban Missile Crisis. The NPT's long term sustainability was further undermined as the text mandated one set of verified obligations for nuclear 'have nots', but a much less specified set of obligations on five defined nuclear 'haves', with no timelines or verification to give those obligations measurable force. This differentiation of obligations created legal, political and security problems that have bedevilled nuclear diplomacy ever since, with the unintended consequence that the NWS have been able to pick and choose what they do, since the major practical burden and safeguards fall on the NNWS. Moreover, the Article IV element intended to create a practical and economic incentive for NNWS to join the NPT, while reassuring them that they would not be technologically and commercially disadvantaged, has been manipulated by some states and institutions into a 'third pillar'. This has had the unintended consequence of spreading and justifying nuclear fuel cycle activities that are not conducive to non-proliferation and international security. This lets some governments off the hook and allows others to argue that they are fulfilling the NPT when they promote commerce in nuclear technologies and privilege industrial interests in nuclear energy over other means of energy generation with stronger economic, environmental, safety and security credentials.

Since 1968 nuclear disarmament initiatives have been almost entirely framed by the NPT context. Contrary to what some politicians in nuclear-armed states seem to believe, the NPT does not authorise any country to retain or to keep producing, deploying and modernising nuclear weapons. Article VI states:

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

It has long been asserted that multilateral nuclear disarmament must be led by the NWS, and that they must determine and agree the objectives, timing and terms of reference. Such assumptions run counter to the actual history of nuclear weapons reductions. What reductions in weapons there have been, from the insane cold war levels of 50,000 in the 1980s to around 16,000 in 2014, have been carried out unilaterally and bilaterally by four of the five NWS, mostly in response to domestic and international imperatives and changes. Where numbers have been reduced, nuclear forces have been enhanced and modernised.

Recognising that the divided obligations of the NPT and the vague wording of Article VI have been instrumental in letting the NWS off the hook, there have been many attempts by the NNWS to strengthen and specify what nuclear-armed states actually need to do. In 2000, for example, the New Agenda Coalition (NAC), initiated by Ireland, led negotiations that achieved NPT consensus on a 13-paragraph programme of principles, steps and requirements for disarmament, underscoring the NWS's 'unequivocal undertaking to accomplish the total elimination of...[all] nuclear weapons'.<sup>1</sup> If these negotiated commitments had been pursued over the ensuing decade and substantially implemented, the '13 steps' could have taken us very close to achieving a world free of nuclear weapons. But as soon as the applause at the end of the 2000 NPT

<sup>1</sup>2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, adopted 20 May 2000, New York, NPT/CONF.2000/28 (Part I).

Review Conference faded, the NWS ceased to treat these commitments as binding or important, except for the purposes of rhetoric at non-proliferation meetings. By 2010 the steps had been reduced and weakened further, collated as 'Action 5' in a 64-point action plan.

Laudable though such efforts have been, they have signally failed to change and reduce the value attached to nuclear weapons by the countries that have or want them. Five of these claim NPT justification for modernising and retaining their nuclear arsenals. Four of today's nuclear-armed states do not consider themselves to be bound by the NPT at all. They have become increasingly brought into (or targeted by) nuclear security initiatives promoted after 2001, but pay no attention to the ritualistic calls for them to join the NPT as NNWS. The NPT gives them a mechanism to avoid accepting any disarmament obligations, though India and Pakistan at times undertake bilateral confidence-building measures. The peace movements in these countries are weak or non-existent, in part because the governments have presented the current non-proliferation regime as imperialist and discriminatory.

This was the context in which humanitarian consequences were explicitly reintroduced into the NPT context in 2010: 'The Conference expresses its deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons and reaffirms the need for all States at all times to comply with applicable international law, including international humanitarian law'.

This paragraph took the political discourse firmly back to the original purpose of the NPT, as stated in its preamble: 'Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples'.

The current structure and politics of nuclear non-proliferation and arms control have done little to dent the value attached to nuclear weapons by those that have or desire them. On the contrary, even where there is recognition that such weapons of mass destruction are unusable in any rational military or security scenario, their holders claim that they must be retained because of their necessary political, deterrent and insurance value. The nuclear weapons game is theoretical and political. With over 100 billion dollars spent each year on nuclear weapons and infrastructure in the nine nuclear-armed states (and more by nuclear-dependent European states in NATO), nuclear weapons are sustained because they are thought to provide power projection and status for the 'haves'. The real drivers are not national security, no matter what the political rhetoric says, but defence lobbies and nationalists seeking status and position vis-à-vis other political parties and neighbours. Most importantly, it is time to recognise that nuclear weapons policies and arsenals have no role in furthering human or collective security.

#### FROM EXPLOSIVE BULLETS TO WEAPONS OF MASS SUFFERING

The humanitarian approach was successfully marshalled to ban explosive and 'dum dum' bullets, chemical and biological weapons, landmines and cluster munitions. The earliest agreements, such as the 1868 St Petersburg Declaration and the 1899 Hague Conventions, developed the concept of humanitarian principles for war.<sup>2</sup> For the first time it was acknowledged by some—though by

<sup>2</sup>Tim Caughley, 'Tracing notions about humanitarian consequences', in John Borrie and Tim Caughley (eds), *Viewing nuclear weapons through a humanitarian lens* (Geneva, 2013). Available at: <http://www.unidir.org/files/publications/pdfs/viewing-nuclear-weapons-through-a-humanitarian-lens-en-601.pdf> (6 June 2014).

no means all—that warring parties could not assume an ‘unlimited’ right to employ whatever methods or means of warfare they were capable of developing and deploying. Until the 1914–18 war, the British government, which at that time was the most dominant military and colonial power in the world, vehemently opposed the application of humanitarian concepts to warfare.

Weapons had been developed through the ages to increase the amount of killing and suffering that could be inflicted on ‘enemies’, as this was viewed as the best way to win wars, land and power. Military theorists from many traditions upheld the view that weapons that maimed were even more useful than weapons that ‘just’ killed, because injured soldiers placed additional burdens on military commanders and hampered the movement of their forces. Painful and often public torture and executions, from crucifixion to burning, hanging, drawing and disembowelling, were regarded not only as means of punishment and despatching military and political adversaries, but as useful tools of deterrence, social control and statecraft. In addition to incapacitating opponents, it was believed in many cultures that the prospect of excruciating pain and suffering was a more powerful deterrent than death itself. The prevailing assumption was that weapons won wars, and that the more frightening, painful and deadly a weapon could be, the better. Targeting civilians and razing cities to the ground were normalised means of undermining an adversary and winning a war, as illustrated by the 1939–45 war, the Vietnam War, and, more recently, the Iraq War. A trawl through history suggests such methods have been nowhere near as decisive as weapons developers and proponents like to claim.

When the St Petersburg Declaration questioned the legitimacy of the ‘use of arms, projectiles, and material of a nature to cause unnecessary suffering’, it began the transition away from the prevailing—and widely accepted—assumption that militaries and leaders can do whatever they want to project power and win wars. The horrors of the 1914–18 war convinced the leading nations to move even further away from the ‘gruesome is awesome’ military assumptions. The 1925 Geneva Protocols evoked the notion of a ‘civilised world’ in which means of warfare were not unlimited: ‘the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilised world’. This largely held for combatants when the 1939–45 war engulfed the world, but civilians were not so fortunate. Germany and Japan used biological and chemical weapons on civilian populations for the purposes of both experiment and extermination. In the 1960s, the United States deployed chemicals such as napalm and agent orange as defoliants in the Vietnam War. The appalling health and environmental impacts on civilians may have been unintended, but some war leaders also considered the terror and misery to be useful. As it turned out, the humanitarian impacts of these weapons appalled many people in America, and around the world, and prompted louder calls for biological and chemical weapons to be completely banned. The legacy of these toxic chemicals continues to exact a high humanitarian toll, especially through birth defects and physical and mental health impacts.

The 1972 Biological and Toxin Weapons Treaty (BTWC) was concluded as the Vietnam War ended. The Treaty’s preamble clearly highlighted its humanitarian driving force: ‘Convinced that such use would be repugnant to the conscience of mankind and that no effort should be spared to minimise this risk’. In the political context of the Cold War, it was deemed impossible to negotiate the complicated verification and oversight mechanisms that dominated US-Soviet arms control at the time. Yet all sides welcomed the BTWC as

an important treaty that would draw a prohibitory line in international law. Its security, normative and legal value has held, despite the fact that post-Cold War efforts to negotiate a multilateral verification protocol foundered due to opposition from certain dominant states, most notably the US administration of George W. Bush.

By the end of the 20th century, the 1993 Chemical Weapons Convention, 1996 Comprehensive Test Ban Treaty (CTBT) and 1997 Mine Ban Treaty were concluded in quick succession. The CWC combined humanitarian drivers banning use and deployment with negotiated arms control procedures to verify compliance and eliminate existing stockpiles. It referenced the Geneva Protocols and the BTWC and created a 'purpose criterion' with regard to dealing with dual use chemicals. It was a treaty of its time, embedding detailed technical and verification requirements for implementation.

The CTBT, which was finally negotiated during 1994–96, had been brought back to the political table by public and diplomatic initiatives that combined humanitarian, environmental and health arguments with pressure through the NPT review process. Regrettably, negative tactics employed by certain nuclear-armed states ensured that the consensus-based negotiations in the Conference on Disarmament thwarted the treaty advocated by the vast majority and delivered a problematic outcome in which a fundamentally good treaty cannot enter into full legal force despite being signed by 183 states, of which 162 have also ratified. By any assessment, this level of support should have brought the test ban into force. But instead, wheeling and dealing among a handful of nuclear armed and nuclear aspirant states created structural obstacles that have thwarted the hopes and intentions of the majority.<sup>3</sup> Nonetheless, this widely supported multilateral treaty has become well established normatively and legally, with an impressive global verification system and institutional participation in the CTBT organisation in Vienna, despite the fact that several nuclear-armed states have not yet signed and/or ratified.

Learning from these lessons, as the world emerged from the political strait jacket of the Cold War, a determined new partnership of civil society and governments from states of all sizes and all regions of the world, took on the companies and states that made and deployed anti-personnel landmines. Bypassing the consensus-based arms control fora that were dominated by the major armed states, the International Campaign to Ban Landmines (ICBL) successfully made the case that anti-personnel landmines should be banned and eliminated because of their unacceptable, indiscriminate and persistent humanitarian effects and consequences.<sup>4</sup> This successful campaign to ban landmines reframed and reinvigorated humanitarian disarmament approaches. It was followed 11 years later by the 2008 Cluster Munitions Convention.<sup>5</sup>

<sup>3</sup>Rebecca Johnson, *Unfinished business: the negotiation of the CTBT and the end of nuclear testing* (New York and Geneva, 2009). Available at: <http://www.unidir.org/files/publications/pdfs/unfinished-business-the-negotiation-of-the-ctbt-and-the-end-of-nuclear-testing-346.pdf> (6 June 2014).

<sup>4</sup>Richard Price, 'Reversing the gun sights: transnational civil society targets landmines', *International Organization* 53 (3) (1998), 613–44; and Maxwell A. Cameron, Robert J. Lawson and Brian W. Tomlin (eds), *To walk without fear: the global movement to Ban Landmines* (Toronto, 1998).

<sup>5</sup>John Borrie, *Unacceptable harm: a history of how the treaty to ban cluster munitions was won* (United Nations, 2009).

## WHAT DOES A HUMANITARIAN APPROACH BRING TO NUCLEAR DISARMAMENT?

Nuclear weapons still pose serious risks and threats for humanity, but that salient fact became subsumed by the self-promoted national interests of a handful of nuclear-armed states. Doctrines of 'extended deterrence' embedded policies and operations related to nuclear weapons dependency to states without nuclear weapons of their own in NATO and various bilateral arrangements between the United States and some Pacific allies, notably Japan, South Korea and Australia. These nuclear alliance arrangements muddied the NPT further, raising concerns that control over nuclear weapons could be transferred to non-nuclear-weapon parties to the treaty in time of war, and increasing the scepticism of NAM countries that had pushed unsuccessfully for legally binding security assurances for all non-nuclear-weapon parties to the NPT.

Though nuclear weapon prohibitions cover over half of the world, through nuclear-weapon-free zones covering the South Pacific, Latin America and the Caribbean, Africa, South-East Asia and Central Asia, the nuclear-dependent countries have hitherto dominated discussions of nuclear arms control and proliferation. As noted in Table 1 below, under traditional arms control, the weapons continued to carry security value. They became fetishised as instruments of great power and status, which further drove proliferation. Nuclear disarmament was framed as an idealistic 'vision' that would be too difficult to accomplish in the lifetime of US President Barack Obama. The nuclear-armed states evoked many theoretical, technical, legal, military and verification hurdles to justify their portrayal of disarmament as impossible. As Obama became president in 2008, the mainstream discourse shifted towards rhetoric about 'global zero' and a 'world free of nuclear weapons'; but in practice it was business as usual for the leaders, whether or not they subscribed to these slogans.

The most they wanted to focus on was Iran's nuclear programme, which might in the future be converted to manufacture a nuclear weapons capability, and bilateral US-Russian negotiations. The New START Treaty, in which President Obama invested so much political capital, codified, took further and provided verification to the SORT agreements President George W. Bush had put in place some years earlier, thereby bringing the US- and Russian-deployed strategic weapons to around 2,000 (while both continued to deploy shorter range theatre weapons and several thousand warheads in storage). These negotiations were carried out in conjunction with nuclear weapons modernisation programmes in many of the nuclear-armed states. Meanwhile, the Conference on Disarmament agreed a negotiating mandate for a limited 'fissile materials cut-off treaty' (FMCT) intended to codify and verify that the nuclear-armed states have halted plutonium and highly enriched uranium production for weapons purposes, but it has failed to make any progress since 1996. Even so, the P5 and various nuclear-dependent allies asserted that these tasks were the priority and could only be done in a patient step-by-step process. Yet, these represented only a small fraction of the 'thirteen steps' they themselves had negotiated and agreed to at the 2000 NPT Review Conference.

In both the Conference on Disarmament and the NPT, it appears, nothing can be practically achieved without the full agreement of all nine nuclear-armed states. In effect, therefore, the countries that wield the weapons are handed a veto with which they can block anything they don't like. This consensus-based paralysis is the reason why nuclear disarmament seems impossible. But if

multilateral negotiations are not tied to the dysfunctional CD and instead negotiated in other kinds of fora that can be made open to all but are blockable by none, proposals for negotiated steps to facilitate nuclear disarmament start to look more feasible.

Framed as a humanitarian imperative, the key actors change places. The negotiating power shifts to countries that put human needs and human security at the centre, instead of arms industry and militarist interests. The case for disarmament is then driven by governments that consider facts and evidence on the real, actual and foreseeable impacts and consequences of nuclear weapon use, doctrines and policies. Their right and responsibility to take legal and diplomatic action to ban and eliminate inhumane weapons stems from every government's responsibility to ensure the security of its own people. The imperative is strengthened for those that place high value on international and human security, and recognise a broader 'responsibility to protect' (R2P) and prevent disasters that would cause millions to suffer and die due to the political actions of their own governments or militaries. Though recently distorted by US and British leaders to justify military interventions in Iraq and Afghanistan, the concept of 'responsibility to protect' was meant to encourage collective international action involving early warning, preventive and proactive diplomatic and supportive actions aimed at preventing conflict and protecting civilians from abuses brought about by failed states and abusive leaders.

In the case of nuclear weapons, the humanitarian impacts of one or more detonations are predicted to go far beyond the recognised devastation, mass deaths and suffering of millions of people in targeted countries. Growing evidence demonstrates much broader, long-term consequences, including radioactive contamination and agricultural collapse across many regions, leading to global famine,<sup>6</sup> as well as incalculable economic and political impacts. Risks from accidents and miscalculation must also be factored in, as research indicates that there have been far more nuclear mistakes and near misses than governments and militaries have acknowledged.<sup>7</sup> These dangers need to be taken seriously, though not as a justification for military action to remove nuclear weapons from the nuclear-armed countries, even if that were possible. Instead, they provide a justification and imperative for concerted legal, political and diplomatic action to create conditions that will enable and pressurise them to see that it is in their own national and security interests to undertake nuclear disarmament unilaterally and/or plurilaterally.<sup>8</sup>

<sup>6</sup>Ira Helfand, *Nuclear famine: two billion people at risk* (Boston, 2014).

<sup>7</sup>See, for example, Eric Schlosser, *Command and control* (New York, 2013); Patricia Lewis, Heather Williams, Benoît Pelopidas and Sasan Aghlani, *Too close for comfort: cases of near nuclear use and options for policy* (London, 2014); Rebecca Johnson, *Unacceptable risks: UK-relevant reports on the humanitarian consequences of nuclear weapons* (London, 2013); Richard Moyes, Philip Webber and Greg Crowther, *Humanitarian consequences: short case study of the direct humanitarian impacts from a single nuclear weapon detonation on Manchester, UK* (London, 2013); Frank Boulton, *Blood transfusion services in the wake of the humanitarian and health crisis following multiple detonations of nuclear weapons* (London, 2013); John Large, *The lay-person's alternative guide to REPPIR relating to the atomic weapons establishment (AWE) Aldermaston and Burghfield* (Reading, 2012); John Ainslie, *If Britain fired trident: the humanitarian catastrophe that one Trident-armed UK nuclear submarine could cause if used against Moscow* (Glasgow and Edinburgh, 2013); Philip Webber, *The climatic impacts and humanitarian problems from the use of the UK's nuclear weapons* (Manchester, 2013, revised edn 2008). These reports are all available at the ICAN-UK and Acronym Institute websites.

<sup>8</sup>Rebecca Johnson, 'Perspectives on the necessary framework to achieve and maintain a nuclear weapons free world', presentation to the United Nations Open-Ended Working Group on Nuclear Disarmament, Palais des Nations, Geneva, 21 May 2013, available at the UN and Acronym Institute: <http://www.acronym.org.uk/articles-and-analyses/perspectives-necessary-framework-achieve-and-maintain-nuclear-weapons-free-world> (6 June 2014).



The nations taking the lead in humanitarian disarmament are those that recognise and value the needs and security interests of current and potential victims throughout the world. In some cases these countries had to take tough decisions to renounce their own involvement in these weapons. Many others had already taken national decisions not to make, deploy or use such weapons. Renouncing the weapons does not disqualify these states from leading diplomatic action to get treaties or other legal regimes to ban and eliminate inhumane weapons. Legislators, lawyers, police and judges are not normally disqualified from developing, administering and implementing laws to prohibit murder just because they themselves abide by laws and do not themselves engage in amassing murder weapons. Though the nuclear-armed states continue to assert that they are the only important actors in nuclear disarmament, humanitarian approaches make it a moral, political and legal advantage that the NNWS are already abiding by treaty obligations not to proliferate. In banning anti-personnel landmines and cluster munitions, the humanitarian disarmament coalitions recognised but refused to prioritise or privilege the military and industrial interests of producers and countries that make, deploy and use inhumane weapons. Applying that to nuclear weapons will not be easy, but it will be necessary. The NPT text and subsequent review conference documents have made it clear that creating the conditions for disarmament are a responsibility on all states, whether nuclear-armed or not.

#### *Taking humanitarian initiatives forward for nuclear disarmament*

In March 2013, 127 governments met in Norway to discuss the humanitarian impacts of nuclear weapons. After hearing from humanitarian agencies such as the Red Cross, experts on radiation, medical and large scale emergency response and management, the chair of the 2013 Oslo Conference, Norway's foreign minister Espen Barth Eide, concluded:

- It is unlikely that any state or international body could address the immediate humanitarian emergency caused by a nuclear weapon detonation in an adequate manner and provide sufficient assistance to those affected. Moreover, it might not be possible to establish such capacities, even if it were attempted.
- The historical experience of the use and testing of nuclear weapons has demonstrated their devastating immediate and long-term effects. While political circumstances have changed, the destructive potential of nuclear weapons remains.
- The effects of a nuclear weapon detonation, irrespective of cause, will not be constrained by national borders, and will affect states and people in significant ways, regionally as well as globally.<sup>9</sup>

All governments had received invitations, whether or not they are party to the NPT. Among the nuclear-armed states, only India and Pakistan attended. The 'P5' nuclear armed states that are permanent members of the UN Security Council dithered before deciding on a joint boycott of the Oslo Conference. Israel and North Korea also failed to attend.

During 2013, 80 states party to the NPT co-sponsored a South-African-led humanitarian statement on nuclear weapons at the Second Preparatory Committee meeting (PrepCom) in Geneva. By October, a similar statement

<sup>9</sup>Espen Barth Eide, chair's summary, Oslo Conference on the Humanitarian Impact of Nuclear Weapons, 5 March 2013.

led by New Zealand garnered 125 co-sponsors at the UN First Committee. In February 2014, on the anniversary of the signing of the 1967 Tlatelolco Treaty, Mexico hosted the Second International Conference on the 'Humanitarian Impacts of Nuclear Weapons in Nayarit'. It was attended by 146 governments, and over 100 civil society representatives from all over the world.

After strong opening statements from the Mexican foreign minister, Dr José Antonio Meade Kuribreña, and the Red Cross vice-president Christine Beerli, the Nayarit Conference heard moving testimonies from Hiroshima and Nagasaki 'Hibakusha' (the name given to atomic bomb survivors). As well as survivors who had been children when their homes and schools were incinerated in 1945, the Nayarit Conference heard from a young student who spoke of the third generation consequences she and her family have suffered because of the radiation damage and social stigma inflicted on her Hibakusha grandmother. A senator from the Marshall Islands spoke from the floor, giving powerful testimony about the continuing and appalling health, environmental and long term effects on his Pacific nation following US testing in the 1950s.

Government representatives from Kazakhstan, Belarus and Ukraine reminded the conference of the birth defects and tragedies their populations suffered from Soviet nuclear testing, production and the massive accidental explosion at the Chernobyl nuclear power plant in 1986. Further panels went into greater depth on the climate effects of nuclear detonations, which could result in agricultural disruption and global famine. There were presentations on 'near-nuclear uses' from Chatham House, and risks and problems affecting safety, command and control procedures in existing arsenals from the author of *Command and control*, Eric Schlosser.<sup>10</sup> Former US military officer Bruce Blair talked about the dangers inherent in nuclear operations, with anecdotes of how he and others were trained to fire 50 'Minuteman' nuclear missiles within 60 seconds. Their training was designed to ensure they would focus only on how fast they could physically fire the weapons without pausing to think about the consequences or question the data or instructions they received with any order to fire.

Drawing together the conclusions of the Conference, Mexico's vice minister for multilateral affairs and human rights, Juan-Manuel Gómez Robledo, referred to the overwhelming evidence that the effects of nuclear detonations could not be constrained by national borders, and human suffering would be 'widespread, the poor and vulnerable being the most severely affected'. From the presentations by experts and from the floor, he concluded: 'Beyond the immediate death and destruction caused by a detonation, socio-economic development will be hampered and the environment will be damaged'. He noted that it would not be possible to establish effective national or international capacities to 'address or provide the short and long term humanitarian assistance and protection needed in case of a nuclear weapon explosion'. Therefore, he concluded, the risks and threats from nuclear weapons would affect everyone, making this an 'issue of deep concern shared by all'. Responding to questions from participants, Gómez Robledo called on governments to recognise that the humanitarian approach, implementation of the NPT, and steps such as entry into force of the Comprehensive Test Ban Treaty, are 'mutually reinforcing processes'. Paying tribute to the important role of civil society, Mexico endorsed the arguments from history which showed that 'in the past, weapons have been eliminated after they have been outlawed'. The chair's

<sup>10</sup>Schlosser, *Command and control*; Lewis, et al., *Too close for comfort*.

summary concluded: 'The broad-based and comprehensive discussions on the humanitarian impact of nuclear weapons should lead to the commitment of States and civil society to reach new international standards and norms, through a legally binding instrument...Nayarit is a point of no return'.<sup>11</sup>

On the first day of the Nayarit Conference, Austria's foreign minister Sebastian Kurz announced his intention to host the third conference on the humanitarian consequences of nuclear weapons. Underscoring that 'reliance on nuclear weapons is an outdated approach to security', Kurz said that 'Nuclear weapons are not only a permanent threat to all humankind but also a relic of the Cold War that we must finally overcome'.<sup>12</sup> The date for the Vienna Conference has now been confirmed as 8/9 December 2014, with South Africa lining up to host a further conference after the NPT Review Conference, which will take place over May 2015.

As Table 1 graphically depicts, there are some significant differences between the status quo arms control approach and the developing humanitarian approach now being applied to nuclear weapons. Ireland played a key role in putting the NPT on the international agenda in the 1960s, and again from 1998 to 2000 in bringing governments together around a New Agenda. This agreement resulted in the adoption of important commitments and steps, which the nuclear-armed states have failed to honour. The challenge for governments and civil society now is to choose the most effective actions, arguments and approaches to accelerate nuclear disarmament. As history shows, and the chair of the Nayarit Conference emphasised, in the real world, weapons have been eliminated after they have been outlawed. In that case, the next step needs to be negotiations on a universally applicable nuclear ban to reinforce and clarify disarmament obligations. This is necessary in order to change the legal and political context within which the current nuclear-armed states and future proliferators calculate the security and practical interests and benefits of disarmament over nuclear weapons possession and modernisation.

<sup>11</sup>Second Conference on the Humanitarian Impact of Nuclear Weapons, Chair's Summary, 14 February 2014, available from the Ministry of Foreign Affairs, Mexico.

<sup>12</sup>Sebastian Kurz, 'Paradigm shift in nuclear disarmament is overdue', press release from the Austrian Ministry of Foreign Affairs, 13 February 2014. Available at: <http://www.bmeia.gv.at/en/foreign-ministry/news/press-releases/2014/kurz-paradigmenwechsel-bei-der-nuklearen-abruestung-ist-ueberfaellig.html> (5 June 2014).

**Table 1. The opposing approaches to arms control and non-proliferation**

<b>Arms control and non-proliferation premises and approaches</b>	<b>Humanitarian disarmament premises and new approaches to tackle nuclear weapons</b>
Proliferation is bad but can be managed	Proliferation is bad and isn't being safely managed
Proliferation is best stemmed by tightening nuclear security procedures and controls on the non-nuclear-weapon states	Stemming proliferation also requires halting the acquisition, modernisation and spread of nuclear weapons and stigmatising nuclear as well as other WMD as unusable and inhumane
Status quo possession is stabilising, and proliferation is not affected by the actions and policies of recognised nuclear-weapon states	The high value accorded to possessing nuclear weapons is a salient proliferation driver
Nuclear weapons have to be greatly reduced and eliminated before there can be any question of prohibiting them	A nuclear ban treaty will change the legal and political context to prevent proliferation and pressure and enable the nuclear-armed states to accelerate the total elimination of their arsenals
Nuclear weapons are essential for deterrence but cause insecurity if in the 'wrong' hands	Nuclear deterrence rests on a belief system that causes insecurity in others
Nuclear weapons are by definition deterrents	Deterrence is not a property or attribute of a weapon, but a complex, multifaceted relationship and process among potential adversaries, requiring accurate and effective communications and interpretations of information, intentions and cultural implications
Nuclear deterrence requires doctrines and operations for use and deployment, including scenarios and operations that demonstrate a readiness to fire and an ability to deliver 'unacceptable loss'. These operations create greater humanitarian threats, risks and instabilities than other deterrence tools	The role of nuclear weapons in deterrence is questionable, unproven and unprovable. Threatening 'unacceptable loss' is inhumane and won't deter non-state or many state adversaries. Other states' actions and intentions may be miscalculated or misinterpreted
Nuclear deterrence ensures that responsible states can extend security to their allies and have freedom of action where necessary	The illusions of deterrence lead nuclear-armed states to take more risks and think they can project regional or international power ('punch above their weight'). This is dangerous and destabilising
Nuclear deterrence is necessary for 'us' and must be maintained (but may be possible to do with lower numbers)	Nuclear weapons are not necessary for deterrence, which is determined by factors other than the number or size of nuclear weapons a country possesses
Nuclear deterrence is not necessary for non-nuclear countries, unless they are in alliance with nuclear-armed states	If nuclear deterrence worked as theorised, every state should have the right to use nuclear weapons of their own. That would of course be a recipe for insecurity and humanitarian disaster

Table 1 (cont.)

Arms control and non-proliferation premises and approaches	Humanitarian disarmament premises and new approaches to tackle nuclear weapons
It is not necessary to consider the consequences of nuclear detonations because nuclear deterrence will ensure that these nuclear weapons won't be used	When nuclear deterrence fails, there will be high risks of nuclear weapon use, with catastrophic humanitarian consequences
Regional nuclear-weapons-free zones (NWFZ) and incremental steps have to be taken first	Regional and international nuclear problems are interconnected, and international initiatives to ban nuclear weapons will reinforce and accelerate strategies to conclude further NWFZ
The NPT is the cornerstone of the non-proliferation regime and is okay as long as we keep talking about disarmament and universality	As a cornerstone dating back to the 1960s, the NPT needs to be built on with new treaties and agreements in order to achieve nuclear disarmament and create a non-discriminatory and universally effective regime to prohibit and eliminate nuclear weapons
Working towards a nuclear weapons ban or comprehensive nuclear weapons convention could undermine and distract from the NPT	Working towards and achieving a nuclear ban treaty will help to fulfil the aims and objectives enshrined in the NPT, just as the 1996 Comprehensive Test Ban Treaty (CTBT) reinforced and fulfilled the 1963 Partial Test Ban Treaty (PTBT)
The P5 assert that reducing the numbers of the largest arsenals and maintaining less expensive nuclear arsenals for the foreseeable future are consistent with their NPT obligations	Nuclear weapons modernisation is not consistent with disarmament. A treaty that bans use, deployment, production and stockpiling of nuclear weapons for all nuclear-armed states and requires their total elimination will be consistent with the NPT, but engage states outside the NPT
Nuclear weapons have to be greatly reduced and eliminated before there can be any question of prohibiting them with a treaty	A nuclear ban treaty will change the legal and political context and push the nuclear-armed states to accelerate the total elimination of their arsenals
Nuclear weapons and disarmament questions are a primary national security interest for the states that have them	Nuclear weapons are a major human and global security issue, and nuclear disarmament is everyone's responsibility and in everyone's interests
The priority is to maintain national security and strategic stability, especially among nuclear-armed states, and projecting security with nuclear weapons	The priority is to promote human security, create more sustainable national, regional and international security without nuclear weapons for everyone, and prevent harm to potential victims, including preventing catastrophic humanitarian consequences if nuclear weapons are detonated

*Table 1 (cont.)*

<b>Arms control and non-proliferation premises and approaches</b>	<b>Humanitarian disarmament premises and new approaches to tackle nuclear weapons</b>
The most important actors are the nuclear-weapon states and their military and technical experts	The non-nuclear-weapon states must take more responsibility to initiate, lead and drive a humanitarian disarmament process with humanitarian agencies and NGOs and all sectors of civil society
The nuclear-weapon states must determine the pace and steps for nuclear disarmament	Because of vested interests, the nuclear-armed states will fail to disarm without leadership from key nuclear-free states to ban nuclear weapons
Nuclear disarmament is impossible unless and until all nuclear-armed states are fully on board	Even if the nuclear-armed states reject a multilateral nuclear ban treaty to begin with, it will change their policies and behaviour, making it much harder to keep modernising and perpetuating nuclear arsenals