Through a Glass Darkly:  
Transparency, Nuclear Weapons, and the United Nations

Paper Presented

By

Randy Rydell
Senior Political Affairs Officer

Workshop of the International Panel on Fissile Materials\(^1\)
Princeton University
30 March 2012

\(^1\) The views presented herein are solely those of the author and not necessarily those of the United Nations. The author gratefully acknowledges the assistance of his intern, Guillaume Farger, in the preparation of this essay.
The United Nations—encompassing its Secretariat and its Member States—has been working on the elimination of nuclear weapons since the adoption of the General Assembly’s first resolution on 24 January 1946. Yet 66 years later, in 2012, not only has nuclear disarmament not been achieved, there are still not even authoritative estimates of the precise number of nuclear weapons in the world—nor the quantities of fissile materials and delivery systems. The number of nuclear weapons is currently estimated at around 20,000—or so—but this figure offers little more than modest gratification, in that the number is at least not over 70,000 as reported in the mid 1980s. Fact-finders are confronted with “ceilings” and unconfirmed, unilateral declarations. Some might call this progress toward disarmament.

Yet one of the fundamental purposes of the UN is to serve as a unique global forum for the deliberation, promulgation, adaptation, and enforcement of multilateral (read universal) norms. In the field of disarmament, various components of what is known as the “UN disarmament machinery”—including the UN Disarmament Commission, the General Assembly’s First Committee, and the Conference on Disarmament—along with other multilateral arenas (including those associated with the Comprehensive Nuclear-Test-Ban Treaty and the Nuclear Non-Proliferation Treaty), have cumulatively produced a very short list of standards or benchmarks denoting what qualifies as a “good” disarmament agreement. Evidence for these standards is easily found in General Assembly resolutions, Final Documents of NPT Review Conferences, and other products of multilateral arenas commanding a consensus or near-consensus.

Specifically, these standards can be reduced to five: transparency; verification; irreversibility; universality; and bindingness. Transparency—the marshalling of reliable data on specific agreed subjects (e.g., warheads, bombs, fissile material, production and storage facilities, and delivery systems) for a disarmament purpose—is one of the most important of these standards. As Secretary-General Ban Ki-moon has stated, “without real transparency, there can be no real accountability”. A similar point could be made about the implications of transparency for these other multilateral standards—what kind of verification and irreversibility can be achieved without transparency?

In the history of disarmament efforts, and the literature about such efforts, critics have identified many alleged problems with pursuing a world without nuclear weapons. Reduced to their essentials, twelve such criticisms—the “dirty dozen”—are repeated endlessly in disarmament critiques—a mantra spanning several decades. Disarmament, we are told, is: utopian; impractical; dangerous; unverifiable; etc.

These critics, however, typically do not compare the risks and benefits of disarmament against those associated with the status quo, nor the dangers of a world of additional nuclear-armed States, or a world of States engaged in qualitative nuclear armed races. They do not consider the benefits for international peace and security of the full realization of the five multilateral standards outlined above. Two of the leading criticisms of disarmament are the

---

spectres of cheating or “break-out”. Yet the fulfillment of these five multilateral standards would address precisely that challenge, and arguably do so far better than another possible solution—including deterrence, preemption, the pursuit of strategic “superiority”, the balance of power, sanctions, export controls, missile defense, et al.

And at the heart of these standards is transparency—a necessary but not sufficient basis for disarmament. Necessary, because all the other multilateral disarmament standards depend on it. But not sufficient, because the mere availability of declarations about arsenals and stockpiles of fissile material and delivery systems—at the exclusion of other standards—at best enables the “metering” rather than the prevention of proliferation, while constituting a fragile basis indeed for disarmament.

A fundamental purpose of “transparency” in disarmament is to address one of the most challenging criticisms found in the dirty dozen—namely, that there just never seems to be a sufficient level of “trust” or “confidence” to permit serious progress toward zero. This is ironic, since one of the whole purposes of transparency is to alleviate just such concerns: confidence-building could even be called the raison d’être of transparency. When the information derived from transparency arrangements is verified, confidence is enhanced all the more. When it is augmented by specific controls to eliminate the risk of reversibility of disarmament commitments, it is strengthened even further. And when such arrangements are implemented universally and pursuant to binding legal obligations, they become indisputable as a foundation for security and order in a world without nuclear weapons.

If transparency is so important, where do the UN, the NPT States parties, and the P5 stand today on efforts to improve it? (Note: this survey focuses on nuclear disarmament themes and does not address other transparency issues associated with IAEA safeguards, peaceful uses of nuclear energy, nuclear safety or physical security.)

Secretary-General Ban Ki-moon and the 2010 NPT Review Conference

On 24 October 2008, the Secretary-General announced a five-point nuclear disarmament proposal – he described his fourth point as follows:

The nuclear-weapon States often circulate descriptions of what they are doing to pursue these goals, yet these accounts seldom reach the public. I invite the nuclear-weapon States to send such material to the United Nations Secretariat, and to encourage its wider dissemination. The nuclear Powers could also expand the amount of information they publish about the size of their arsenals, stocks of fissile material and specific disarmament achievements. The lack of an authoritative estimate of the total number of nuclear weapons testifies to the need for greater transparency.

On 8 December 2009, he again returned to the themes of transparency and accountability, saying:

In 2000, the NPT Review Conference agreed on several practical steps for advancing disarmament, including the preparation of ‘regular reports’ on implementing Article VI.

I will, therefore, call upon all States that support my initiative for such a registry to consider including it in the recommendations to be adopted at the forthcoming Review Conference. I also intend to explore ways to encourage greater involvement by civil society and parliamentarians.

Six months later, the States Parties to the NPT concluded their 2010 Review Conference, whose Final Document included numerous references to the importance of transparency in safeguards (paragraph 21 of the Final Document), export controls (para 26), multilateral approaches to the fuel cycle (para 57), and the merits of unilateral declarations concerning their “national inventories” (para 94). Yet all of these references pertained to the “review” portion of the Review Conference, which was prepared solely on the authority of the Conference President, Ambassador Libran Cabactulan.

The rest of the Final Document referred to consensus language on an “Action Plan”. Action 2 stated, “All States parties commit to apply the principles of irreversibility, verifiability and transparency in relation to the implementation of their treaty obligations.” Action 5, which addressed specific actions by the nuclear-weapon States, included subparagraph (g), which read, “Further enhance transparency and increase mutual confidence….” Subparagraph (i) affirmed “the importance of enhanced confidence through increased transparency and effective verification.” This was not all that was agreed in at this Review Conference on transparency.

Action 19 provided:

All States agree on the importance of supporting cooperation among Governments, the United Nations, other international and regional organizations and civil society aimed at increasing confidence, improving transparency and developing efficient verification capabilities related to nuclear disarmament.

Action 20 states that States parties should submit “regular reports” on the implementation of this Action Plan, and Action 21 went further, stating:

As a confidence-building measure, all the nuclear-weapon States are encouraged to agree as soon as possible on a standard reporting form and to determine appropriate reporting intervals for the purpose of voluntarily providing standard information without prejudice to national security. The Secretary-General of the United Nations is invited to establish a publicly accessible repository, which shall include the information provided by the nuclear-weapon States.

In 2011, the UN Secretariat’s Office for Disarmament Affairs established a page on its official web site relating to Action 21 of the 2010 NPT Review Conference. The page is essentially a “place-keeper” for the eventual establishment of a “Repository of information provided by nuclear-weapon States”. The future of this transparency instrument – whose lineage can be traced back not just to the 2010 NPT Review Conference, or the Secretary-General’s 24 October 2008 proposal, but also to decades of efforts to improve transparency of nuclear weapons disarmament progress at the United Nations—is entirely dependent upon the readiness of the states possessing such weapons to contribute data to this repository.

The determination of what types of data should be contributed is still up to the nuclear-weapon States, though Secretary-General’s 24 October 2008 speech did suggest the following types of information: “the size of their arsenals, stocks of fissile material and specific disarmament achievements.” This would logically include—in fundamental “base-line” declarations—bombs and warheads (both deployed and non-deployed), weapon usable fissile material in both military and civilian programmes, facilities for the production of both nuclear weapons and their fissile materials, and delivery systems (land-based missiles, bombers, air-launched missiles, and submarine-launched missiles), including both cruise and ballistic missiles, as well as tactical or so-called non-strategic weapons.6

The level of detail of these declarations would certainly grow the closer the arsenals approached zero, as would the level of verification and controls for irreversibility. Accountable progress in disarmament requires at least a minimal “base-line” from which the world community can identify and assess such progress. As Secretary-General Ban once said, “let us work together to bring disarmament down to earth.”7 Transparency measures are a practical way of pursuing that goal.

Speaking as the UN’s High Representative for Disarmament Affairs, Sergio Duarte further reinforced the importance of transparency in an NPT context:

Let me say here that transparency is not a dispensable option for ensuring accountability under the treaty, both with respect to non-proliferation and disarmament commitments, as well as to peaceful uses. If there is little or no transparency, how are the States parties supposed to assess progress in achieving the goals of the treaty, especially with respect to disarmament? Basic facts about weapon production, stockpiles, and holdings of fissile material are absolutely essential in the establishment of a “base line” from which to assess progress in disarmament. Without such facts, how is the whole “confidence-building” function of transparency to be achieved? If states are to rely exclusively upon discretionary reporting on progress in disarmament, on what grounds can a stricter standard be applied to assess compliance in non-proliferation? Any treaty that applies a full-transparency standard for most of its parties—without corresponding requirements for some of them—will inevitably encounter difficulties.8

Looking ahead to the future of the NPT, he later elaborated these views:

… a good place to start is with increased transparency over progress in reducing and eliminating existing nuclear arsenals, fissile material, and delivery systems. . . . because without real transparency, there can be no real accountability—and without

---


accountability, the review process will lose all its meaning, and the Treaty can only suffer as a result. My own office—the United Nations Office for Disarmament Affairs—is ready to receive and process the information to be provided by States Parties to the NPT. . . . The ultimate beneficiaries of enhanced accountability and transparency in the NPT review process will be the general public. . . . In conclusion, while I am certainly unable to predict the future of disarmament and non-proliferation, I have learned through the years that without respect for accountability and transparency these goals will remain highly unreachable.  

Elsewhere he stated, “transparency enables the world to witness disarmament as it is underway, and to gauge its progress in achieving elimination.”

These views from the UN about transparency reinforce many others voiced in earlier NPT Review Conferences. Step number 9 of the famous “thirteen steps” on nuclear disarmament that were agreed by consensus in the 2000 NPT Review Conference, read as follows:

Increased transparency by the nuclear-weapon States with regard to the nuclear weapons capabilities and the implementation of agreements pursuant to article VI and as a voluntary confidence-building measure to support further progress on nuclear disarmament.

Similarly, step number 12 provided for “regular reports” on implementing nuclear disarmament commitments under the treaty.

Regular reports, within the framework of the strengthened review process for the Non-Proliferation Treaty, by all States parties on the implementation of article VI and paragraph 4 (c) of the 1995 Decision on “Principles and Objectives for Nuclear Non-Proliferation and Disarmament”, and recalling the advisory opinion of the International Court of Justice of 8 July 1996.

Approaches to transparency in the UN disarmament machinery

Since its reorganization following the General Assembly’s first Special Session on disarmament in 1978, the UN Disarmament Commission has not adopted any Guidelines or recommendations specifically on transparency issues with respect to nuclear weapons.

---

By contrast, the First Committee of the General Assembly has addressed nuclear weapons transparency fairly regularly, if somewhat tangentially. In recent years, three nuclear weapons resolutions have briefly addressed this issue—the resolutions in 2011 were:

Resolution 66/40: Introduced by New Zealand (on behalf of the seven-member New Agenda Coalition); it recalled the commitment of the nuclear-weapon States at the 2010 NPT Review Conference “to further enhance transparency and mutual confidence”;

Resolution 66/45: Introduced by Japan; it emphasized “the principles of irreversibility, verifiability, and transparency” in nuclear disarmament and non-proliferation; affirmed “the importance of enhanced confidence through increased transparency and effective verification”; and welcomed the Paris meeting of the P5 in June 2011 as a “transparency and confidence-building measure among them”;

Resolution 66/51: Introduced by Myanmar (with the co-sponsorship of several members of the Non-Aligned Movement); it underlined “the importance of applying the principles of transparency, irreversibility, and verifiability” in nuclear disarmament.

In 2011, there was an additional resolution introduced by Iran to “follow-up” on the nuclear disarmament obligations agreed at the 1995, 2000, and 2010 NPT Review Conferences. Adopted by a vote of 118-52-6, Resolution 66/28 called (inter alia) for “increased transparency” on the part of the nuclear-weapon States in implementing agreements pursuant to NPT Article VI.

The Conference on Disarmament in Geneva has been unable to commence negotiations on any new multilateral disarmament treaties since concluding its work on the Comprehensive Nuclear-Test-Ban Treaty in 1996. Its efforts to start work on a fissile material treaty (what many call a “cut-off” treaty)—which certainly would have implications for nuclear transparency—have failed to achieve a consensus.

**Steps taken by the nuclear-weapon States**

The response of the P5 nuclear-weapon States (some of them at least) to growing demands for transparency has come in two forms—unilateral declarations, typically in the form of ceilings on deployed strategic weapons, and consultations amongst these states in a collective effort to respond to these calls for greater transparency. Of the five recognized nuclear-weapon States, only China has demurred on providing detailed information on its arsenal, fissile material and delivery systems, while the other four have at least declared ceilings of their deployed nuclear weapons and some details on current and historical production of fissile material and stocks. There is little to no transparency of the nuclear-weapon arsenals of the non-NPT states.

This essay will not address unilateral declarations because they are difficult to assess without verification and a reasonable opportunity for the world community to interpret them. Of much greater interest are the various efforts of the nuclear-weapon States to work out a common response to these growing demands for transparency.

---

12 Other resolutions addressing transparency issues relate to conventional arms, military expenditures, and outer space issues.
The first recent P5 meeting on “confidence building measures towards disarmament and non-proliferation issues” pre-dated the 2010 NPT Review Conference. It was held in London on 3-4 September 2009. A brief press release was issued, which contained few details of the discussions—these meetings are held in private—while acknowledging that one of the issues discussed including “building mutual confidence through voluntary transparency and other measures.” A prominent theme of this conference was the consideration of the various “conditions to enable further progress” in implementing Article VI (disarmament) of the NPT.

Following the NPT Review Conference of May 2010, France hosted the next P5 meeting on 30 June-1 July 2011 in Paris. The purpose of that meeting was “to consider progress on the commitments they made” at the Review Conference; their Joint Statement referred specifically to commitments made pursuant to Action 5 “as well as reporting.” They recognized “the issues of transparency and mutual confidence” as “important for establishing a firm foundation” for further progress in disarmament. They established a working group to consider the development of an agreed glossary of key nuclear terms. Other subjects addressed included verification, NPT withdrawal, the CTBT, efforts to conclude a fissile material “cut-off” treaty, a Middle East WMD Free Zone, and safeguards issues. Elaborating the language of NPT Article VI, they also called on all states—including non-NPT states—to “contribute to” nuclear disarmament. (At their first Summit meeting on nuclear disarmament and non-proliferation on 24 September 2009, the Security Council adopted Resolution 1887, which also contained this call for universal action on nuclear disarmament beyond Article VI of the NPT.) Another P5 meeting is reportedly scheduled for June 2012.

Yet it is not clear if, when, or in what format or scope the P5 will agree to contribute data to the “repository” that the UN Secretariat has established upon the request of the 2010 NPT Review Conference. The 2010 Final Document “called upon” the P5 states to report on their undertakings on Action 5 (which included transparency) at the third session of the Preparatory Committee in 2014, on the eve of the Review Conference the following year.

Transparency initiatives outside the UN: A brief survey

The number of transparency initiatives originating outside the UN are too numerous to address comprehensively in this essay. The following are identified solely to demonstrate their variety and longevity.

Several independent international commissions have stressed the importance of improvements in transparency, including: the Canberra Commission, the Tokyo Forum, the international WMD Commission, and the International Commission on Nuclear Non-Proliferation and Disarmament. The International Panel on Fissile Materials has made its own important contributions to this effort.

Various private research groups and NGOs have addressed transparency issues at length in recent studies on achieving nuclear disarmament, including the Carnegie Endowment for

International Peace,\textsuperscript{15} the Stimson Center,\textsuperscript{16} and many others. The Frankfurt Peace Research Institute has issued several reports on nuclear weapons transparency issues, including the specific proposal of a nuclear-weapons register.\textsuperscript{17} A group of NGOs has drafted a Model Nuclear Weapons Convention that contains several provisions relating directly to transparency; two versions (1997 and 2007) have been circulated at the UN as official UN documents.\textsuperscript{18} Useful work on improving NPT reporting has also been undertaken by Canadian NGOs, including the Canadian Network to Abolish Nuclear Weapons\textsuperscript{19} and Project Ploughshares.\textsuperscript{20}

Meanwhile, various bilateral agreements between the Russian Federation and the United States provide (inter alia) for the exchange of information on deployed strategic nuclear forces (e.g. the New Start treaty) and certain fissile materials (e.g., the 1993 Highly Enriched Uranium agreement and the 2000 Plutonium Management and Disposition Agreement). Especially noteworthy was the Joint Statement by President’s Yeltsin and Clinton in 1997 on parameters for further reductions in nuclear forces.\textsuperscript{21} Included in that statement was a commitment to begin negotiations on a follow-up treaty to START II (which never entered into force), that would include:

\textit{Measures relating to the transparency of strategic nuclear warhead inventories and the destruction of strategic nuclear warheads and any other jointly agreed technical and organizational measures, to promote the irreversibility of deep reductions including prevention of a rapid increase in the number of warheads.}

Also in 1997, the Committee on International Security and Arms Control of the US National Academy of Sciences published a report on The Future of U.S. Nuclear Weapons Policy, which stressed, “Unprecedented international transparency and accountability for fissile materials are essential preconditions for achieving very low numbers of nuclear weapons.”\textsuperscript{22}

\textsuperscript{15} George Perkovich and James M. Acton (eds), \textit{Abolishing Nuclear Weapons: A Debate} (Washington, D.C.: Carnegie, 2009).
\textsuperscript{16} Barry M. Blechman and Alexander K. Bollfrass (eds), \textit{Elements of a Nuclear Disarmament Treaty} (Washington, D.C.: Stimson Center, 2010).
\textsuperscript{18} Respectively, UN General Assembly documents A/C.1/52/7 (1997) and A/62/650 (2007).
\textsuperscript{19} For a report from a 2003 roundtable co-hosted by the Network, see http://www.web.net/~cnanw/Roundtablereport2003.pdf.
\textsuperscript{22} Citation from p. 70. The full report is available from the National Academies Press at: http://www.nap.edu/catalog/5796.html.
Over the years, several coalitions of States have advanced various nuclear weapons transparency initiatives.

The New Agenda Coalition (Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa, and Sweden) have for many years introduced General Assembly resolutions on nuclear disarmament issues; this coalition had a significant impact in shaping the 13 steps for nuclear disarmament agreed at the 2000 NPT Review Conference.

After the 2010 Review Conference, the foreign ministers of ten states (Australia, Canada, Chile, Germany, Japan, Mexico, the Netherlands, Poland, Turkey, and the United Arab Emirates) met in New York in September that year to form a group “to take forward the consensus” reached at that NPT event. Later called the “Non-Proliferation and Disarmament Initiative”, the group adopted a Joint Statement at their September 2010 meeting to urge the nuclear-weapon States (inter alia) “to pursue confidence building measures such as effective verification and increased transparency, including by reporting regularly on progress in implementing their disarmament undertakings.”23 The Joint Statement also indicated that the countries will consider “how we might most effectively contribute to the development of the ‘standard reporting form’ for use by the nuclear-weapon States” in meeting their disarmament commitments made at the 2010 Review Conference. The countries met again in Berlin on 30 April 2011 and issued the “Berlin Statement”, which indicated that they were developing a draft standard reporting form as a means to inform the nuclear-weapon States of “our expectations regarding information that we would like to see all states possessing nuclear weapons provide”.24 And on 21 September 2011, meeting again in New York, the 10 ministers issued another joint statement, which reported that the members of the group “have now shared our proposed reporting form with the P5.”25

The Non-Aligned Movement circulated a Working Paper at the 2010 NPT Review Conference that outlined a three-stage proposal for achieving nuclear disarmament.26 The proposal included the following pertaining to transparency, to be achieved in the 2010-2015 period: “Clear and verifiable declarations by States of their stocks of nuclear weapons and nuclear-weapons-usable material and agreement on a multilateral mechanism to monitor reductions by nuclear-weapon States of their nuclear arsenals individually, bilaterally or collectively.”

In April 2010, Second Conference of States Parties and Signatories of Treaties that Establish Nuclear-Weapon-Free Zones and Mongolia concluded by adopting an Outcome Document stressing that “all nuclear disarmament initiatives should be irreversible, transparent and verifiable.”27

---

The “Nuclear Security Summit” to be held on 26-27 March 2012 in Seoul may provide some additional opportunities to strengthen transparency, at least with respect to certain fissile materials.\textsuperscript{28} The primary foci of that event will be on nuclear non-proliferation, nuclear terrorism, and physical security of nuclear material—with disarmament and fissile materials in military stocks not being central themes. Yet at some point in the global nuclear disarmament process, the quality of transparency over all such material—military and civilian—will be critical to the future success of that process. As Secretary-General Ban Ki-moon once put it, “We should never forget that the nuclear fuel cycle is more than an issue involving energy or non-proliferation; its fate will also shape prospects for disarmament.”\textsuperscript{29}

Conclusion

While necessarily incomplete, this survey has arrived at six substantive conclusions:

(1) Efforts to improve transparency of nuclear arsenals and progress in achieving nuclear disarmament enjoy widespread support in the world community, including but not exclusively at the United Nations, and this support has endured for decades.

(2) Some progress in improving transparency has occurred, but almost entirely through unilateral, unverified declarations, and without universal support or participation by all States that possess such weapons.

(3) Future efforts to strengthen transparency will likely involve a combination of additional unilateral declarations coupled with possible new agreements among nuclear-weapon possessors, depending upon the outcome of future P5 deliberations.

(4) Most transparency proposals appear to be based on common sense reasoning, logical deduction, and conformity to some ideal type or model (stated or unstated), rather than close examination of the practical political realities of achieving full implementation—it is one thing to identify what a good agreement normatively should contain, quite another to offer a political plan of action to get it implemented; in all likelihood, such a plan would have to consider actions by coalitions of non-nuclear-weapon States, leadership from within the nuclear-weapon States, and sustained advocacy by diverse sectors of civil society.

(5) Undoubtedly one leading multilateral forum for advocacy of collective efforts to improve transparency in the years ahead will be the NPT review process, based on the expectations and momentum created by the 2010 Review Conference, especially vis-à-vis reporting. When the NPT was extended indefinitely in 1995, a common expression at the time was that this was an outcome of “permanence with accountability”.\textsuperscript{30} Whether this is indeed the case, or just wishful

\textsuperscript{28} For an overview, see \url{http://www.thenuclearecuritysummit.org/eng_info/overview.jsp}.

\textsuperscript{29} Speech of 24 October 2008, \url{http://www.un.org/News/Press/docs/2008/sgsm11881.doc.htm}.

thinking, will depend to a significant extent on whether the review process is successful in increasing transparency over the remaining nuclear arsenals, the relevant fissile materials, and concrete steps to implement disarmament commitments.

(6) Finally, the NPT cannot be the exclusive forum for progress on transparency, if the other solemn multilateral disarmament goal of “universality” is ever to be achieved—at some point, the non-NPT states must make their own contributions to transparency. While it will be entirely up to those states to decide what and when to divulge, those decisions have at least the potential to be influenced, perhaps significantly, by ongoing progress in nuclear disarmament elsewhere, diplomatic initiatives by coalitions of countries, and sustained pressure from civil society. Only then will the dark glass of transparency finally yield to clarity, and transparency will return to its dictionary definition.