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# THE STORY SO FAR

## The humanitarian initiative on the impacts of nuclear weapons

By Dr Nick Ritchie  
ILPI-UNIDIR Vienna Conference Series

Paper N° 1 of 6  
🐦 #HINW14vienna

- Decisive multilateral progress toward a nuclear-weapon-free world led by the nuclear-armed states has not been forthcoming since the end of the cold war, as many once expected.
- Some non-nuclear-armed states have responded by reframing nuclear disarmament debate in terms of the unacceptable humanitarian consequences of the use of nuclear weapons, and this perspective has gathered broad political support and momentum.
- The Vienna conference provides an important opportunity ahead of the 2015 Nuclear Non-proliferation Treaty (NPT) Review Conference to begin to consider potential diplomatic responses to the indiscriminate and catastrophic effects of nuclear violence.

## Introduction

Nuclear weapons are the most destructive technology ever created.<sup>1</sup> A conflict fought using nuclear weapons today would cause inescapable and unacceptable devastation and human suffering. Nuclear weapons represent a magnitude of destruction that is very difficult to imagine; a scale of violence that most people struggle to rationalize.

In 1968 the international community signed the NPT to halt the spread of nuclear weapons and kick-start the process of nuclear disarmament. The NPT's starting point is 'the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every ef-

fort to avert the danger of such a war'.<sup>4</sup> During the cold war the United States and Soviet Union made progress in slowing the nuclear arms race, and after it ended a significant opportunity emerged to rethink the role of nuclear weapons in international politics. The NPT's five nuclear-weapon states (China, France, the Russian Federation, the United Kingdom, and the United States) committed themselves to:

- The 'Principles and Objectives for Nuclear Non-Proliferation and Disarmament' agreed at the 1995 NPT Review and Extension Conference.
- The 'Practical steps for the systematic and progressive efforts to implement Article VI of the

Treaty’—the ‘13 steps’—negotiated at the 2000 NPT Review Conference.

- The 64-point ‘Action Plan’ negotiated at the 2010 NPT Review Conference.

Many states are now deeply concerned at the glacial pace of nuclear disarmament under the NPT and the value that nuclear-armed states continue to place on their nuclear weapons 25 years after the end of the cold war. They argue that the nuclear-weapon states have failed to meet their commitment to pursue ‘negotiations in good

faith’ on nuclear disarmament made in 1968 and reaffirmed in 1995, and their ‘unequivocal undertaking’ to eliminate nuclear weapons leading to nuclear disarmament made in 2000 and reiterated in 2010.<sup>5</sup> There is attendant concern that the NPT will never deliver nuclear disarmament and that the nuclear-weapon states view their possession of nuclear weapons as permanent, with all of the continued risks of inadvertent or deliberate use this entails. This concern has steadily raised a vital question: what can non-nuclear-weapon states collectively do to address the risk of catastrophic nuclear violence?

## The emergence of a humanitarian initiative

Encouragingly, the 2010 NPT Review Conference saw the emergence of a broad group of states determined to place the humanitarian impact of nuclear weapons on its agenda. They wanted to shift the debate in the NPT on nuclear disarmament away from ideas of nuclear deterrence and strategic stability and towards the unacceptable humanitarian consequences of nuclear violence. Their success was reflected in the meeting’s Final Document that noted for the first time ‘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.’<sup>6</sup> This was a very significant development and the focus on the humanitarian impact of nuclear violence has since gathered increasingly widespread political and popular support in the form of a so-called ‘humanitarian initiative’ of states, international organizations and civil society actors.

Notable developments relevant to the humanitarian initiative include:

- A ‘Joint statement on the humanitarian dimension of nuclear disarmament’ delivered at the 2012 NPT Preparatory Committee meeting by Switzerland with 16 signatories.<sup>7</sup>
- A further joint statement by Switzerland at the United Nations General Assembly First Committee in October 2012 with 34 signatories.<sup>8</sup>
- In 2012, the International Red Cross and Red Crescent Movement called on all states to ensure that nuclear weapons are never used again, and to pursue treaty negotiations to prohibit and eliminate them.<sup>9</sup> This followed adoption of a resolution by the Movement’s Council of Delegates in November 2011 on the incalculable human suffering resulting from any use of nuclear weapons and the incompatibility of their use with

BOX 1

### SOME OF THE IMPACTS OF NUCLEAR WEAPONS ON HUMANITY

The two bombs dropped on Hiroshima and Nagasaki in August 1945 exploded with an estimated yield of approximately 14 and 20 kilotons (kt) respectively and between them killed around 200,000 people. Detonation of a single modern nuclear warhead over a city would completely overwhelm the health services of even a developed country. An attack with multiple weapons would cause tremendous loss of life and disrupt a country’s entire economic and social infrastructure. The immediate destruction caused by the initial blast, heat flash, and radiation effects of one or two British or United States 100kt Trident nuclear warheads could kill hundreds of thousands of people.<sup>2</sup>

The incendiary effects of such a nuclear blast would also be devastating. In Hiroshima, a tremendous firestorm developed within 20 minutes after detonation. Peer-reviewed studies indicate that a nuclear conflict involving the use of 100 Hiroshima-sized nuclear weapons would have a catastrophic impact on the global climate caused by the tremendous amount of smoke released into the atmosphere. Sophisticated climate models predict a precipitous drop in temperatures, which could result in substantially reduced staple crop yields, extensive ozone depletion, and famine on a global scale, particularly for those people near or below the poverty line.<sup>3</sup>



The final session of the Second Conference on the Humanitarian Impact of Nuclear Weapons, Nayarit, Mexico, 13-14 February 2014 (Photo: T. G. Hugo / ILPI).

international humanitarian law applicable in armed conflict.<sup>10</sup>

- A ground-breaking conference on the humanitarian impact of nuclear weapons in Oslo in March 2013 hosted by the Norwegian government that attracted 128 countries as well as several United Nations organisations and the International Red Cross and Red Crescent Movement.
- A joint statement delivered by South Africa with 80 state signatories at the April 2013 NPT Preparatory Committee meeting.<sup>11</sup>
- Discussion of the humanitarian initiative in the United Nations Open-Ended Working Group on multilateral nuclear disarmament final report in September 2013.<sup>12</sup>
- Discussion of the humanitarian initiative at the United Nations General Assembly's High Level Meeting on Nuclear Disarmament in September 2013.<sup>13</sup>
- A further 'Joint statement on the humanitarian impact of nuclear weapons' delivered by New Zealand at the General Assembly's First

Committee in October 2013 sponsored by 125 countries.<sup>14</sup>

- A further resolution by the Council of Delegates of the International Red Cross and Red Crescent Movement, which in November 2013 adopted a four-year action plan towards the elimination of nuclear weapons.<sup>15</sup>
- A 'Buenos Aires Declaration on Nuclear Disarmament' signed by the Community of Latin American and Caribbean States (CELAC) in January 2014 that expressed their 'greatest concern at the humanitarian impact of vast proportions and global effects of any accidental or intentional nuclear detonation.' The CELAC Declaration called upon the international community to 'reiterate its concern on the humanitarian consequences of nuclear weapons whenever the debate on this type of weapon takes place.'<sup>16</sup>
- A second conference on 'The Humanitarian Impact of Nuclear Weapons' hosted by the Mexican government in Nayarit in February 2014 attended by 146 states. (Juan Gomez Robledo, chair of the Mexico conference on the

humanitarian impact of nuclear weapons and Deputy Foreign Minister for multilateral affairs and human rights, stated ‘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 [...] the Nayarit Conference has shown that time has come to initiate a diplomatic process conducive to this goal.’<sup>17)</sup>

- The humanitarian consequences of nuclear conflict and compliance with international humanitarian law applicable in armed conflict were explicitly referenced in the 2014 NPT Preparatory Committee meeting Chair’s concluding recommendations to the 2015 NPT Review Conference.<sup>18)</sup>
- A call in May 2014 by the International Trade Union Confederation World Congress (with over 200 million members) for a treaty to ban nuclear weapons.<sup>19)</sup>
- A call in July 2014 by the World Council of Churches for its global membership ‘to join inter-governmental initiatives, and affirm civil society endeavours, to ban the production, deployment, transfer and use of nuclear weapons in accordance with international humanitarian law and in fulfilment of existing international obligations’.<sup>20)</sup>
- A ‘Joint Statement on the Humanitarian Consequences of Nuclear Weapons’ delivered by New Zealand at the General Assembly’s First Committee in October 2014 sponsored by 155 countries.<sup>21)</sup>
- Calls by the Nigerian delegation to the General Assembly’s First Committee on behalf of the Africa Group for ‘a legally binding instrument to prohibit nuclear weapons’ and by the Republic of Trinidad and Tobago on behalf of the Caribbean Community (CARICOM) to ‘begin deliberations on measures geared toward the banning of nuclear weapons’.<sup>22)</sup>
- A third conference on ‘The Humanitarian Impact of Nuclear Weapons’ hosted by Austria in Vienna in December 2014.<sup>23)</sup>

The growing humanitarian initiative has prompted strong reactions from the NPT nuclear-weapon states. These states have argued that specific focus on the humanitarian impact (and, by extension, the acceptability) of nuclear weapons is wilfully idealistic, distracts from their preferred ‘step-by-step’ approach to nuclear disarmament, and therefore undermines the NPT.<sup>24)</sup> In fact, the opposite is true: the initiative emerged in response to the disarmament malaise, particularly in the NPT, and has been framed as a means of revitalizing debate and action on the NPT’s vital disarmament pillar, among its potential benefits.

## Looking ahead

The humanitarian initiative has significantly increased general awareness about the catastrophic humanitarian impacts of nuclear weapon use in populated areas, and the Vienna Conference will add to this.

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As diplomatic attention turns to what happens beyond the Vienna Conference, and to the challenges of achieving a successful 2015 NPT review meeting, a number of states and civil society organisations have begun to think about the political implications of the unacceptable humanitarian consequences of the use of nuclear weapons. They are asking what can and should be done with the new knowledge and political momentum generated by the focus on humanitarian effects in terms of reducing the risks of unacceptable nuclear violence.

A milestone paper by the New Agenda Coalition (NAC) delivered by Ireland at the April 2014 NPT Preparatory Committee meeting set out a number of options for realizing progress on fulfilment

of Article VI of the NPT on nuclear disarmament. These options included a treaty banning nuclear weapons, a Nuclear Weapons Convention, a ‘framework’ arrangement, or a ‘hybrid’ arrangement for nuclear disarmament. The NAC paper provides a useful basis for states both within the NPT and the humanitarian initiative to consider collective action on next steps for progress towards nuclear disarmament.<sup>25</sup>

The International Campaign to Abolish Nuclear Weapons (ICAN), a coalition of more than 300 civil society groups now active in more than 80 countries, has called for states to commence negotiations on a treaty banning nuclear weapons.<sup>26</sup> ICAN and others argue a new legally-binding instrument to ban nuclear weapons is now required in the same way that chemical and biological weapons, as well as a range of conventional weapons, are subject to legal prohibitions, and is a realistic political and normative objective for states to pursue.<sup>27</sup>

In any discussion on how to move forward on addressing the humanitarian risks and impacts of nuclear weapons, the following points are relevant:

1. The risk that an armed conflict will collapse into nuclear violence by accident, miscalculation or deliberate choice cannot be eliminated as long as the weapons exist. The current system of nuclear relations is not stable or static but dynamic and evolving. It is a system in which things can and do go wrong (see the third paper in this series<sup>28</sup>). The practice of nuclear deterrence is far from perfect even if it sounds appealing or coherent in theory.<sup>29</sup>
2. Without serious action on nuclear disarmament human society probably faces a future of more nuclear-armed or near-nuclear-armed states. This would be a world in which multiple forms of insecurity—from the effects of climate change, socio-economic inequality, resource scarcity, nationalism and exclusivist ideologies—generate conflicts

## BOX 2

### SUGGESTED READING

- R. Acheson, Banning nuclear weapons: an effective measure for disarmament, *Reaching Critical Will*, October 2014.
- R. Acheson, T. Nash, and R. Moyes, A treaty banning nuclear weapons: developing a legal framework for the prohibition and elimination of nuclear weapons, *Reaching Critical Will and Article 36*, May 2014.
- R. Acheson (ed), *Assuring destruction forever: nuclear weapons modernization around the world*, *Reaching Critical Will*, 2014.
- Article 36, *Humanitarian consequences: a short case study on the direct humanitarian impacts from a single nuclear detonation on Manchester, UK*, February 2013.
- J. Borrie, and T. Caughley, *An illusion of safety: challenges of nuclear weapon detonations for United Nations humanitarian coordination and response* (Geneva: UNIDIR, 2014).
- J. Borrie, ‘Humanitarian reframing of nuclear weapons and the logic of a ban’, *International Affairs*, 90: 3, 2014.
- J. Borrie, and T. Caughley (eds), *Viewing nuclear weapons through a humanitarian lens*, UNIDIR, 2013.
- J.E. Doyle, ‘Why eliminate nuclear weapons?’, *Survival*, 50: 1, 2013.
- S. Lothe Eide, ‘A ban on nuclear weapons? What’s in it for NATO?’, *Nuclear Weapons Project Policy Paper No. 5*, *International Law and Policy Institute*, January 2014.
- B. Fihn (ed), *Unspeakable suffering: the humanitarian impact of nuclear weapons*, *Reaching Critical Will*, February 2013.
- I. Helfand, *Nuclear famine: two billion people at risk*, 2nd ed., *International Physicians for the Prevention of Nuclear War and Physicians for Social Responsibility*, 2013.
- P. Lewis, H. Williams, S. Aghlani, and B. Pelopidas, *Too close for comfort: cases of near nuclear use and options for policy*, Chatham House, 2014.
- P. Lewis, ‘A new approach to nuclear disarmament: learning from international humanitarian law success’, *International Commission on Nuclear Nonproliferation and Disarmament*, Paper No. 13, January 2009.
- N. Ritchie, ‘Waiting for Kant: devaluing and delegitimising nuclear weapons’, *International Affairs*, 90: 3, 2014.

involving nuclear-armed states, unsecured stockpiles of fissile material and a range of armed non-state actors. This will exacerbate the prospect of the use of nuclear weapons and the breakdown of global nuclear governance. From this standpoint, significant progress toward a world free of nuclear weapons seems the only sustainable means of managing the risk of nuclear violence.

3. The international community and United Nations humanitarian coordination and response infrastructure is not equipped to respond to the use of nuclear weapons in a conflict in an adequate manner.<sup>30</sup> The humanitarian impact would be devastating and the long-term climactic consequences could be severe.<sup>31</sup>
4. The nuclear-armed states are reluctant to lead on nuclear disarmament. They convey the appearance of remaining committed to the possession of nuclear weapons and the doctrine of nuclear deterrence for the long term. The very expensive modernization of nuclear weapon

systems and recapitalization of warhead production facilities bear witness to this. A nuclear disarmament agenda rooted in a glacial nuclear force reductions process governed by the NPT nuclear-weapon states is insufficient to discharge the obligation under the NPT to negotiate effective measures on nuclear disarmament.

5. Non-nuclear-weapon states have an opportunity to collectively reframe the debate on how humanity deals with the question of nuclear violence by focusing on the basic principles of human rights and wrongs to question the legitimacy of nuclear weapons as acceptable instruments of statecraft.
6. The purpose of reframing the nuclear disarmament debate in humanitarian terms is not to replace or side-line the NPT but to realize the commitment to nuclear disarmament set out in the treaty's Article VI by moving beyond entrenched divisions in NPT politics.

## Conclusion

The convening of the Vienna conference represents a further milestone in the re-emergence of international concern about the humanitarian consequences of the use of nuclear weapons. It seems certain to put these humanitarian consequences and potential diplomatic responses firmly on the agenda of the 2015 NPT Review Conference, which will take place a few months before the 70th anniversary of the nuclear bombing of

Hiroshima and Nagasaki. In view of these developments, 2015 would be a fitting (and poignant) year for the international community of nuclear- and non-nuclear-armed states to demonstrate its resolve in tackling the continued threat nuclear weapons pose to humanity.

## Endnotes

- 1 This briefing draws on work published elsewhere in N. Ritchie, 'Valuing and devaluing nuclear weapons', *Contemporary Security Policy*, vol. 34 no. 1, 2013, pp. 146-73, and 'Legitimizing and delegitimizing nuclear weapons' in J. Borrie, and T. Caughley, (eds.) *Viewing Nuclear Weapons Through a Humanitarian Lens*, UNIDIR, 2013.
- 2 FM 8-9: *NATO Handbook on the Medical Aspects of NBC Defensive Operations AMedP-6*, Department of the United States Army, Navy and Air Force, February 1996, chapter 3, 'Effects of Nuclear Explosions'.
- 3 A. Robock and O.B. Toon, 'Local nuclear war, global suffering', *Scientific American*, no. 302, 2009, pp. 74-81.
- 4 'Preamble', *Treaty on the Non-Proliferation of Nuclear Weapons*, 1968: <http://www.un.org/en/conf/npt/2005/npttreaty.html>.
- 5 'Nuclear Disarmament', Working Paper submitted by Ireland on behalf of the New Agenda Coalition (Brazil, Egypt, Ireland, Mexico, New Zealand and South Africa), NPT Preparatory Committee, document NPT/CONF.2015/PC.III/WP.25, 17 April 2014, p. 5.

- 6 2010 NPT Final document (Volume 1), document NPT/CONF.2010/50 (Vol. I), p. 19.
- 7 'Joint statement on the humanitarian dimension of nuclear disarmament', 1st NPT Preparatory Committee, 2 May 2012.
- 8 'Joint statement on the humanitarian dimension of nuclear disarmament' by Algeria, Argentina, Austria, Bangladesh, Belarus, Brazil, Chile, Colombia, Costa Rica, Denmark, Ecuador, Egypt, Iceland, Indonesia, Ireland, Kazakhstan, Liechtenstein, Malaysia, Malta, Marshall Islands, Mexico, New Zealand, Nigeria, Norway, Peru, the Philippines, Samoa, Sierra Leone, South Africa, Swaziland, Thailand, Uruguay, Zambia, and Switzerland, as well as the Observer State Holy See, 67th Session of United Nations General Assembly First Committee, 22 October 2012.
- 9 Statement of the International Committee of the Red Cross at the First Committee of the 67th United Nations General Assembly, 16 October 2012.
- 10 'Working towards the elimination of nuclear weapons', Draft Resolution and Background Document adopted by Council of Delegates of The International Red Cross and Red Crescent Movement, 26 November 2011.
- 11 'Joint statement on the humanitarian impact of nuclear weapons', 2nd NPT Preparatory Committee, 24 April 2013.
- 12 'Report of the Open-ended Working Group to develop proposals to take forward multilateral nuclear disarmament negotiations for the achievement and maintenance of a world without nuclear weapons', United Nations General Assembly, document A/AC.281/2, 3 September 2013.
- 13 United Nations General Assembly, 'Summary of the high-level meeting of the General Assembly on nuclear disarmament', document A/68/563, 30 October 2013.
- 14 New Zealand, 'Joint statement on the humanitarian impact of nuclear weapons', United Nations General Assembly, 21 October 2013.
- 15 'Working towards the elimination of nuclear weapons', Resolution 1 adopted by Council of Delegates of The International Red Cross and Red Crescent Movement, 17-18 November 2013.
- 16 Buenos Aires Declaration on Nuclear Disarmament, Community of Latin American and Caribbean States, 20 August 2013: <http://www.wagingpeace.org/buenos-aires-declaration-on-nuclear-disarmament/>.
- 17 Mexico, 'Chair's summary', Second Conference on the Humanitarian Impact of Nuclear Weapons, 14 February 2014: <http://www.sre.gob.mx/en/images/stories/cih/ci.pdf>.
- 18 'Draft recommendations to the 2015 NPT Review Conference', 3rd NPT, Preparatory Committee, document NPT/CONF.2015/PC.III/CRP.7, 7 May 2014.
- 19 ITUC, 'Building Workers Power—World Congress Statement', May 2014, p. 10: <http://congress2014.ituc-csi.org/IMG/pdf/ituc-3co-e-5-congressstatement-en-210x297-01-140819.pdf>.
- 20 World Council of Churches, 'Statement towards a nuclear-free world', 7 July 2014: <http://www.oikoumene.org/en/resources/documents/central-committee/geneva-2014/statement-towards-a-nuclear-free-world>.
- 21 New Zealand, 'Joint statement on the humanitarian impact of nuclear weapons', United Nations General Assembly, 20 October 2014.
- 22 Nigeria, 'Statement on behalf of the African Group', and Republic of Trinidad and Tobago, 'Statement on behalf of the Caribbean Community (CARICOM)', both delivered to the United Nations General Assembly on 7 October 2014.
- 23 Mexico 'Chair's summary', 14 February 2014.
- 24 J. Borrie and T. Caughley (eds), *Viewing Nuclear Weapons through a Humanitarian Lens*, UNIDIR, 2013, pp. 97-100.
- 25 New Agenda Working Paper, 2 April 2014.
- 26 [www.icanw.org/campaign](http://www.icanw.org/campaign).
- 27 R. Acheson, T. Nash, and R. Moyes, *A treaty banning nuclear weapons: developing a legal framework for the prohibition and elimination of nuclear weapons*, *Reaching Critical Will* and Article 36, May 2014.
- 28 J. Borrie, 'A limit to safety: risk, 'normal accidents', and nuclear weapons', ILPI-UNIDIR paper no. 3, December 2014.
- 29 General Lee Butler, head of United States Strategic Command in the early 1990s and responsible for all United States nuclear weapons, said that 'Deterrence was a dialogue of the blind with the deaf during the Cold War: G. L. Butler, 'The Risks of Nuclear Deterrence: From Superpowers to Rogue Leaders' (speech to the National Press Club, Washington, D.C.), 2 February 1998.
- 30 J. Borrie and T. Caughley, *An Illusion of Safety: Challenges of Nuclear Weapon Detonations for United Nations Humanitarian Coordination and Response*, UNIDIR, 2014.
- 31 A. Robock and O.B. Toon, 'Self-assured destruction: the climate impacts of nuclear war', *Bulletin of the Atomic Scientists* (2012) no. 68, pp. 66-74.



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