

NUCLEAR DISARMAMENT AND THE CONFERENCE ON DISARMAMENT

Presentation to inform CD Subsidiary Body 1 discussion¹

25 June 2018, 15h00, Council Chamber, Palais des Nations

1. Introduction

This paper is intended to provide a basic resource on the topic of nuclear disarmament, primarily as it has been dealt with in the Conference on Disarmament (CD). The paper was prepared at the request of Indonesia, the Coordinator for subsidiary body 1 (SB1) pursuant to the CD's decision of 16 February² in order to help inform discussion about this complicated topic. As well as listing historical information on proposals discussed earlier in the CD, this paper offers some points for possible discussion in SB1.

BOX 1: A NOTE ON SOURCES

There is a large body of material available relating to nuclear disarmament, much of it available online. This paper is largely concerned with UN sources, or others widely seen as authoritative. One must begin with the General Assembly's very first resolution, which concerned "the elimination from national armaments of atomic weapons" and proceed from there. The attached list ([Annex A](#)) sets out the subsequent key resolutions and treaties and covers the main issues in this area, but it is selective. For instance, as regards UNGA resolutions, space limitations dictated the need to leave out continuing initiatives by Member States and groups of States on relevant issues ranging from nuclear dangers to nuclear use. Also not listed for reasons of brevity is the extensive body of undertakings and decisions by Meetings of States Parties related to the various treaties listed in Annex A. However, CD members should note that the website of the United Nations Geneva Office of Disarmament Affairs (ODA) maintains a helpful on-line compilation of core CD documents on nuclear disarmament, as does the main ODA office at the UN in New York. Moreover, UNODA's annual *Disarmament Yearbook* reports copiously on each year's nuclear disarmament activities. Another key source is the CD's Annual Reports to the UNGA, which also detail the Conference's yearly work on nuclear disarmament. Meanwhile, UNIDIR has a General Assembly mandate "to assist the international community in finding and implementing solutions to disarmament and security challenges." UNIDIR has produced a large body of work on nuclear disarmament over the years (see [Annex B](#)). UNIDIR's website (www.unidir.org) also provides much additional useful information, as well as resources on other topics on the CD's agenda.

¹ This paper was prepared by John King and John Borrie based on earlier work by Tim Caughley, and with input from him and Wilfred Wan.

² CD/2119, 19 February 2018

2. Nuclear disarmament

From the beginning of the atomic age, efforts were made to regulate or eliminate the use of nuclear weapons. These efforts have taken place in individual, bilateral and multilateral disarmament fora.³ The focus here is largely on multilateral disarmament aspects rather than those of a bilateral or unilateral nature, although they are touched on below and feature in the annexes to this paper, especially as arms control agreements in US-USSR negotiating fora impacted significantly on larger multilateral disarmament goals.⁴

One important milestone in calls for nuclear disarmament was in 1978 at the Special Session on Disarmament of the UN General Assembly (UNSSOD), which among other things reformed the CD's forerunner (and established UNIDIR). The drafters of the consensus UNSSOD resolution saw disarmament efforts in general as "a gradual but effective process beginning with a reduction in the present level of armaments. The ending of the arms race and the achievement of real disarmament are tasks of primary importance and urgency."⁵ Nuclear disarmament is recognized in the document as a broader process than simply one of quantitative reductions⁶, and is intrinsically linked to reducing nuclear dangers or risk, as well as making a broader contribution to general and complete disarmament.

At its initial session in 1979, the Committee on Disarmament (which was renamed the Conference on Disarmament in 1982) established a "Decalogue" of ten issues based on the 1978 UNSSOD outcome.⁷ This was meant to be a framework for establishing an annual CD agenda. However, as Jerzy Zaleski wrote in 2011, the CD has never had an easy time in maintaining an agreed balance—or consequently of making any progress on nuclear disarmament, which straddles elements within the Decalogue.⁸ Zaleski's UNIDIR paper provides a detailed account of the twists and turns of proposals on the subject, which became especially tortuous after negotiations on a nuclear test ban were completed in the mid-1990s and the Conference entered its current era of deadlock. Zaleski argued that the linkages created by a "comprehensive and balanced programme of work" and subsequent strengthening of these linkages by CD Member States with divergent priorities was fatiguing

³ See J. Goldblat, *Arms Control: The New Guide to Negotiations and Agreements* (2nd edn), London, Sage, 2002 for a concise guide to developments up to the beginning of the 21st century.

⁴ See R. Rydell (2013), *Explaining Hammarskjöld's "Hardy Perennial": The Role of the United Nations in Nuclear Disarmament*, London, United Nations Association-UK.

⁵ UN General Assembly, *Resolutions and Decisions adopted by the General Assembly during its Tenth Special Session, 23 May-30 June 1978 (A/S-10/4)*, Paragraph 1: < <https://s3.amazonaws.com/unoda-web/wp-content/uploads/2017/05/A-S10-4.pdf>>.

⁶ Goldblat notes that this was also a finding of the International Court of Justice (ICJ) in an advisory opinion of 8 July 1996. Although unable to rule on whether the use or threat of use of nuclear weapons was prohibited unconditionally, "At the same time the ICJ declared the existence of an international obligation to achieve nuclear disarmament 'in all its aspects'. [...] Mere cuts in nuclear arsenals will not necessarily lead to their abolition." See Goldblat, *op cit* (2002), p. 295.

⁷ The "Decalogue": (1) nuclear weapons in all its aspects; (2) chemical weapons; (3) other weapons of mass destruction; (4) conventional weapons; (5) reduction of military budgets; (6) reduction of armed forces; (7) disarmament and development; (8) disarmament and international security; (9) collateral measures; confidence-building measures; effective verification methods in relation to appropriate disarmament measures, acceptable to all parties concerned; and (10) comprehensive programme of disarmament leading to general and complete disarmament under effective international control.

⁸ J. Zaleski, *Nuclear Disarmament in the Conference on Disarmament*, Geneva, UNIDIR, 2011.

and unworkable. The Conference, he concluded, “should address issues on its agenda separately, on the basis of their merits, without preconditions”.⁹

3. The Categorization of Nuclear Disarmament Arrangements and Agreements

The challenge of nuclear disarmament effort is so formidable that, by necessity, it has mainly been approached in a piecemeal manner. In effect, the problem has been broken down into its component parts, and each part negotiated as a separate entity. At some point, this will mean that nuclear disarmament is achieved when all of the substantive parts have been finalized, with the expectation that the ultimate whole will be greater than the sum of those parts.

One way of categorizing nuclear agreements and arrangements achieved so far is through the divisions indicated below.¹⁰ The list we present is not exhaustive of all nuclear disarmament-related work that has been done or is being planned. Rather, it seeks to provide a logical organizational framework for that which has already been done and to indicate where further work can be done. Annexes A and B to this paper provide additional information concerning CD-related disarmament measures and analyses. The list is as follows:

a. Nuclear Test Bans:

Agreements in this area would include the Partial Nuclear Test Ban Treaty (in effect since 1963) and the Comprehensive Test Ban Treaty (the CTBT was signed in 1996 but is not yet in effect). The partial ban achieved the elimination of nuclear testing in the atmosphere, while the comprehensive ban seeks to eliminate nuclear testing in all environments.

b. Regional Denuclearized Zones:

A number of agreements have been finalized concerning Nuclear Weapon-Free Zones (NWFZ), including the Treaties of Tlatelolco, Rarotonga, Pelindaba, Bangkok, and Semipalatinsk. These treaties provide nuclear weapon-free status to much of the world’s habitable territory. In addition, one state (Mongolia) has unilaterally declared its nuclear weapon-free status, its declaration of which has been recognized by UN member states.¹¹ However, key areas of the world still to be covered include the Middle East, South Asia, Northeast Asia and potentially Europe. For varying reasons, negotiating zones soon in any of these regions is very challenging.

c. Environmental Treaties:

Treaties have been negotiated that cover environmental areas such as the sea beds and outer space. The 1967 Outer Space Treaty and the 1977 Environmental Modification Treaty (ENMOD) are examples of efforts to project nuclear disarmament into areas outside normal territorial regions of the earth. The ENMOD treaty does not specifically mention nuclear weapons, but the nature of its constraints is generally assumed to include them, an assumption that has not been challenged. On the other hand, the Outer Space Treaty

⁹ Zalesky, *op cit* (2011), p. 15.

¹⁰ The texts of all treaties and agreements mentioned in this paper are available on the website of the UN Office of Disarmament Affairs (UNODA): <www.un.org/disarmament/> under the “Databases and Research Tools” tab.

¹¹ A/67.393-S/2012/721, 26 September 2012.

specifically prohibits placing nuclear weapons in earth orbit. In addition, the Antarctic Treaty bans nuclear explosions and provides other disarmament-related protections to that area. Much work remains to be done in the environmental area overall, however, including work on a radiological weapons ban.¹²

d. Nuclear Weapons Proliferation

The ‘cornerstone’ treaty in this area is the Nuclear Non-proliferation Treaty (NPT) of 1968.¹³ Its objectives are clearly stated and subscribed to by all but four members of the UN (DPRK, India, Israel, and Pakistan). Originally the NPT was valid for twenty-five years, but in 1995 states party to the treaty agreed to extend it indefinitely. In addition, the rubric of non-proliferation has been expanded to include subsidiary disarmament elements such as Negative Security Assurances (NSAs)¹⁴, Positive Security Assurances (PSAs), controls over nuclear materials and their transport, and controlling the spread of missile technology.

e. Control of Nuclear Material

Negotiations for a Fissile Material Cutoff Treaty (FMCT) were expected to begin after the unanimous adoption of UNGA Res 48/75L in 1993. However, negotiation mandate difficulties have delayed their start, negotiations set to take place in the CD. The situation remains unresolved, and is the subject of discussion, of course, in Subsidiary Body 2.

f. Nuclear Weapons Abolition

The goal of the complete abolition of nuclear weapons has been a long-sought goal by both civil society peace activists and many governments. Article VI of the NPT treaty states that “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.” This undertaking is generally seen as the quid-pro-quo for NPT non-nuclear weapon states giving up their right to such weapons.

NPT Article VI’s potential has not yet been fulfilled. (Nor, as mentioned already, have four of the nuclear-armed states joined the NPT and accepted its obligations.)¹⁵ Implementation—or perceived lack of it—on practical nuclear disarmament actions have caused tension between nuclear and non-nuclear-weapon states in the NPT and beyond. In the meantime, a number of reports, action proposals (including in the CD in 1996)¹⁶ and statements by former senior government officials¹⁷ have reinforced the call for nuclear weapons abolition.

¹² Goldblat (2002), *op cit*, pp. 162-5.

¹³ Treaty on the Non-Proliferation of Nuclear Weapons (NPT):
<<https://www.un.org/disarmament/wmd/nuclear/npt/text>>.

¹⁴ See UNIDIR’s presentation on NSAs to the CD of 22 May 2018:
<<http://www.unidir.ch/programmes/disarmament-machinery/support-to-the-conference-on-disarmament-s-2018-subsidiary-bodies>>.

¹⁵ South Sudan has also not yet deposited its instrument of accession to the NPT.

¹⁶ CD/1419, Proposal Submitted by the Group of 21 for a “Programme of Action for the Elimination of Nuclear Weapons”, 8 August 1996; See also paragraph 37, CD Annual Report for 1996, CD/1436, 12 Sept. 1996.

¹⁷ See, for example, a series of newspaper articles and speeches dating from 2007 by former US Secretaries of State Henry Kissinger and George Schultz, former US Defense Secretary William Perry, and former US Senator Sam Nunn.

An established approach to nuclear abolition has been that of independent advances toward it through a process known variously as ‘step-by-step’, the ‘building block’ or ‘progressive’ approach. Practical steps include many of the actions mentioned in this paper, such as negotiating a comprehensive ban on nuclear testing, providing adequate security assurances for non-nuclear-weapon states, halting the production of fissile material, and negotiating verifiable arms reduction treaties to be pursued in a successive and mutually reinforcing way until a world without nuclear weapons is eventually achieved. Certain steps have been undertaken, but others have not, or these have been thwarted—such as the inability to bring the CTBT into force internationally more than two decades after its negotiation in the CD.

In 2007, Costa Rica and Malaysia tabled a ‘draft Model Convention on Nuclear Weapons’ (or Nuclear Weapons Convention) in the General Assembly based on an updated version of a text originally prepared by civil society groups in the 1990s.¹⁸ The model convention offered, in a single document, a fully-fledged draft of the measures the authors thought would be needed to both prohibit and eliminate nuclear weapons. In 2008, the model convention was endorsed by the UN Secretary-General.¹⁹

In 2017, a Treaty on the Prohibition of Nuclear Weapons (TPNW)²⁰ was negotiated at the UN and opened for signature, a measure to set an abolition norm—that nuclear weapons are unacceptable in any hands—and encourage the NWS to fulfill their NPT obligation. It may be noted that, logically, the TPNW is itself a ‘step’ or partial measure and not an alternative to the step-by-step or nuclear weapons convention approach to facilitate total nuclear abolition. This is because the TPNW creates a prohibition but does not in itself eliminate nuclear weapons²¹—as its proponents have always freely admitted. In fact, the same may be said of the Nuclear Weapons Convention: it could be regarded in temporal terms as a potential ‘step’ that comes at some point late in the process of sequential and concurrent actions needed to achieve a nuclear-weapon-free world.²² Thus, it is not necessarily productive to think in terms of these as distinctly alternative approaches.

g. Other Nuclear Disarmament-related Actions

Related to the nuclear disarmament measures mentioned above, a number of other complementary agreements and actions are in effect or being worked on such as Confidence Building Measures, Hotline Agreements, Nuclear Risk Reduction Centers, Notifications of Missile Launches and Strategic Exercises, De-Targeting Measures, and other such measures. Bilateral or plurilateral activities as diverse as plutonium disposition agreements and multilateral initiatives on verification are also relevant. As this paper was being prepared, negotiations were even being planned for the de-nuclearization of North Korea and the

¹⁸ UN document A/62/650, 18 January 2008, and NPT/CONF.2010/PC.1/WP.17, 1 May 2007.

¹⁹ UN ODA, “The Secretary-General’s five-point proposal on nuclear disarmament”, 24 October 2008: <<https://www.un.org/disarmament/wmd/nuclear/sg5point/>>.

²⁰ A/CONF.229/2017/8, 7 July 2017: <http://undocs.org/A/CONF.229/2017/8>.

²¹ For analysis of the different approaches to eliminating nuclear weapons, see Chapter 3 in J. Borrie et al, *A Prohibition on Nuclear Weapons: A Guide to the Issues*, Geneva and Oslo, UNIDIR and the International Law and Policy Institute, February 2016.

²² Paragraph 46 of UNSSOD (1978) *op cit* states that “Nothing shall preclude States from conducting negotiations on all priority items concurrently.”

Korean Peninsula. All of these efforts can assist the overall nuclear disarmament effort, and there remains much room for the expansion of this particular area of activity.

h. Forums for negotiating additional measures:

In terms of forums for negotiating additional nuclear disarmament measures, the UNGA or its creation of the CD at its first SSOD in 1978, are, of course, in principle available for taking nuclear disarmament forward. The General Assembly is also considering recommendations in the Report of the Open-ended Working Group (OEWG) on UNSSOD-IV relevant to nuclear disarmament.²³ Mention should also be made here of a decision of the UNGA to convene a High-Level Conference in 2018 (postponed) to review progress on nuclear disarmament.²⁴

Members of the CD include all the current possessors of nuclear arsenals. But even as a comparatively exclusive body, the Conference has been deadlocked. Meanwhile, the NPT's rules of procedure do not impose consensus decision-making. Nevertheless, that treaty's potential as a negotiating forum will likely be unrealized while it remains unrepresentative of broader nuclear-weapon possession realities—nor was it necessarily intended for that purpose.

Although not a negotiating forum, the United Nations Disarmament Commission (UNDC) is open to all States. It meets annually to deliberate on “recommendations for achieving the objective of nuclear disarmament and non-proliferation of nuclear weapons”.²⁵ The UNDC, although only a deliberative body, could nonetheless play a role in developing confidence-building measures and other ideas for advancing nuclear disarmament or in related areas such as transparency and confidence building in outer space.

4. Looking Forward

Subsidiary Body 1 is tasked with reaching “understanding on the areas of commonalities in the Conference on Disarmament by taking into consideration all relevant views and proposals past, present and future; (b) Deepening technical discussions and broadening areas of agreement, including through the participation, in accordance with the rules of procedure, of relevant experts; [and to] (c) Consider effective measures, including legal instruments for negotiations.”²⁶ To assist in this effort, here are some thoughts and discussion points to consider:

a. At this point in time, progress on nuclear disarmament at the bilateral level has been outmatched by increasing efforts on the multilateral front in the UNGA and diplomatic conferences, leading to a (contested) OEWG outcome in 2016 and to the subsequent negotiation of the TPNW Treaty. Hopes for concerted implementation of the consensus Action Plan²⁷ of the 2010 NPT Review Conference have not been realized, nor has the 1995 Resolution on the Middle East been consummated. However, prospects are in sight for some

²³ A/AC.268/2017/2.

²⁴ A/RES/68/32.

²⁵ For the UNDC's 2017 session, see A/CN.10/L.78.

²⁶ See CD/2119 of 19 February 2018.

²⁷ 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document Volume I, Un Document NPT/CONF.2010/50 (Vol. i) New York, 2010.

sort of movement on de-nuclearization of the Korean peninsula on a self-organized plurilateral basis.²⁸ SB1 will have to monitor and discuss these and related issues.

b. SB1 might also wish to reflect further on what basic groundwork needs to be done to move nuclear disarmament forward²⁹, to engage on findings areas of common ground, identifying the other areas that require increased understanding and bridging, developing a sufficiently flexible schedule of activities, and building in regular reviews of progress—in other words, negotiations that the CD might be able to carry out or in which the United Nations might effectively be the forum.

c. SB1 can also review the UN Secretary General’s just-issued report on “Securing our Common Future—An Agenda for Disarmament” to see where goals and objectives on nuclear disarmament might apply to work in the CD environment.³⁰

d. Thought and discussion will also have to be given to the current political environment for undertaking nuclear disarmament in order to ensure that the path remains open and navigable for undertaking disarmament measures.

e. A more formal list of topics for discussion in SB1 could include the following items, which were reviewed in a previous CD working group on nuclear disarmament:³¹

- 1) Interrelationship between bilateral and multilateral consideration of the cessation of the nuclear arms race and nuclear disarmament; participation in negotiations for the cessation of the nuclear arms race and nuclear disarmament; role of the CD.
- 2) Security concepts relating to nuclear weapons;
- 3) Implementation of paragraph 50 of the SSOD1 Final Document;³²
- 4) Interrelation between measures for the cessation of the nuclear arms race and disarmament measures in other areas;
- 5) Verification in relation to the purposes, scope and nature of agreements;

²⁸ Such steps, if taken, would help to meet the requirement of the Action Plan as regards “Other regional issues” – relating to the Democratic People’s Republic of Korea. See NPT/CONF.2010/50 (Vol. I), p.31.

²⁹ For instance, see CD/1419 of 7 August 1996, and Annex I of CD/1877 of 15 December 2009.

³⁰ United Nations, *Securing Our Common Future: An Agenda for Disarmament*, New York, May 2018.

³¹ See the *UN Disarmament Yearbook*, Vol. 12, 1987, Chapter 5, “Nuclear Disarmament), pp.106-107, UN Office of Disarmament Affairs, New York, 1988: <<https://www.un.org/disarmament/publications/yearbook/volume-12-1987>>. See also Zaleski (2011), *op cit*.

³² “The achievement of nuclear disarmament will require urgent negotiation of agreements at appropriate stages and with adequate measures of verification satisfactory to the States concerned for; (a) Cessation of the qualitative improvement and development of nuclear-weapon systems; (b) Cessation of the production of all types of nuclear weapons and their means of delivery, and of the production of fissionable material for weapons purposes; (c) A comprehensive, phased programme with agreed time-frames, whenever feasible, for progressive and balanced reduction of stockpiles of nuclear weapons and their means of delivery, leading to their ultimate and complete elimination at the earliest possible time.

Consideration can be given in the course of the negotiations to mutual and agreed limitation or prohibition, without prejudice to the security of any State, of any types of nuclear armaments.”

6) Existing proposals.

5. Comment

Nuclear disarmament is arguably the CD's most important negotiating function. The direction indicated by the UN General Assembly's very first resolution in 1946 plus the spirit of the Final Document of the First Special Session on Disarmament in 1978 fully support this conclusion and urge that action be taken to fulfill this mandate. That the CD's deliberations and activities on the subject have not lived up to the goals outlined in part reflect the complexity of the issues involved and the varying ways that states define their national security.

Prospects for nuclear disarmament cannot be divorced from the broader strategic context. As delegations in the CD are apt to say, "disarmament doesn't happen in a vacuum". At the same time, given the stakes involved in curbing nuclear dangers and achieving the elimination of nuclear weapons, CD members cannot afford to be fatalistic. Nuclear disarmament steps are most needed precisely when circumstances are difficult. Policy makers have pulled back from the nuclear brink before, as in early 1960s and in the mid-1980s, which shows it is possible for them to alter their perceptions and decision calculus. It is incumbent on this Conference to address—and stick at addressing—questions of "how" to identify ways to make progress on nuclear disarmament in a dynamic strategic situation.

One immediate challenge, as a range of experts have noted³³, is to find common ground again following divisive developments and in current uncertainty. The second preparatory meeting of the 2020 NPT review cycle in Geneva earlier this year reminded us that views are far apart on some nuclear disarmament-related issues for the members of that Treaty—not counting the four nuclear-armed states that are not in the NPT but which do participate in the CD. In the short run, dialogue, transparency and confidence building are important functions of this Subsidiary Body and of the CD as a whole. Perhaps this is where the CD could productively focus effort because it might contribute positively to the broader disarmament and non-proliferation environment, irrespective of specific intra-CD differences. There are plenty of sources of inspiration here, from the many sources we have mentioned, to the work of like-minded initiatives such as the International Panel on Nuclear Disarmament Verification³⁴ to the report of the 2016 Open-ended Working Group on taking forward nuclear disarmament negotiations³⁵.

We would also humbly suggest that it is time to "turn the page" on some recent debates. Whatever one may think of the TPNW, for instance, it is now a reality. The states supporting it are proclaiming their desire for, and continued commitment to, nuclear disarmament. Now that the point is made, it is time for this body to see how it can contribute in good faith to achieving the shared goal of a nuclear-weapon-free world.

³³ For instance, see L. Dunn, "The Strategic elimination of nuclear weapons: an alternative global agenda for nuclear disarmament", *The Nonproliferation Review*, 24:5-6, pp. 401-35; J. Borrie, *Resuming Dialogue on Moving Nuclear Disarmament Forward: An Immediate Challenge*, Geneva, UNIDIR, May 2018.

³⁴ <https://www.ipndv.org>.

³⁵ UN document A/71/371, 1 September 2016.

Another way in which the CD could play a useful role on nuclear disarmament would be in making greater use of the space it affords for collective discussion about the implications of modernization of nuclear weapons and their delivery systems, and changes in strategic nuclear doctrines. Almost two decades into the 21st century, it is not clear that Cold War-era understandings about concepts and practices around nuclear weapons still hold in a multipolar environment. Excessive ambiguity or confusion on this point could be destabilizing to the point that not only do practical nuclear disarmament steps become inconceivable, nuclear dangers are significantly heightened.³⁶ Thus, there is an intrinsic link between nuclear risk reduction and nuclear disarmament as both part of that enterprise and as an objective.

UNIDIR prepared this paper to assist CD member states in undertaking SB1 discussions in an effort to be helpful. It is hard to do justice to such a complicated subject in a brief document, although the Institute has striven to be even-handed. As such, it is not an official UN document, nor do the views of its researchers represent any UNIDIR “position”. In concluding, here are some questions the CD might consider in its SB 1 discussions:

1. What is the most effective and realistic role for the CD in the nuclear disarmament process today?
2. To what extent does the current CD need to re-invent the wheel, in light of previous proposals and suggestions on nuclear disarmament measures (e.g. CD/1419 of 1996, CD/1877 Annex I of 2009)?
3. What has changed since previous nuclear disarmament proposals and dedicated discussions (e.g. how significant are the new START, TPNW, JCPOA, NPT developments)? Which of these proposals remain relevant?
4. Do prior linkages made between differing themes and priorities of the CD’s “Decalogue” still pertain?
5. What role does linkage play in helping/hindering forward nuclear disarmament progress in the CD?
6. Can/should nuclear disarmament be broken into even smaller pieces, or should consolidation be attempted?
7. What technical developments are on the horizon that would alter the nuclear disarmament process?

³⁶ See, for instance, M. Fitzpatrick and M. Barnett, “Risk and nuclear deterrence”, in J. Borrie, T. Caughley, and W. Wan (eds), *Understanding Nuclear Weapon Risks*, Geneva, UNIDIR, 2017, pp. 23-31.

6. ANNEXES

Annex A: Some key UNGA resolutions and treaties

1. Key UNGA Resolutions

Resolution, Date	Title	Comments
A/RES/1(I) 24 January 1946	Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy	First resolution adopted by the UN General Assembly
A/S-10/4 29 May – 30 June 1978	Final document of SSOD-I: Resolution and Decisions of the Tenth Special Session of the GA	Paragraph 120 establishes the Committee on Disarmament (precursor of the CD) open to the nuclear-weapon States, and thirty-two to thirty-five other States. Membership (now 65) to be reviewed at regular intervals
A/RES/67/56 3 December 2012	Taking forward multilateral nuclear disarmament negotiations	Establishment of an open-ended working group (OEWG) to develop proposals to take forward multilateral nuclear disarmament negotiations for the achievement and maintenance of a world without nuclear weapons
A/RES/68/46 5 December 2013	Taking forward multilateral nuclear disarmament negotiations	The General Assembly noted with satisfaction the discussions in the OEWG, and requested the Secretary-General to seek the views of Member States on how to take forward multilateral nuclear disarmament negotiations
A/RES/68/32 5 December 2013	Follow-up to the 2013 high-level meeting of the General Assembly on nuclear disarmament	The General Assembly decided to convene, no later than 2018, a United Nations high-level international conference to review progress on aspects of nuclear disarmament
A/RES/69/41 2 December 2014	Taking forward multilateral nuclear disarmament negotiations	The General Assembly welcomed the report of the Secretary-General containing the views of Member States on how to take forward

		multilateral nuclear disarmament negotiations
A/RES/70/33 7 December 2015	Taking forward multilateral nuclear disarmament negotiations	Proposed the establishment of an OEWG mandated to to substantively address (a) concrete effective legal measures, legal provisions and norms that will need to be concluded to attain and maintain a world without nuclear weapons (b) recommendations on other measures that could contribute to taking forward multilateral nuclear disarmament negotiations
A/RES/71/258 3 December 2016	Taking forward multilateral nuclear disarmament negotiations	The General Assembly decided to convene in 2017 a United Nations conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination
A/RES/72/31 4 December 2017	Taking forward multilateral nuclear disarmament negotiations	Welcomed the TPNW. Urged additional efforts on nuclear disarmament. Recommended that States consider implementing, as appropriate, the OEWG's various measures.

2. Multilateral Treaties:

1963 Treaty Banning Nuclear Tests in the Atmosphere, in Outer Space and Under Water (Partial Test Ban Treaty) (PTBT) and the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT):

The two main multilateral treaties on nuclear testing are the PTBT and the CTBT. The PTBT requires Parties to prohibit, prevent, and abstain from carrying out nuclear weapons tests or any other nuclear explosions in the atmosphere, in outer space, under water, or in any other environment if such explosions cause radioactive debris to be present outside the territorial limits of the State that conducts an explosion, while the CTBT is the Treaty banning any nuclear weapon test explosion or any nuclear explosion - everywhere, by everyone. The CTBT was negotiated at the Conference on Disarmament in Geneva and adopted by the United Nations General Assembly.

1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT):

The NPT is a landmark international treaty aiming to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy and to further the goal of achieving nuclear disarmament and general and complete disarmament. The Treaty represents the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon States Parties.

1971 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and Ocean Floor and in the Subsoil Thereof (Seabed Treaty):

The Treaty forbids States Parties from implanting or emplacing on the seabed and the ocean floor and in the subsoil thereof beyond the outer limit of a seabed zone any nuclear weapons or any other types of weapons of mass destruction as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons. In 1969, the United States and the Soviet Union submitted a joint draft to the Conference of the Committee on Disarmament. The final draft was approved by the United Nations General Assembly's Resolution 2660 (XXV) on 7 December 1970.

2005 International Convention for the Suppression of Acts of Nuclear Terrorism:

The Convention refers to the criminalization of planning, threatening, or carrying out acts of nuclear terrorism; it also requires States to criminalize these offenses via national legislation and to establish penalties in line with the gravity of such crimes. The General Assembly unanimously approved the Convention on 13 April 2005 by resolution A/RES/59/290.

2017 Treaty on the Prohibition of Nuclear Weapons:

The Treaty on the Prohibition of Nuclear Weapons prohibits the use, possession, development, testing, deployment and transfer of nuclear weapons, leading towards their total elimination.

3. Nuclear-Weapon-Free-Zone Treaties:

1951 Antarctic Treaty:

The Treaty asserts that Antarctica shall be used for peaceful purposes only. The Treaty prohibits any nuclear explosions in Antarctica and the disposal there of radioactive waste material.

1967 Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Tlatelolco Treaty):

The Contracting Parties hereby undertake to use exclusively for peaceful purposes the nuclear material and facilities which are under their jurisdiction, and to prohibit and prevent in their respective territories: (a) The testing, use, manufacture, production or acquisition by any means whatsoever of any nuclear weapons, by the Parties themselves, directly or indirectly, on behalf of anyone else or in any other way, and (b) The receipt, storage, installation, deployment and any form of possession of any nuclear weapons, directly or indirectly, by the Parties themselves, by anyone on their behalf or in any other way.

1985 South Pacific Nuclear-Free Zone (Treaty of Rarotonga):

Parties to the Treaty of Rarotonga undertake not to manufacture or otherwise acquire, possess or have control over any nuclear explosive device by any means anywhere inside or outside the South Pacific Nuclear Free Zone, not to take any action to assist or encourage, and not to seek or receive any assistance in the manufacture or acquisition of any nuclear explosive device.

1992 Nuclear-Weapon-Free Status of Mongolia:

This Declaration, made by Mongolia, prohibits any individual, legal person or any foreign State on the territory of Mongolia from committing, initiating, or participating in the following acts or activities relating to nuclear weapons: 1) developing, manufacturing, or otherwise acquiring, possessing, or having control over nuclear weapons; 2) stationing or transporting nuclear weapons by any means; 3) dumping or disposing nuclear weapons-grade radioactive material or nuclear waste.

1995 Southeast Asian Nuclear-Weapon-Free-Zone Treaty (Bangkok Treaty):

Each State Party undertakes not to, anywhere inside or outside the Zone: (a) develop, manufacture or otherwise acquire, possess or have control over nuclear weapons; (b) station or transport nuclear weapons by any means; or (c) test or use nuclear weapons. The SEANWFZ comprises the territories of all States in Southeast Asia, namely, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam, and their respective continental shelves and Exclusive Economic Zones (EEZ).

1996 African Nuclear-Weapon-Free-Zone Treaty (Pelindaba Treaty):

Parties to the Pelindaba Treaty undertake not to conduct research on, develop, manufacture, stockpile or otherwise acquire, possess or have control over any nuclear explosive device. The Treaty does not prevent the use of nuclear sciences and technology for peaceful purposes. "African nuclear-weapon-free zone" means the territory of the continent of Africa, islands States members of OAU and all islands considered by the Organization of African Unity in its resolutions to be part of Africa

2006 Central Asia Nuclear-Weapon-Free-Zone:

Central Asian states undertake not to research on, develop, manufacture, stockpile or otherwise acquire, possess, or have any control over any nuclear weapon or other nuclear explosive device; not to seek or receive assistance in any of the above; or assist in or encourage such actions.

4. Bilateral Treaties:

1972 Interim Agreement between the United States of America and the Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation of Strategic Offensive Arms (SALT I):

The Parties undertook not to start construction of additional fixed land-based intercontinental ballistic missile (ICBM) launchers after July 1, 1972. The Agreement was to expire on 3 October 1977. However, on 23 September 1977, the United States made a unilateral announcement that it would continue to honour the Agreement while SALT II was still being negotiated, provided the USSR would do the same. On 25 September 1977, the USSR made a similar announcement.

1972 Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty):

Each Party undertakes to limit anti-ballistic missile (ABM) systems and to adopt other measures. Each Party also undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region except as provided for in Article III of the Treaty. Parties: United States and USSR (Russia, Belarus, Kazakhstan, Ukraine). Ceased to be in force on 13 June 2002, after the US formally withdrew.

1976 Treaty between the United States of America and the Union of Soviet Socialist Republics on Underground Nuclear Explosions for Peaceful Purposes (PNE Treaty):

The Parties undertook, not to conduct individual underground peaceful nuclear explosions (PNEs) with a yield exceeding 150 kilotons, group underground PNEs with an aggregate yield exceeding 1.5 megatons, or group PNEs with an aggregate yield exceeding 150 kilotons unless the individual explosions in the group could be identified and measured by agreed verification procedures.

1979 Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms, together with Agreed Statements and Common Understandings regarding the Treaty (SALT II):

Each Party undertakes, in accordance with the provisions of the Treaty, to limit strategic offensive arms quantitatively and qualitatively, to exercise restraint in the development of new types of strategic offensive arms, and to adopt other measures provided for in this Treaty.

1987 Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-range and Shorter-range Missiles (INF Treaty):

Each Party to this Treaty is legally bound to eliminate its intermediate-range and shorter-range missiles, not have such systems thereafter, and carry out the other obligations set forth in this Treaty.

1988 India-Pakistan Non-Attack Agreement:

Each party must refrain from undertaking, encouraging or participating in, directly or indirectly, any action aimed at causing the destruction of, or damage to, any nuclear installation or facility in the other country.

1991 Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I):

START I obligates each Party to reduce and limit its ICBMs and ICBM launchers, SLBMs and SLBM launchers, heavy bombers, ICBM warheads, SLBM warheads, and heavy bomber armaments.

1993 Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START II):

START II complemented, rather than replaced, the earlier START I, in that the earlier Treaty's provisions remain unchanged unless specifically modified by START II. START II was to remain in force for the duration of START I. START II established a limit on strategic weapons for each Party, with reductions to be implemented in two phases.

1994 US-DPRK Agreed Framework:

Under the Agreed Framework, the DPRK agreed to halt the operations and infrastructure development of its nuclear program in return for a package of nuclear, energy, economic, and diplomatic benefits from the United States.

2002 Treaty Between the United States of America and the Russian Federation on Strategic Offensive Reductions (SORT/Treaty of Moscow): (Superceded by New START)

The Treaty obligated each Party to reduce and limit strategic nuclear warheads, so that by December 31, 2012 the aggregate number of such warheads does not exceed 1700-2200 for each Party.

2010 Treaty between The United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START):

New START is the most recent agreement for nuclear arms reduction between the United States and Russia, establishing a limit on deployed strategic warheads. New START obligates each Party to reduce and limit its ICBMs and ICBM launchers, SLBMs and SLBM launchers, heavy bombers, ICBM warheads, SLBM warheads, and heavy bomber nuclear armaments.

Annex B: Selected UNIDIR publications on nuclear disarmament (2011-2018)

Over a long period of time, UNIDIR has produced a large number of studies specifically on issues facing the Conference on Disarmament or related to its nuclear disarmament work. All of this material is freely available for download from <www.unidir.org>.

Nuclear Disarmament in the Conference on Disarmament

Jerzy Zaleski – 2011

Between December 2010 and July 2011, UNIDIR carried out a project on “The Conference on Disarmament: Breaking the Ice”. As part of this work, Jerzy Zaleski, a recently retired Secretariat expert from the Geneva Branch of the UN Office for Disarmament Affairs, contributed this detailed background paper on the history of nuclear disarmament-related structures and proposals for work in the Conference.

Practical Steps towards Transparency of Nuclear Arsenals

Pavel Podvig – 2012

The development of a comprehensive reporting standard called for in the 2010 NPT Action Plan would require a coordinated effort on the part of the international community. However, important elements of the future transparency regime are already in place in the US–Russian nuclear disarmament process. As discussed in this publication, the legal and institutional framework created by the New START Treaty could provide a practical template for a future regime of comprehensive transparency of nuclear arsenals.

Transparency in the Nuclear Non-Proliferation Regime

Tim Caughley – 2012

Transparency is a principle to which all states should adhere because it helps to reinforce compliance with treaty obligations. The more that is known about the manner of implementation of a state’s binding treaty commitments the greater will be the level of international trust in the regime. This publication provides a short history of transparency in the NPT before discussing the proposals by states parties.

Disposition of Excess Military Nuclear Material

Pavel Podvig – 2012

This paper presents an overview of the current programmes to eliminate fissile materials and some of the problems they have encountered. The experience of the US-Russian programmes suggests that there are no significant barriers that would prevent nuclear-weapon states from declaring more of their military material as excess to military purposes. At the same time, these programmes have demonstrated the difficulty of disposing of weapon materials in a safe, secure and economically efficient way.

Disposition of Excess Russian Weapon HEU and Plutonium

Anatoli Diakov – 2012

This paper discusses the disposition of excess Russian weapon highly enriched uranium (HEU) and plutonium. Russia and the United States have made considerable progress in reducing their HEU stockpiles in recent years. In contrast, disposition of US and Russian excess weapons plutonium has yet to begin.

[Universalization of Comprehensive Safeguards—Next Steps](#)

Annette Schaper – 2012

This publication discusses the advantages of universal safeguards, the commitments that have been made so far, and the steps that are necessary to achieve this goal.

[Transparency in Nuclear Disarmament](#)

Pavel Podvig – 2012

This paper provides an overview of the transparency and verification measures that have been implemented so far in the context of nuclear disarmament and the procedures that have been developed to ensure irreversibility of the reductions of nuclear arsenals.

[Challenges of Protecting US Nuclear Weapon Materials](#)

Nickolas Roth – 2012

Facilities within the United States' nuclear weapons complex possess enough separated weapons-grade plutonium and high-enriched uranium to build tens of thousands of nuclear weapons. Events in the United States have highlighted challenges and demonstrated that, even in nuclear-weapon states with high standards for physical security, seemingly insignificant failures can have potentially significant consequences.

[The NTI Nuclear Materials Security Index](#)

Page O. Stoutland – 2012

The Nuclear Threat Initiative (NTI) Nuclear Materials Security Index is a first-of-its-kind public benchmark assessment of nuclear materials security conditions on a country-by-country basis. The NTI Index, prepared with the Economist Intelligence Unit (EIU) and guided by an international panel of nuclear security experts, was created to catalyse discussion about nuclear materials security priorities, and to encourage governments to provide assurances and take actions to strengthen nuclear materials security. This UNIDIR project draws on NTI's nuclear expertise, the EIU's experience in constructing indices, and the reach of the EIU's global network of 900 analysts and contributors. The NTI Index can be accessed online at <www.ntiindex.org>.

[Reducing Alert Rates of Nuclear Weapons](#)

Hans M. Kristensen & Matthew McKinzie – 2012

As this study illustrates, the use of even several dozen strategic nuclear weapons—a small percentage of the current alert forces of the United States and the Russian Federation—could kill hundreds of millions of people. Overall, this study finds that alert nuclear forces contradict the efforts to reduce the role—and to some extent the numbers—of nuclear weapons by locking nuclear-weapon states in unnecessarily threatening and dangerous postures that drive high requirements for nuclear weapons capability and war-fighting

preparations, motivate mistrust and worst-case planning, and contradict the hopes and aspirations of the overwhelming part of the international community to end the threat of nuclear war.

[Prospects for Nuclear Power in the Middle East after Fukushima and the Arab Spring](#)

Anton Khlopkov – 2012

This paper examines the impact of the Fukushima accident on the Middle Eastern countries' nuclear energy plans and the effects of the processes and transformations that began in the region in late 2010–early 2011, known collectively as the Arab Spring.

[The IAEA Additional Protocol after the 2010 NPT Review—Status and Prospects](#) *Mark Hibbs – 2013*

This publication examines the developments from 1997 through 2010, before discussing the status and prospects of the IAEA Additional Protocol after the 2010 NPT Review.

[Humanitarian Impacts of Nuclear Weapons: Tracing Notions about Catastrophic Humanitarian Consequences](#)

Tim Caughley – 2013

This paper examines the notion of catastrophic humanitarian consequences and the origins of similar expressions as orienting concepts in the context of use of weapons of mass destruction in particular.

[Viewing Nuclear Weapons through a Humanitarian Lens: Context and Implications](#)

John Borrie – 2013

This paper considers the relevance of viewing nuclear weapons through a humanitarian lens—along with some criticisms of it—with a view to informing contemporary policy debate.

[A New START Model for Transparency in Nuclear Disarmament](#)

Tamara Patton, Pavel Podvig & Phillip Schell – 2013

Transparency and accountability are important elements of nuclear disarmament. The action plan adopted at the 2010 Non-Proliferation Treaty Review Conference encouraged the nuclear-weapon states to agree on a reporting standard that would help demonstrate progress in their commitment to pursue reductions of nuclear arsenals. This study presents a model for such reporting, based on the approach developed by the Russian Federation and the United States in the New START treaty. As the study demonstrates, the framework of the US–Russian nuclear disarmament process could serve as the foundation for a multilateral transparency and accountability regime, and provide a basis for closer cooperation and confidence-building measures among all NPT member states to help advance the goal of nuclear disarmament.

[A New START Model for Transparency in Nuclear Disarmament: Individual Country Reports](#)

Tamara Patton, Pavel Podvig & Phillip Schell – 2013

This supplement to the UNIDIR study A New START Model for Transparency in Nuclear Disarmament contains data exchange documents for all Nuclear Non-Proliferation Treaty nuclear-weapon states, which are modelled

after the reports submitted by the Russian Federation and the United States as part of their New START obligations.

[OEWG Briefing Paper no. 1. Nuclear Disarmament in Relevant United Nations Forums](#)

UNIDIR – 2013

This paper was prepared by UNIDIR at the request of Ambassador Manuel B. Dengo, Costa Rica, Chair of the Group. It contains background information about the treatment of the issue of nuclear disarmament in relevant forums established by the United Nations

[Understanding Disarmament no. 1: Negotiation of a Ban on the Production of Fissile Material](#)

UNIDIR – 2013

This paper provides brief insights into the issues that will arise when negotiations on a fissile material production ban begin in earnest.

[After Oslo: Humanitarian Perspectives and the Changing Nuclear Weapons Discourse](#)

John Borrie & Tim Caughley – 2013

This paper examines recent international policy discourse concerning new initiatives on nuclear disarmament that draw primarily from, or are influenced by, humanitarian concerns about the consequences of the use of nuclear weapons. In particular, it analyses recent criticism from the Nuclear Non-Proliferation Treaty (NPT)'s five nuclear-weapon states that these initiatives constitute distractions from a "practical step-by-step approach" towards nuclear weapons reductions.

[The United Nations General Assembly High-Level Meeting on Nuclear Disarmament](#)

UNIDIR – 2013

This paper examines how a General Assembly high-level meeting on nuclear disarmament could effectively contribute to achieving the goal of nuclear disarmament.

[Viewing Nuclear Weapons through a Humanitarian Lens](#)

John Borrie & Tim Caughley (eds) - 2013

Drawing on a range of perspectives, this volume explores what viewing nuclear weapons through a humanitarian lens entails, and why it is of value. Recent developments in this respect are also examined, as well as what these could mean for nuclear arms control in the near future

[An Illusion of Safety: Challenges of Nuclear Weapon Detonations for United Nations Humanitarian Coordination and Response](#)

John Borrie & Tim Caughley - 2014

Prompted by findings from international conferences on their humanitarian impacts held in Norway in March 2013 and Mexico in February 2014, this UNIDIR study explores the challenges for activation and operation of the humanitarian system in a range of plausible, illustrative nuclear weapon detonation scenarios. As a scoping exercise the study identifies specific issues that warrant further policy and operational attention in order to enhance civilian protection from nuclear weapons.

[The Story so Far: The Humanitarian Initiative on the Impacts of Nuclear Weapons](#)

Nick Ritchie – 2014

In collaboration with ILPI, this publication is the first of the six thematic briefing papers produced for the December 2014 International conference on humanitarian impacts of nuclear weapons held in Vienna, Austria.

[A Harmful Legacy: The Lingering Humanitarian Impacts of Nuclear Weapons Testing](#)

John Borrie – 2014

In collaboration with ILPI, this publication is the second of the six thematic briefing papers produced for the December 2014 International conference on humanitarian impacts of nuclear weapons held in Vienna, Austria.

[A Limit to Safety: Risk, 'Normal Accidents', and Nuclear Weapons](#)

John Borrie – 2014

In collaboration with ILPI, this publication is the third of the six thematic briefing papers produced for the December 2014 International conference on humanitarian impacts of nuclear weapons held in Vienna, Austria.

[Population Displacement: Displacement in the Aftermath of Nuclear Weapon Detonation Events](#)

Simon Bagshaw – 2014

In collaboration with ILPI, this publication is the fourth of the six thematic briefing papers produced for the December 2014 International conference on humanitarian impacts of nuclear weapons held in Vienna, Austria.

[Gendered Impacts: The Humanitarian Impacts of Nuclear Weapons from a Gender Perspective](#)

Anne Guro Dimmen – 2014

In collaboration with ILPI, this publication is the fifth of the six thematic briefing papers produced for the December 2014 International conference on humanitarian impacts of nuclear weapons held in Vienna, Austria.

[Legal Aspects of Nuclear Weapons: A 'Bird's-eye View' of International Law and Nuclear Weapons](#)

Gro Nystuen – 2014

In collaboration with ILPI, this publication is the sixth of the six thematic briefing papers produced for the December 2014 International conference on humanitarian impacts of nuclear weapons held in Vienna, Austria.

The Humanitarian Initiative in 2015: Expectations are Building for the Need for Nuclear Disarmament Progress

Nick Ritchie – 2015

In collaboration with ILPI, this publication is the first of the five thematic briefing papers produced for the April-May 2015 five-yearly review meeting of the NPT.

On the Ethics of Nuclear Weapons: Framing a Political Consensus on the Unacceptability of Nuclear Weapons

Nobuo Hayashi – 2015

In collaboration with ILPI, this publication is the second of the five thematic briefing papers produced for the April-May 2015 five-yearly review meeting of the NPT.

Analysing Effective Measures: Options for Multilateral Nuclear Disarmament and Implementation of NPT Article VI

Tim Caughley – 2015

In collaboration with ILPI, this publication is the third of the five thematic briefing papers produced for the April-May 2015 five-yearly review meeting of the NPT.

On Builders and Blockers: States Have Different Roles to Play to Complete the Nuclear Disarmament Puzzle

Torbjørn Graff Hugo – 2015

In collaboration with ILPI, this publication is the fourth of the five thematic briefing papers produced for the April-May 2015 five-yearly review meeting of the NPT.

NPT Success and the Humanitarian Initiative: A Range of Initiatives Is Required to Achieve a Nuclear-Weapon-Free World

John Borrie, Tim Caughley & Nick Ritchie – 2015

In collaboration with ILPI, this publication is the fifth of the five thematic briefing papers produced for the April-May 2015 five-yearly review meeting of the NPT.

A Prohibition on Nuclear Weapons: A Guide to the Issues

John Borrie, Tim Caughley, Torbjørn Graff Hugo, Magnus Løvold, Gro Nystuen & Camilla Waszink – 2016

This study surveys various views on how to promote and achieve nuclear disarmament in the current security environment. It draws on our institutes' previous work on nuclear weapons-related issues, for instance, as part of analysing the so-called 'humanitarian impacts initiative', the work of the Conference on Disarmament, and the Nuclear Non-Proliferation Treaty (NPT).

[UNIDIR OEWG Brief no. 2: The Treatment of the Issue of Nuclear Disarmament since the Open-Ended Working Group](#)

UNIDIR – 2016

This background paper, prepared at the request of the Chair of the 2016 OEWG, outlines developments in different international processes related to the treatment of nuclear disarmament since 2013. It builds upon an earlier UNIDIR Brief for the OEWG in 2013 entitled ‘The Treatment of the Issue of Nuclear Disarmament in Relevant Forums Established by the United Nations’.

[Fissile Material \(Cut-off\) Treaty: Elements of the Emerging Consensus](#)

Pavel Podvig – 2016

This paper presents the elements of this emerging consensus in order to stimulate further productive discussion of the treaty. It focuses on the points of agreement to illustrate that a number of important issues have already been effectively resolved.

[Verifiable Declarations of Fissile Material Stocks: Challenges and Solutions](#)

Pavel Podvig – 2016

This paper examines some practical challenges of including declarations of fissile material stocks in the future treaty that bans production of fissile materials for weapons, as well as solutions that could help address these challenges.

[Fissile Material \(Cut-off\) Treaty: Definitions, Verification, and Scope](#)

Pavel Podvig – 2016

This paper aims to present a summary of the issues related to definitions, verification and scope taking into account the most recent discussions that have taken place in the expert community.

[Nuclear Disarmament Verification: Survey of Verification Mechanisms](#)

Tim Caughley – 2016

The objective of this survey is to provide a general overview of past and present verification activities and proposals relevant to the elimination of nuclear weapons.

[Gender, Development and Nuclear Weapons: Shared Goals, Shared Concerns](#) *John Borrie, Kjølsv Egeland, Torbjørn Graff Hugo, Anne Guro Dimmen & Camilla Waszink – 2016*

This study discusses the relationship between nuclear weapons and gender—how and why the two are connected, both to each other, and to shared global agendas such as sustainable development.

[Taking Forward Multilateral Nuclear Disarmament Negotiations: The 2016 Open-ended Working Group](#)

UNIDIR – 2016

This paper builds upon and updates the [OEWG Brief no. 1, 2013](#), and the [OEWG Brief no. 2, 2016](#).

[FM\(C\)T Meeting Series—FM\(C\)T: Elements of the Emerging Consensus](#)

Zia Mian, Pavel Podvig, Annette Schaper – 2016

This report presents the first meeting of the 2016 UNIDIR Fissile Material (Cut-off) Treaty Meeting Series, which examined the structure and basic elements of the treaty, future directions of research in support of the treaty, and a potential ban on production of all weapon-usable fissile materials.

[FM\(C\)T Meeting Series—Verifiable Declarations of Fissile Material Stocks: Challenges and Solutions](#)

Anatoly S. Diakov, Alexander Glaser, Malte Göttsche, Pavel Podvig – 2017

The papers presented in this volume examine some practical challenges of including declarations of fissile material stocks in the treaty as well as solutions that could help address these challenges.

[FM\(C\)T Meeting Series—Addressing Disparities in a Non-Discriminatory Fissile Material Treaty](#)

Vitaly Fedchenko, Pavel Podvig, Thomas E. Shea – 2017

The papers presented in this volume examine practical ways the future Fissile Material (Cut-off) Treaty could deal with the existing disparities in the size of fissile material stocks and the history of production of fissile materials for military purposes while still preserving the non-discriminatory nature of the treaty and building an effective and efficient verification system.

[Lock them Up: Zero-deployed Non-strategic Nuclear Weapons in Europe](#)

Pavel Podvig and Javier Serrat – 2017

This paper presents a proposal to ensure that all such weapons remain non-deployed during peacetime, codifying current practices into a legally-binding, verifiable arrangement—thereby reducing the risks of nuclear war breaking out in times of peace and placing safeguards against nuclear escalation in times of crisis.

[Understanding Nuclear Weapon Risks](#)

John Borrie, Tim Caughley and Wilfred Wan, editors – 2017

Policy attention to date has focused predominantly on understanding the consequences of nuclear weapon detonations. The probability side of the risk equation, by contrast, is less well understood. Risk assessment and risk management warrant more attention. In response, this study seeks to contribute to the facts-based discourse about nuclear weapons by drawing on a range of expert perspectives. It explores various sources of nuclear weapon risk, from technological aspects to military strategy to political considerations, among others, and considers recent security developments of relevance.

[The NPT and the Prohibition Negotiation: Scope for Bridge-building](#)

Paul Meyer & Nick Ritchie – 2017

This publication comprises two papers. These two papers were prepared for a panel event held during the first preparatory committee meeting of the Treaty on the Non-Proliferation of Nuclear Weapons (known as the Non-Proliferation Treaty, NPT) in Vienna on 2 May 2017. Organized by the Hiroshima Prefectural Government, the event aimed to elucidate a variety of perspectives on how to facilitate building bridges towards nuclear disarmament.

[Negotiation of a Nuclear Weapons Prohibition Treaty: Nuts and Bolts of the Ban](#)

Tim Caughley & Gaukhar Mukhatzhanova – 2017

The two papers in this publication were prepared in advance of the June–July 2017 session of the United Nations conference in 2017 to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination. Building upon the 2016 ILPI/UNIDIR Guide to the Issues, the papers aim to constitute a practical resource for practitioners involved in the negotiations. This paper is part of a series of UNIDIR briefs on the “nuts and bolts of a ban”.

[Negotiation of a Nuclear Weapons Prohibition Treaty—The New Treaty: Taking Stock](#)

Yasmin Afina, John Borrie, Tim Caughley, Nick Ritchie & Wilfred Wan - 2017

In July 2017, 122 States adopted the Treaty on the Prohibition of Nuclear Weapons. This paper briefly traces the context and course of its negotiation. It comments on the key features of the treaty, on its relationship with other treaties, and on next steps towards nuclear disarmament. This paper is part of a series of UNIDIR briefs on the “nuts and bolts of a ban”.

[Deferred verification: Verifiable Declarations of Fissile Material Stocks](#)

Pavel Podvig, Joseph Rodgers - 2017

Fissile Material Cut-off Treaty could include declarations of fissile material inventories of all categories of materials, including materials in nuclear weapons. This arrangement, referred to as "deferred verification", would allow declarations to be legally binding and verifiable. Combined with the introduction of FMCT, this arrangement could be the result of fissile material stocks and the gradual elimination of all weapons-related fissile materials.

[Space Security and Strategic Stability](#)

Joseph Rogers – 2018

The space environment and existing political initiatives to govern space and constrain its militarization are changing. This paper surveys those changes and examines how recent developments in the space environment may impact “strategic stability”. It assesses definitions and criticisms of strategic stability in the context of space and discusses the implications of reliance on strategic stability in space as a guiding principle in the contemporary and near future world.

[Reducing the Role of Nuclear Weapons in North East Asia](#)

Nick Ritchie – 2018

In August 2017 a roundtable of experts and former officials met in Hiroshima, Japan to discuss pathways towards nuclear disarmament in North East Asia. The deterioration in US–DPRK relations in 2017 precipitated by Pyongyang’s technological advances in thermonuclear weapons and long-range ballistic missiles featured heavily. The Hiroshima Roundtable Chairman’s concluding statement suggested that to deter the DPRK, the US and its allies need not rely, or state publicly their reliance, on nuclear weapons due to the range of conventional deterrence options at their disposal. In consequence, this paper was commissioned by UNIDIR and the Hiroshima Prefecture, primarily to examine steps the US, alongside the ROK, could take to reduce the role of nuclear weapons in its strategy towards the DPRK.

[Resuming dialogue on moving nuclear disarmament forward: An immediate challenge](#)

John Borrie – 2018

Nuclear disarmament is a shared objective, and many steps towards it have been identified in past NPT final review conference documents and in the UNGA. Meanwhile, in an increasingly uncertain strategic environment, the reality is that nuclear disarmament is at an impasse. Dialogue is needed with a view to achieving the requisite collective intentionality required for future progress, and transcending what has become an unhelpfully polarized discourse within the NPT and other forums related to the management of nuclear dangers. After setting out context, some suggestions are made in this paper for elements to contribute to common dialogue towards that end.

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