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# Nuclear disarmament and the humanitarian initiative: Making sense of the NPT in 2014

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**‘We have yet to fully grasp the monstrous effects of these weapons, that the consequences of their use defy reason, transcending time and space, poisoning the earth and deforming its inhabitants.’**

General Lee Butler USAF (Rtd.),  
National Press Club, Washington, D.C., 4 December 1996.

A new initiative has emerged over the current NPT review cycle to think afresh about nuclear weapons in terms of unacceptable and unmanageable humanitarian consequences of a nuclear conflict; to think not in terms of abstract concepts of nuclear deterrence and strategic stability, but in terms of the catastrophic impact of nuclear violence on people's lives and human societies. This initiative, led by states and civil society, has brought a strong reaction from the nuclear-armed states. They have collectively argued that it undermines the NPT when in fact the opposite is true: the initiative emerged in response to the disarmament malaise in the NPT and was framed as a means of revitalising debate and action on the NPT's vital disarmament pillar. The initiative is also based on the NPT's fundamental recognition of the humanitarian consequences of a nuclear conflict as the rationale for disarmament and non-proliferation. The nuclear-armed states, in contrast, argue that it is wilfully idealistic and distracts from a 'step-by-step' approach to nuclear disarmament. This points to two different images of the NPT, but in fact there are three in play. This briefing paper outlines these three images of the NPT and nuclear disarmament in order to contextualise the humanitarian initiative as we approach the next Review Conference in 2015.

## Image 1: Surface devaluing

The nuclear-armed states have been subject to consistent pressure since the end of the Cold War to reduce the value assigned to their nuclear weapons through quantitative reductions in nuclear numbers and qualitative changes in nuclear doctrine. They have been criticised for

slow progress and their enduring commitment to nuclear deterrence. The NPT nuclear-armed states reject this criticism and insist they have done an impressive job in de-escalating the Cold War confrontation through significant force reductions and changes in doctrine. According to these five states they have made 'unprecedented progress and efforts... in nuclear arms reduction, disarmament, confidence-building and transparency.' They 'note with satisfaction that stocks of nuclear weapons are now at far lower levels than at any time in the past half-century' delivered through 'systematic and progressive efforts' since the end of the Cold War.<sup>2</sup>

The disarmament picture is not quite as rosy as the one they paint. History shows that after an initial cull of nuclear weapons by the US and USSR/Russia in the early 1990s (primarily non-strategic nuclear weapons through the unilateral-reciprocal Presidential Nuclear Initiatives [PNIs] in 1991 and 1992), nuclear force reductions have proceeded very slowly. Strategic nuclear force reductions under the START process (the 1991 START I, 2002 SORT, and 2010 New START treaties) as well as unilateral reductions by the UK and France are important and welcome. Nevertheless, they represent a codification of the changed geo-strategic environment following the end of the Cold War through the consolidation of nuclear forces rather than any fundamental downgrading of nuclear weapons or radical rethinking of the commitment to nuclear deterrence. They signify a slow and cautious acknowledgement of the reduced salience of nuclear weapons in national defence and conceptions of global balances of power driven by a shift in defence priorities to 'new wars', regional intervention, and expeditionary conventional military capabilities. The PNIs, for example, were a pragmatic response to geo-political, financial and technical realities rather than a sweeping away of Cold War doctrine as some argued.<sup>3</sup> Acknowledgement of the reduced salience of nuclear weapons has been slow and cautious.

This can be described as a post-Cold War process of 'surface devaluing'. 'Devaluing' here refers to political processes that reduce or annul the values assigned to nuclear weapons in terms of the perceived beneficial effects of their possession and deployment. 'Surface devaluing' refers to a limited dilution of the values assigned to nuclear weapons primarily by: rebalancing national defence priorities away from nuclear defence; trimming the vast excesses of Cold War legacy nuclear forces; marginalising the idea of using nuclear weapons for theatre 'war-fighting'<sup>4</sup>; substituting some roles previously assigned to nuclear weapons for conventional weapons (mainly in the US<sup>5</sup>); and some consolidation of nuclear declaratory policies.

The nuclear-armed states insist this is excellent progress and fulfils requirements for meeting their end of the nuclear disarmament bargain over the past four NPT review cycles from 1990 to 2010. Yet for many this surface devaluing of nuclear weapons is not sufficient. It has left the logic of nuclear deterrence relatively undisturbed, the perceived legitimacy of threatening massive nuclear violence intact, and the idea of nuclear prestige largely untouched. It is a process centred on the technocratic and managerial orientation to arms control developed during the Cold War. It is a process that privileges regulation and stabilisation of inter-state strategic relations, a firm belief in the necessity and efficacy of nuclear deterrence, and a fixation on the idea of parity between the US and Russia in terms of a quantitative 'balance' in strategic nuclear delivery vehicles and warheads.<sup>6</sup>

## Image 2: Deep devaluing

Non-nuclear-armed states have consistently called for specific measures to reduce the role and legitimacy of nuclear weapons in international politics. Three of these include negative security assurances, no first use (proposed initially by China), and de-alerting. The collective purpose of these steps can be called 'deep devaluing'. This image of the NPT centres on qualitative changes in nuclear doctrines as an essential component of a nuclear disarmament process and a crucial indicator of nuclear-armed states' commitments to that goal alongside quantitative reductions in nuclear numbers. These qualitative changes can be seen as a means of restricting the scope of nuclear deterrence and diminishing the value of nuclear weapons in national security planning and international politics. In short, 'deep devaluing' refers to measures that seek to reduce the value of nuclear weapons as instruments of state security, power, and coercion. In that regard non-nuclear-armed states are quite clear that these steps are 'pragmatic, interim and practical measures' pending nuclear disarmament and not a permanent substitute for that end goal.<sup>7</sup> These measures have gone hand in hand with routine calls for further numerical reductions in nuclear arsenals, entry into force of the Comprehensive Test Ban Treaty, and negotiation of a Fissile Material Cut-off Treaty. Although advocated for many decades, these measures found new force through the New Agenda Coalition formed in 1998 to pressure the nuclear-armed states to make substantial progress on disarmament commitments agreed at the pivotal 1995 NPT Review and Extension Conference (NPTREC).<sup>8</sup>

### Negative Security Assurances

Non-nuclear-armed states have long sought legally-binding assurances from the nuclear-armed states that they will not be subject to nuclear attack or blackmail. Such assurances were considered during the negotiation of the NPT in the 1960s but did not survive the final draft.<sup>9</sup> Since then the NPT nuclear-armed states have issued assurances at the UN General Assembly's First Special Session on Disarmament in 1978, again in 1995 ahead of the NPTREC, with further updates from the US and UK ahead of the 2010 NPT Review Conference. The nuclear-armed states have steadily codified their NSAs in legal form for an increasing number of states through protocols to nuclear weapon-free zones.

NSAs can be seen as diminishing the value of nuclear weapons by constraining nuclear practice through formal and legally binding undertakings.<sup>10</sup> Under a universal and legally-binding NSA regime nuclear weapon politics would become an exclusive feature of relations between nuclear-armed states and, potentially, states outside the NPT or those in breach of NPT commitments. This would shrink the political realm in which nuclear weapons have salience in inter-state relations, reducing it from a global space in which nuclear weapons can be framed as a legitimate response to general 'strategic uncertainty' to a much narrower one defined by existential emergencies between a discrete number of nuclear-armed states pending disarmament.

### No first use

Some states have advocated a formal no first use agreement since the early 1960s, again with a view to restricting the scope of nuclear deterrent threats and the practice of nuclear deterrence. This follows the examples of the 1975 Biological and Toxin Weapons Convention (BTWC) and 1993 Chemical Weapons Convention (CWC) that banned possession of chemical and biological weapons and were facilitated by established

norms against their use in customary international law and the 1925 Geneva Protocol.<sup>11</sup> A legally-binding and unconditional<sup>12</sup> no-first use policy would mean nuclear-armed states could not legally threaten pre-emptive use of nuclear weapons against other states (nuclear-armed or otherwise), retaliatory nuclear use in response to a massive conventional attack, or engage in nuclear 'signalling' during a severe crisis by firing a 'sub-strategic' warning shot indicating intent to escalate to a full nuclear exchange should aggression continue.<sup>13</sup> It would limit nuclear deterrence policy and planning to an exclusively defensive, retaliatory posture. This would consign all other potential missions for nuclear weapons to the doctrinal dustbin with corresponding effects on alert procedures, operational war plans, and potentially procurement decisions.<sup>14</sup> NFU can be argued to diminish 'requirements' for large and diverse nuclear forces. It could restrict the residual deterrent value of nuclear weapons to a very discrete set of existential military threats to the survival of the state as a part of the transition to a world free of nuclear weapons.

### De-alerting

The third 'deep devaluing' measure advocated by non-nuclear-armed states is the de-alerting of nuclear weapons. De-alerting refers to measures that reduce the operational readiness of nuclear weapons, or more precisely 'implementing some reversible physical changes in a weapon system that would significantly increase time between decision to use the weapon and the actual moment of its launch'.<sup>15</sup> Some de-alerting has already taken place, for example the readiness of NATO Dual Capable Aircraft (DCA) has been reduced from hours and minutes to several months.<sup>16</sup> Other nuclear forces have been de-alerted prior to retirement, for example weapons withdrawn from service through the 1991 and 1992 Presidential Nuclear Initiatives.

Supporters of de-alerting see it as a means of reducing the salience of nuclear weapons in day-to-day national security planning. In fact, de-alerting is framed as having two beneficial effects: first, an immediate practical effect of lowering the risk of an accidental or unintentional launch of nuclear weapons; and second, a longer-term effect of 'a significant nuclear disarmament dividend through a reduction of the role of nuclear weapons in nuclear doctrines and therefore security policies overall'.<sup>17</sup> This, again, would restrict the scope of nuclear policy planning, further constrain the roles and values assigned to nuclear weapons, and begin to address the problem identified by Bruce Blair et al that 'These postures also perpetuate a mutual reliance on nuclear weapons that lends legitimacy to the nuclear ambitions of other nations.'<sup>18</sup> In essence, supporters of de-alerting measures view them as an important means of 'de-coupling'<sup>19</sup> nuclear weapons from the broad, day-to-day calculus of national security by demonstrating that nuclear-armed states can learn to live without nuclear weapons on high-alert, or even operationally deployed on a permanent basis as a precursor to learning to live without nuclear weapons at all.

Pressure for these deep devaluing measures reflects a widely held view that progress on the disarmament side of the NPT bargain has been wholly inadequate.<sup>20</sup> Part of the problem is that nuclear force reductions are invariably accompanied by unequivocal commitments to nuclear deterrence and the necessity of nuclear weapons for national security as well as nuclear force modernisation programmes.<sup>21</sup> Action 5 of the 2010 NPT Final Document Action Plan reflects the 'deep devaluing' image. It commits the nuclear-armed states to 'accelerate concrete progress on the steps leading

to nuclear disarmament' including further reductions in all types of nuclear weapons, steps to further diminish the role and significance of nuclear weapons in all military and security concepts, doctrines and policies, steps to prevent the use of nuclear weapons, steps to reduce the operational status of nuclear weapons systems, and steps that further enhance transparency and increase mutual confidence.

At the same time, these measures have not been without criticism. Negative security assurances, for example, have been criticised for potentially reinforcing the claim of certain states to legitimately possess nuclear weapons.<sup>22</sup> Arrangements that allow nuclear-armed states to enter into treaties forswearing use of these weapons against one group could tacitly reinforce their 'right' to hold these weapons and possibly use them against others. No first use has been similarly criticised for legitimising possession of nuclear weapons and entrenching nuclear deterrence within the military doctrines of nuclear-armed states, legitimising the potential second use of nuclear weapons.

### Image 3: delegitimising nuclear weapons

The third contemporary image of the NPT and nuclear disarmament seeks to transcend these limitations. This third image is based on 'delegitimising' nuclear weapons driven by concern at the slow pace of disarmament progress in the NPT. This has fuelled a determination from a cross-regional group of states including Austria, Ireland, Mexico, New Zealand, Switzerland, South Africa and Norway to exercise their political agency as non-nuclear-armed states and take greater ownership of the NPT's Article VI commitment to achieve a world free of nuclear weapons.

This image of the NPT and nuclear disarmament moves beyond deep devaluing by challenging the legitimacy of nuclear weapons. It does so by reframing NPT nuclear politics away from a nuclear force reductions process governed by the nuclear-armed states and towards the unacceptable and unmanageable humanitarian impact of the use of nuclear weapons. This approach gathered momentum with the formation of a coalition of states ahead of the 2010 NPT Review Conference. They have been supported by civil society organisations committed to challenging the legitimacy of nuclear weapons through a comprehensive ban treaty. This was reflected in the Final Document of the 2010 NPT Review Conference 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>23</sup> It was followed by further statements at the 2012 and 2013 NPT PrepComs by Norway and Switzerland that gained widespread support and led to a ground-breaking conference on the humanitarian impact of nuclear weapons in Oslo in March 2013. The 'Joint statement on the humanitarian dimension of nuclear disarmament' delivered at the 2012 NPT PrepCom by Switzerland's Ambassador, Benno Laggner, had 16 signatories.<sup>24</sup> This expanded to 34 nations at the UN General Assembly First Committee in October 2012 when Laggner delivered a similar statement.<sup>25</sup> This more than doubled at the April 2013 NPT PrepCom to 80 nations for the statement delivered by South Africa's Ambassador, Abdul Minty.<sup>26</sup>

The Oslo conference hosted by the Norwegian government attracted 128 countries as well as several UN organisations and the International Red Cross movement.<sup>27</sup> The humanitarian disarmament narrative was reiterated

at the UN General Assembly's High Level Meeting on Nuclear Disarmament in September 2013, the UN Open-Ended Working Group on multilateral nuclear disarmament that also reported in September 2013 and the UN General Assembly First Committee in October 2013.<sup>28</sup> New Zealand delivered a further 'Joint statement on the humanitarian impact of nuclear weapons' at the latter, this time sponsored by 125 countries.<sup>29</sup> The narrative was further developed at the second conference on 'The Humanitarian Impact of Nuclear Weapons' hosted by the Mexican government in February 2014 and attended by 146 states. Austria now plans to host a third conference later in 2014.<sup>30</sup>

Reframing nuclear disarmament as a humanitarian imperative has enabled non-nuclear-armed states to re-assert the imperative of a world free of nuclear weapons. Nuclear disarmament under Article VI has often been dominated by a nuclear-armed states discourse of deterrence, strategic stability, arms control, and state security. Now it is being reframed in terms of global justice, humanitarian harm, ecological violence, human rights, human security, and the international rule of law. Many non-nuclear-armed states are committed to these themes and values in other issue areas and this has empowered them to challenge the legitimacy of nuclear weapons in new ways with the support of civil society organisations. It has provided a new frame based on a justifiable and authoritative set of rules and norms for international society rooted in concepts of collective security and common humanity, rather than a realpolitik set of rules and norms rooted in state security and balances of military power.<sup>31</sup>

For some, the delegitimising process is a means of reframing NPT politics in order to realise a deep devaluing of nuclear weapons through the NPT. For others it is a means of transcending entrenched positions in the NPT and galvanising political support for a treaty to ban nuclear weapons as a framework to achieve their prohibition and elimination. As Swiss Ambassador Benno Laggner stated at the UN General Assembly in October 2012, 'we are encouraged by the increasing attention given to the humanitarian dimension of nuclear disarmament by States as well as international and non-governmental organizations. Switzerland is convinced that a better understanding of the humanitarian impact of nuclear explosions will pave the way to a multilateral process to prohibit nuclear weapons based on their destructive, indiscriminate and inhumane nature.'<sup>32</sup>

The nuclear-armed states have not welcomed this intervention. They did not attend the Oslo or Mexico conferences based on their collective concern that 'the conference in Oslo could divert discussion and focus away from the practical steps required to create the conditions for further nuclear weapons reductions. We believe that the practical, step-by-step approach that we are taking to progress multilateral nuclear disarmament through existing mechanisms, such as the nuclear non-proliferation treaty (NPT) and the Conference on Disarmament, have proven to be the most effective means to increase stability and reduce nuclear dangers.'<sup>33</sup> This was reasserted in their collective statement ahead of the 2013 PrepCom that 'reaffirmed the historic contribution of the pragmatic, step-by-step process to nuclear disarmament and stressed the continued validity of this proven route.'<sup>34</sup> This ignores the fact the Oslo conference was precipitated by the failure of the established step-by-step process and dysfunctional disarmament institutions to generate significant progress towards nuclear disarmament through ever deeper devaluing of nuclear weapons.

## Conclusion

Where does this leave the NPT as we head towards the 2015 Review Conference? Arguably it leaves it in a very difficult place. The nuclear-armed states insist they are doing well and point to progress through the 'P5 process' of discussions initiated in 2009 to establish common ground for further disarmament steps. They insist that the only realistic road map to a world free of nuclear weapons lies in a step-by-step approach centred on another round or two of US-Russian nuclear force reductions, entry into force of the CTBT, and negotiation of a fissile material treaty. This agenda is far too conservative and the pace far too slow for many non-nuclear-armed states who are looking for more substantial quantitative force reductions and qualitative changes in nuclear doctrines and practices. The lack of progress has fuelled efforts by a group of states to reframe the debate in humanitarian terms. Rather than trying to yet again bridge the gap between surface and deep devaluing, they are looking to transcend it. They have done this not to score political points, or to use the new framing to squeeze another concession or two from some of the nuclear-armed states, but because human-centred conceptions of security have secured a fundamental legitimacy since the end of the Cold War and the consequences of using nuclear weapons are simply unacceptable within that paradigm. The authority of this approach has empowered them to challenge the legitimacy of possessing nuclear weapons.

The nuclear-armed states have so far dismissed this approach. They show little inclination to accept the fundamental illegitimacy of nuclear weapons or even to discuss meaningful qualitative changes in nuclear policies alongside further force reductions. Their strategy appears to have been to discredit the humanitarian approach and other recent initiatives such as the UN General Assembly's High Level Meeting on Nuclear Disarmament in September 2013 and the UN Open-Ended Working Group on multilateral nuclear disarmament that also reported in September 2013. They may hope that the humanitarian approach will turn out to be a temporary feature of the nuclear weapons discussions. After a rocky Review Conference in 2015 they could then return to a business-as-usual process of 'surface devaluing' in 2020 with a few more steps to report and a few more concessions to give. With that in mind, it remains to be seen whether: 1. the non-nuclear-armed states involved in the humanitarian approach can align their interests to put significant and sustained pressure on the nuclear-armed states to escalate qualitative and quantitative changes in nuclear weapons policies and practices with deliberate speed based on the illegitimacy of these weapons; and 2. whether they will go further and pursue a nuclear ban treaty with or without nuclear-armed states' involvement.<sup>35</sup>

This briefing summarises a longer article in the journal *International Affairs* published by Chatham House called 'Waiting for Kant: Devaluing, and Delegitimising Nuclear Weapons'.<sup>36</sup> Its title is drawn from Ambassador Antonio Guerreiro, Permanent Representative of Brazil to the Conference on Disarmament, who said in 2012: 'The world has always been and will always be an unstable environment. Waiting for a Kantian universal and perpetual peace to commit to forswear atomic weapons simply runs counter to the ultimate objective of the NPT, which is the total and irreversible elimination of nuclear weapons.'<sup>37</sup>

## ENDNOTES

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2 Statement by the P5, NPT Preparatory Committee, General Debate, Vienna, 3 May 2012.

3 Representative Lee Hamilton maintained that 'the most astonishing aspect of the President's initiative is his call for a unilateral reduction of U.S. armaments. In one stroke, he scrapped much of the now obsolete nuclear doctrine and Cold War thinking of the past four decades. He has paved the way for a new approach'. Lee Hamilton, 'The President's Arms Control Speech', *Congressional Record (Extension of Remarks)*, 9 October 1991, p. E3331.

4 The US has transitioned from around 9,150 NSNW in 1991 to around 500 today. Russian has gone from around 18,900 to around 2,000 with several thousand awaiting dismantlement. Data from *Table of US Nuclear Warheads*, National Resources Defense Council, Washington, DC (<http://www.nrdc.org/nuclear/nudb/datab9.asp>) and *Table of USSR/Russian Nuclear Warheads*, National Resources Defense Council, Washington, DC (<http://www.nrdc.org/nuclear/nudb/datab10.asp>, both accessed 24 March 2013). Hans Kristensen and Robert Norris, 'US nuclear forces, 2013', *Bulletin of the Atomic Scientists*, 69: 2, 2013, p. 78; Hans Kristensen and Robert Norris, 'Russian nuclear forces, 2012', *Bulletin of the Atomic Scientists*, 68: 2, 2012, pp. 89-90.

5 See Donald Rumsfeld, *Annual report to the President and the Congress*, US Department of Defense, Washington, D.C., 2002, chapter 7.

6 Keith Krause, 'Structural and cultural challenges to arms control in intra-state and post-conflict environments', in Ian Anthony and Daniel Rotfeld, eds., *A Future Arms Control Agenda* (Stockholm: SIPRI, 2001), p. 128.

7 Statement by Ambassador Xolisa Mabongo, Representative of the Republic of South Africa to the IAEA, NPT Preparatory Committee, cluster 1: nuclear disarmament, 3 May 2012, Vienna.

8 See 'A nuclear-weapons-free world: the need for a new agenda', Joint Declaration by the Ministers for Foreign Affairs of Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden, 9 June 1998.

9 George Bunn, 'The legal status of US negative security assurances to non-nuclear weapon states', *The Nonproliferation Review*, Spring/Summer 1997, p. 3.

10 See, for example, statement by Jan Petersen, Ministry of Foreign Affairs, Norway, NPT Preparatory Committee, cluster 1: nuclear disarmament, Vienna, 3 May 2012.

11 Jozef Goldblat, 'No first use: a prerequisite for nuclear disarmament', *Strategic Dialogue*, 28: 3, 1997, pp. 265-70.

12 Alexei Arbatov outlines a range of possible NFU pledges with different conditions attached in 'Non first use as a way of outlawing nuclear weapons', paper prepared for the International Commission on Nuclear Non-proliferation and Disarmament, November 2008, pp. 7-8.

13 See Steven Miller, 'The utility of nuclear weapons and the strategy of no-first use', paper presented at a Pugwash meeting on *No First Use of Nuclear Weapons*, 15-17 November 2002, London.

14 Scott Sagan, 'The case for no-first use', *Survival*, 51: 3, 2009, p. 165.

15 EastWest Institute, 'Reframing nuclear de-alert: decreasing the operational readiness of U.S. and Russian arsenals', New York, 2010, p. 2.

16 'NATO's nuclear forces in the new security environment', NATO, 1995 (<http://www.nato.int/issues/nuclear/sec-environment.html>, accessed 9 November 2010).

17 Statement by Swiss Ambassador for Nuclear Disarmament and Non-Proliferation, Benno Laggner, on behalf of the De-alerting Group, UN General Assembly First Committee, 67th session, New York, 17 October 2012.

18 Bruce Blair, Victor Esin, Matthew McKinzie, Valery Yarynich, and Pavel Zolotarev, 'Smaller and safer: a new plan for nuclear postures', *Foreign Affairs*, 89: 5, 2010, p. 13.

19 Michael Mazarr, 'Nuclear doctrine and virtual nuclear arsenals' in Michael Mazarr, ed., *Nuclear weapons in a transformed world: the challenge of virtual nuclear arsenals* (New York: St. Martin's Press, 1997), p. 47.

20 See, for example, the statement by the Indonesian delegation, NPT Preparatory Committee, cluster 1: nuclear disarmament, Vienna, 3 May 2012.

21 For details see Ray Acheson, ed., *Assuring destruction forever: nuclear weapon modernization around the world* (Washington, DC: Reaching Critical Will, 2012).

22 Thomas Nash, Maya Brehm, Richard Moyes, 'Banning nuclear weapons', Article 36, London, February 2013, p. 16.

23 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final document (Volume 1), NPT/CONF.2010/50 (Vol. I), New York, 2010, p. 19.

24 'Joint statement on the humanitarian dimension of nuclear disarmament', NPT Preparatory Committee, General Debate, Vienna, 2 May 2012.

25 '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 UN General Assembly First Committee, New York, 22 October 2012.

26 'Joint statement on the humanitarian impact of nuclear weapons', NPT Preparatory Committee, General Debate, Geneva, 24 April 2013.

27 Norwegian Minister of Foreign Affairs Espen Barth Eide, opening address, Conference on the humanitarian impact of nuclear weapons, Oslo, 4-5 March 2013.

28 See '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', UN General Assembly, A/AC. 281/2, 3 September 2013.

29 'Ambassador Dell Higgie, 'Joint statement on the humanitarian impact of nuclear weapons', UN General Assembly, New York, 21 October 2013.

30 'Chair's summary', Second conference on the humanitarian impact of nuclear weapons, Nayarit, Mexico, 14 February 2014 (available at <http://www.sre.gob.mx/en/images/stories/cih/ci.pdf>, accessed 17 February 2014).

31 See Ken Berry, Patricia Lewis, Benoit Pélopidas, Nikolai Sokov and Ward Wilson, 'Delegitimizing nuclear weapons: examining the validity of nuclear deterrence', (Monterey, CA: James Martin Center for Nonproliferation Studies, the Monterey Institute of International Studies, 2010); Maya Brehm, Richard Moyes and Thomas Nash, 'Banning nuclear weapons', Article 36, February 2013; Beatrice Fihn, ed., 'Unspeakable suffering: the humanitarian impact of nuclear weapons', Reaching Critical Will, January 2013.

32 Statement by Swiss Ambassador for Nuclear Disarmament and Non-Proliferation, Benno Laggner, UN General Assembly First Committee, 67th session, Thematic debate on nuclear weapons, 17 October 2012.

33 Statement by Baroness Warsi, Senior Minister of State, Department for Communities and Local Government & Foreign and Commonwealth Office, Official report, House of Lords, Col. WA182, 21 March 2013.

34 Joint statement issued by China, France, Great Britain, Russia, and the United States at the conclusion of the Fourth P5 Conference, 'On the way to the 2015 NPT review conference', 18-19 April, Geneva, Switzerland.

35 Article 36, 'Banning nuclear weapons without the nuclear armed states', briefing paper, October 2013.

36 Nick Ritchie, 'Waiting for Kant: Devaluing and Delegitimising Nuclear Weapons', *International Affairs*, 90: 3, 2014. See also in that edition John Borrie, 'Humanitarian Reframing of Nuclear Weapons and the Logic of a Ban'.

37 Statement by Ambassador Antonio Guerreiro, Permanent Representative of Brazil to the Conference on Disarmament, NPT Preparatory Committee, Vienna, 2 May 2012.