



NEWS IN REVIEW

*Civil society perspectives on the second session of the Preparatory Committee
for the 2010 nuclear Non-Proliferation Treaty Review Conference
28 April–9 May 2008*



Transparency, accountability, credibility

Ray Acheson, Reaching Critical Will

Kicking off the Friday morning meeting, delegates from Canada and Mexico renewed their calls for greater transparency and official reporting by NPT states parties, calls that were echoed throughout the day by other delegations. These calls are not new, nor are they based on a desire for increased bureaucracy or paperwork. Project Ploughshares' latest report, *Transparency and Accountability: NPT Reporting 2002-2007*, notes, "The indefinite extension of the NPT in 1995 was agreed in the context of a collective commitment by States Parties to strengthening the Treaty's review process and, in particular, with a heightened sense of the need for mutual accountability in the implementation and furtherance of the aims of the Treaty."

Yet, as this report also notes, only 48 states parties to the NPT have submitted a report since the 13 Practical Steps (of which the obligation to report on the implementation of Article VI is the twelfth step) were adopted at the 2000 NPT Review Conference. At the 2007 PrepCom, only nine states submitted a report, the lowest on record. So far this year, only three states have submitted reports—Canada, Japan, and Iran. Of the nuclear weapon states, only Russia and China have ever submitted formal reports (both to the 2005 Review Conference). Project Ploughshares says, "All of the NWS that are party to the NPT have reported informally through a variety of statements and background materials.... For the most part, however, NWS have chosen not to provide formal reports, in defiance of the promise made when they agreed to the 2000 reporting provision."

In the past, Canada has routinely called for standardized and consistent reporting pursuant to Step 12, while Brazil has recommended that the NPT bureau track measures that nuclear weapon states have taken to implement article VI of the Treaty. On Friday, Mexico's representative called for a legally-binding mechanism for transparency and accountability that would include requirements for states to report not only on their reductions but also on their holdings and future plans. Canada's delegate also wanted to hear reports on the operational status of nuclear weapons, as did Japan and New Zealand. Japan's Amb. Tarui pointed to his delegation's working paper on nuclear disarmament (WP.10), which includes a non-exhaustive list of possible categories for reporting (see Working Paper Review on page 7 for more information).

New Zealand's Amb. Mackay echoed the call for a formalized reporting mechanism, arguing that its development is a realistic objective, as it would be consistent with what some nuclear weapon states are already doing unofficially. He suggested that one reason the nuclear weapon states feel they don't get enough recognition for their "disarmament measures" is because they don't supply the information pursuant to a standardized process.

In addition to failing to formally articulate their compliance with Article VI, the nuclear weapon states have also failed to implement Article VI. Amb. Mackay reminded the delegates that dismantlement does not equal disarmament, though it is a "useful interim step," and that transparent, irreversible, and effectively verifiable disarmament is essential. He argued that standardized reporting would help facilitate this process, foremost by strengthening confidence and trust between nuclear weapon states. Responding to the United Kingdom's proposal for a NPT-nuclear weapon state scientific conference on disarmament verification, Amb. Mackay commended the effort as a good transparency measure among the nuclear weapon states and requested the same type of transparency be extended to non-nuclear weapon states.

The fundamental objective of transparency is accountability, credibility, and the building of confidence. As South Africa's representative said, we need to have confidence in each other to ensure that nuclear weapons will never be used again. Short of the complete elimination of nuclear weapons, legally-binding negative security assurances and consistent, comprehensive reporting is key to building this confidence. South Africa's delegate also argued that states "exercising their right of peaceful uses of nuclear energy" have an obligation to build confidence in the international community and that some states, particularly those in the Europe, need to drop their "do what I say, no what I do" attitude in order to preserve their credibility as states committed to nuclear disarmament. He suggested that instead of simply calling on other states to develop nuclear weapon free zones, countries in Europe should begin a movement for a nuclear weapon free zone there.

The deficit of trust and confidence was brought to light by Syria's right of reply on Friday afternoon. Responding to the Australian delegation's comments on the alleged nuclear assistance between North Korea and Syria, the Syrian representative questioned Australia's credibility in the international community, accusing Australia of war crimes and crimes against humanity due to its involvement in the invasion and occupation of Iraq. He further questioned the United States' credibility, arguing the US has violated the NPT by providing nuclear assistance to Israel, a non-NPT state.

This exchange demonstrates the political tensions serving as a backdrop to multilateral deliberations and the linkages inherent in governments' decision-making processes. It starkly reminds us of the importance of transparency as a means to accountability and credibility—and ultimately, to confidence in the good faith of our neighbours. •

To download a copy of *Transparency and Accountability: NPT Reporting 2002-2007*, go to www.ploughshares.ca.

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Complex Transformation: A \$200 Billion Bailout of the Nuclear Weapons Industry?

William D. Hartung, New America Foundation

At a time when distinguished foreign policy experts are calling for a “world free of nuclear weapons,” the Department of Energy plans to undertake an extensive, multi-billion dollar investment in new nuclear weapons facilities and new nuclear warhead designs.

The initiative, known as “Complex Transformation,” is unnecessary on strategic and technical grounds, not to mention exorbitantly expensive. The various plans being considered by the DOE have more to do with bailing out the nuclear weapons industry than they do with determining what size complex makes sense in an era of nuclear arms reductions.

The Bush administration’s 2001 Nuclear Posture Review called for a “new triad” to replace the traditional nuclear triad of nuclear weapons delivered from the ground, from the air, and from the sea. The new triad is to consist of a variety of long-range strike systems, both nuclear and non-nuclear; a “responsive infrastructure” able to design and build new nuclear weapons as needed; and a capability to defend against nuclear attack. The purported advantage of the new triad concept is that it will provide future presidents with the “flexibility” to increase, decrease, or reshape the nuclear arsenal as needed in response to new developments.

In conjunction with this new nuclear strategy, the Department of Energy’s National Nuclear Security Administration (NNSA) has embarked upon a “Complex Transformation” initiative. Complex Transformation calls for upgrading existing nuclear weapons facilities, building new ones, and designing, producing and deploying new nuclear warheads. The Department of Energy (DOE) has supplied no comprehensive cost estimates for the various plans it may pursue in the name of transformation. The information that does exist raises more questions than it answers.

The Department of Energy argues that the current nuclear weapons stockpile is aging to the point that existing weapons could become unsafe and unreliable. But, a Department of Energy funded study by the highly regarded scientific expert group JASON suggests that current warheads will be reliable for at least another 75 to 100 years.

Similarly, DOE’s argument that nuclear weapons facilities are too old is misleading. Although some of the buildings were built decades ago, much of the equipment—which is the heart of the nuclear weapons complex—has been regularly repaired, upgraded or replaced.

Even the DOE’s own estimates suggest that the Complex Transformation initiative will cost well over \$200 billion over the next two decades, or one-third more than previous estimates. According to the DOE’s economic consultants, investments in upgrading the weapons complex may not be recouped through savings from more efficient operations until as late as 2060, more than 50 years from now. This suggests that a more affordable, less investment intensive approach to sustaining the complex makes far more sense than any of the DOE’s current proposals.

There is a growing consensus among former top government officials—affirmed by presidential candidates Barack Obama and Hillary Clinton—that the United States should be moving towards deep reductions and/or eventual elimination of nuclear weapons. The call for a “world free of nuclear weapons” has been led by former Republican Secretaries of State George Shultz and Henry Kissinger, former Clinton administration Secretary of Defense William Perry, and former Senate Armed Services Committee chairman Sam Nunn. Their proposal is also supported by a roster of distinguished experts, including several former arms control officials from the Reagan administration. A nuclear-free posture, if adopted, would obviate the need for a nuclear weapons complex of the size and scope of the current one, much less a modernized version of same.

At a minimum, the Complex Transformation plan should be put on hold pending guidance from a new administration; and options should be explored that involve scaling back the research and production capacities of the nuclear weapons complex in line with possible movement towards a world in which nuclear weapons stockpiles are radically reduced or eliminated. A new approach should also address the possibilities for providing new missions for existing facilities that may no longer be needed.

Given the increasing realization that nuclear weapons have no constructive role in any likely defense scenario, a major modernization plan—including new weapons factories and new warheads—is dangerous and unnecessary. •

Arms and Security Initiative of the New America Foundation

The Arms and Security Initiative offers a regular E-Newsletter covering the arms trade, military budget developments and U.S. foreign policy issues.

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The Arms and Security Initiative is part of the New America Foundation and the successor to the World Policy Institute’s Arms Trade Resource Center: http://www.newamerica.net/programs/american_strategy/arms_security

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info@reachingcriticalwill.org



Nuclear Famine (as if the other reasons for abolishing nuclear weapons weren't enough)*John Loretz, International Physicians for the Prevention of Nuclear War*

I remember seeing Carl Sagan's name and the words "nuclear winter" on the cover of Parade magazine in 1983 and thinking, "That should take care of that; no sane person can possibly tolerate the existence of nuclear weapons after America's most widely read Sunday supplement has brought the facts to bowlers and Pat Boone fans across the country."

In my enthusiasm for a man who, at the time, was the world's most popular scientist and a television evangelist for the more noble products of human creativity, I had momentarily underestimated Richard Perle and Edward Teller and their equally creepy associates. These guys, after all, had a bottomless capacity to see military and political advantage where less damaged minds were noticing that the end of the human experiment on Earth was only one or two pushes of one or two buttons away.

Twenty-five years later, the US and Russia still have enough nuclear weapons to plunge us into a radioactive ice age several times over, whether that seems like a remote possibility these days or not.

A far more worrisome event is a regional nuclear war between India and Pakistan, who have acquired maybe 100 nukes between them since declaring themselves nuclear weapon states in 1998, and who have had a hard time staying out of war since partition in 1947.

We've known for some time that a nuclear war between these South Asian rivals would kill some 20,000,000 people outright and devastate the region beyond repair. What we didn't know until quite recently was that even a regional nuclear war, using only a very small fraction of the world's arsenals, would have an impact on the global climate that, if not quite nuclear winter, would be a close runner-up.

Over the past year or so, Richard Turco of UCLA, Brian Toon of the University of Colorado, Alan Robock of Rutgers, and others have looked at the consequences of a regional nuclear war involving no more than 100 Hiroshima-sized nuclear weapons—about 0.3% of the global nuclear arsenal.

As Brian Toon told participants at an IPPNW conference in London last October, they expected to find massive casualties and enormous local devastation, because the targets were likely to be megacities. But they assumed at the start there would be little or no impact on the global climate—that nuclear winter was a 1,000-warhead phenomenon. "As scientists," Toon said, "we thought we'd better test that assumption."

What they found shocked them: urban firestorms caused by multiple nuclear explosions would inject 1-5 million metric tons of smoke and soot into the upper troposphere and on up into the stratosphere. The resulting soot cloud would block the sun leading to significant cooling and reductions in precipitation lasting for more than a decade. Within 10 days following the explosions, there would be a drop in average surface temperature of 1.25° C. In a matter of days, temperatures around the Earth would become colder than those experienced during the pre-industrial Little Ice Age. Over the following year, we would experience a 10% decline in average global rainfall and a large reduction in the Asian summer monsoon.

The sudden climate changes predicted by these studies would have a significant impact on agricultural production. The growing season would be shortened by 10 to 20 days in many of the most important grain producing areas in the world which might completely eliminate crops that have insufficient time to reach maturity. Large quantities of food might also need to be destroyed and significant areas of crop land might need to be taken out of production because of radioactive contamination.

A sudden, dramatic cooling would not be the only effect. The smoke would cause a huge, long-lasting reduction in the Earth's protective ozone: 20% globally, 25-45% at midlatitudes, and 50-70% at northern high latitudes. The resulting increases in UV radiation would have serious consequences for human health.

Ira Helfand, an IPPNW physician from the US, has looked at these scientific findings in the context of current agricultural production, global food supplies, and chronically malnourished populations.

World grain stocks last summer were only enough to last about 49 days, and have only gone lower if recent news reports about world food shortages are any indication. These stocks would not provide any significant reserve in the event of a sharp decline in global production—an event that would also trigger hoarding and even more dramatic price increases for food than the world is currently experiencing.

Even now, more than 800 million people in the world are unable to meet their basic nutritional requirements because of inadequate access to food. Dr. Helfand fears that few of these people could survive the global famine that would follow a regional nuclear war, and has made a reasonable estimate—which still needs scientific validation—that a total global death toll in the range of one billion people from starvation alone is conceivable.

Even that is not the end of the story (except, of course, that it is), since famine on this scale would also lead to major epidemics of infectious diseases, and would create immense potential for war and civil conflict. Dr. Helfand worries that illnesses such as plague might reemerge as major health threats, and that competition for limited food resources would send nations spiralling into armed conflict over whatever food supplies they could control.

Fortunately, we still have time to write a different ending (how many more times do we get to say that?). If a mere 100 nuclear weapons can do nearly as much to destroy our human habitat as 1,000 or 2,000, doesn't that prove once and for all that the right number of nuclear weapons needed to guarantee our collective security is zero? Which means that the ending the diplomats gathered here in Geneva should all get busy writing is the final text of a Nuclear Weapons Convention. •



News in Brief

Michael Spies, Arms Control Reporter

Summary of the Interactive Discussion on Cluster 1 Issues:

- Germany initiated an interactive discussion, clarifying misunderstanding on its proposed “New Implementation Baseline,” which it described as a brainstorming paper.
- New Zealand commended Germany and its paper, and affirmed that changes in the security environment since 2000 have not detracted from the pertinence of the 1995 and 2000 outcomes.
- South Africa spoke on a number of themes from the perspective of the global south, including: advocated for the issue of military expenditures and development to become part of the discussion; called for Europe to begin its own process toward establishing a NWFZ, in light of European states’ calls for such zones elsewhere; and challenged developed states to demonstrate where developing states were failing to implement non-proliferation and disarmament objectives, in light of some states holding disarmament hostage to further “progress” on non-proliferation.
- Iran demanded a report from the NWS on measures it has taken to implement the 13 steps.
- Norway expressed appreciation for South Africa’s comments, but nonetheless stated there was room for improvement in the non-proliferation regime. Norway advocated for progress to be made in all three pillars of the Treaty independently with linkages, instead of matching progress step for step.
- Japan emphasized the importance of prioritizing disarmament education.
- Germany agreed with Japan on education, adding that education should encompass more than just youth. Germany also noted its interaction with youth attending the Prep-Com and stated delegates needed pressure from youth to improve global security.

Highlights from the Discussion on Nuclear Disarmament and Security Assurances:*Nuclear Disarmament*

- New Zealand countered the US argument that the security environment is not appropriate for disarmament, stating we don’t have 27,000 nuclear weapons in the world due to NWS concern about proliferation in NNWS, but because of concern of NWS with NWS. New Zealand also asked the NWS to address specific questions regarding use doctrines and safety in the context of operational readiness. Although the chair encouraged the NWS to address the questions, none responded.
- Egypt also argued against the position that disarmament requires an “appropriate security environment,” contingent upon implementation of an open-ended list of non-proliferation goals and compliance with the other provisions of the Treaty.

Security Assurances

- Seven delegations, including the Non-Aligned Movement (NAM), reiterated calls for conclusion of a NPT protocol granting legally-binding security assurances. The NAM called for establishment of a subsidiary body to negotiate such a protocol. In this context South Africa highlighted a 2003 New Agenda Coalition working paper on the issue and New Zealand referred to a draft protocol it had prepared during the past review cycle.
- The nuclear weapons states differed on the matter of security assurances: Russia said it supported discussion only

in the context of the CD; China said it would consider a protocol to the NPT.

- Iran called for decision on a protocol declaring threat or use of nuclear weapons illegal and granting negative security assurances.

Transparency

- Japan outlined proposed categories that the NWS should report on toward implementation of Article VI: aggregate number of warheads; plans for reductions and dismantling; years in which fissile material production ceased; and the amount of fissile material declared excess of military stocks.
- New Zealand said transparency should play a role in this review process, affirming the importance of Canada’s proposal for a standardized reporting mechanism and acknowledging Japan’s proposed reporting categories.
- Mexico called for a legally-binding mechanism for transparency and accountability that would include requirements for NWS to report on their holdings and future plans.
- Canada called for reporting on operational status of nuclear weapons.

Highlights from the Cluster 2 Discussion:*Iran’s nuclear program*

- Four delegations, including the European Union, called on Iran to comply with the decisions of the UN Security Council.
- China called for a peaceful settlement through negotiation.
- France and Australia stated Iran’s fuel cycle programs have no legitimate civilian applications.

Syria’s alleged secret reactor program

- Australia stated the United States has provided evidence that North Korea had provided Syria with assistance in constructing a clandestine nuclear reactor. Australia urged Syria to cooperate with the IAEA in its investigation.
- Without direct reference to Syria, the European Union (EU) expressed concern over reports of clandestine reactor program and called on the IAEA to investigate.
- In a right of reply, Syria said the accusations were manufactured to create further tension. Syria reminded delegates of Australia’s role in the invasion of Iraq and accused the invaders of committing crimes against humanity through the use of depleted uranium and white phosphorus weapons. Syria criticized its accusers for failing to also mention Israel and urged others not to follow the path of the “mad” US regime.
- In a response to Syria, Iraq called for delegates to refrain from equating the situation leading to Iraq with the Syrian issues, noting that “everyone is aware” of the record of the previous Iraqi regime on WMD and other issues.

Article III: Strengthening Safeguards

- Four delegations, including the EU, called for the Additional Protocol to become the standard of compliance or a condition of supply. Australia called for NPT parties to unequivocally declare that the Additional Protocol is now the verification standard required under Article III.1.
- The NAM stated it is fundamental to make distinctions between voluntary and mandatory measures, and to not impose voluntary measures, in response to calls for the Additional Protocol to become the verification standard.

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News in Brief (cont.)

- Egypt reiterated its opposition to reinterpretation of Article IV and imposition of heightened safeguard standards and conditions of supply.

Article III: Compliance Procedures

- Canada stated the IAEA must continue to have recourse to the UN Security Council to reinforce the integrity and credibility of the NPT.
- The NAM suggested a number of guidelines to ensure that the IAEA remains technical, non-political and impartial, such as requiring non-compliance to be reported first from agency inspectors.

Article IV: The Nuclear Fuel Cycle

- Russia said there was a need for an alternative to provision of sensitive nuclear technologies and a mechanism for the supply of nuclear fuel. It defended its international uranium enrichment center as consistent with Article IV.
- France expressed support for a criteria-based approach to the supply of nuclear technology and material.

Article X: Withdrawal from the Treaty

- France said any state that withdraws from the NPT should dismantle or return any third party equipment acquired while party to the treaty. It referred delegates to the EU working paper on the issue.

Working towards a world free from nuclear weapons

Emma Rosengren, Women's International League for Peace and Freedom

At lunchtime on Friday, the Ministry of Foreign Affairs of Norway, the Nuclear Threat Initiative (NTI) and the United Nations Institute for Disarmament Research (UNIDIR) co-sponsored a panel government, UN, academic, and NGO representatives.

Mr. Sergei Ordzhonikidze of UNOG, Dr. Patricia Lewis of UNIDIR, and Mr. Rolf Ekéus of SIPRI affirmed the urgent need for an expanded dialogue on nuclear disarmament between governments, international organizations, academics, and civil society, to ensure greater security for all states and people.

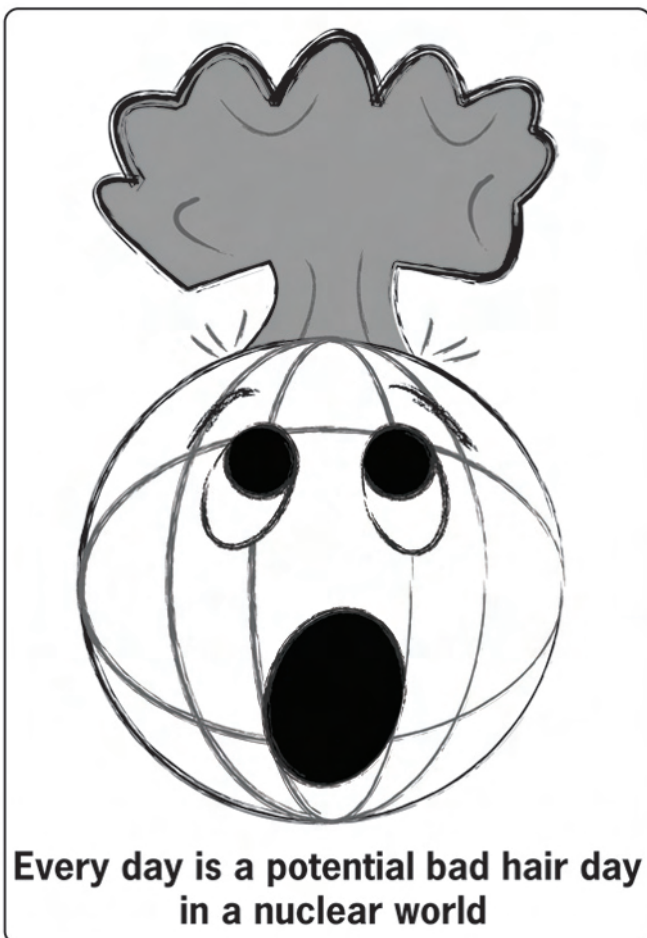
From an optimistic perspective, Mr. Charles B. Curtis of NTI insisted the goals of the NPT can be met if steps such as reduced nuclear arms, elimination of non-strategic nukes, the enforcement of the CTBT, better standards of security, and improved development of international control are taken. Without these actions, the vision of a nuclear weapon free future will neither be seen as realistic nor possible.

Referencing the Oslo Conference, Mr. Kåre R. Aas of the Norwegian Ministry of Foreign Affairs accentuated that national leaders in all states should engage in and make proposals for nuclear disarmament and build broad support in their countries. He encouraged the US and Russia to reduce their number of nuclear arms, and welcomed a dialogue between NWS and NNWS on how to lower the number of states possessing nuclear arms. He also highlighted the equal responsibility of all states to work towards nuclear disarmament as well as the need for the CTBT to enter into force. The Fissile Material Cut-off Treaty (FMCT) and a strong IAEA could also improve the work for nuclear disarmament.

Baroness Williams of Crosby of the House of Lords, UK, spoke about a connection between non-proliferation and climate change. According to her, there are 439 civil nuclear power plants in operation right now, and many more are under construction or being planned. Because of the connection between nuclear power and nuclear weapons, the structures of civilian nuclear power have to be strengthened and promote efficient monitoring by trained staff.

Lord Malloch-Brown, UK Foreign and Commonwealth Affairs Office, stated that the NPT still remains the best vehicle for nuclear disarmament. The big challenge, according to Malloch-Brown, is to get countries that have not already sign it to join, since it only works properly if it has global authority. However, it is also urgent for states possessing nuclear arms to live up to their commitments and to ratify the CTBT. Referring to article IV, Lord Malloch-Brown insisted that there is need for an international system to support states in need of nuclear energy.

Other issues were raised during the Q&A. The likelihood of ratification and a meaningful follow-up of the CTBT before 2010 were highlighted by the German Ambassador. The Ambassador of Iran questioned if the US is sincere when it comes to reduction of its nuclear supplies. He encouraged NNWS, NGOs, and governments to put pressure on nuclear weapon states for total disarmament. Dr. Rebecca Johnson raised the issue of binding commitments and the relation between crimes against humanity and the use of nuclear weapons. The Ambassador of Finland requested a spirit of action from states, referring to the fact that the Conference on Disarmament has been dormant the past twelve years. •



FMCT Progress Report from the International Panel on Fissile Materials

Michael Spies, Arms Control Reporter

On Friday, 2 May, members from the International Panel on Fissile Materials (IPFM) provided an update on their progress toward preparing a draft fissile materials (cut-off) treaty (FM[C]T) and a verification protocol, in an event co-sponsored by the UN Institute for Disarmament Research (UNIDIR). IPFM presented draft elements of an FM(C)T and addressed issues of verification in depth. IPFM associates and others also presented analyses on regional perspectives on a fissile materials treaty, outlining the national positions of South Africa, India, and Pakistan.

FMCT Issues: Draft Elements and Verification

IPFM Co-chair Frank von Hippel opened with an overview of fissile materials issues, drawing from the IPFM's 2007 Fissile Materials Report. Toward addressing issues facing a fissile materials regime, von Hippel divided fissile material stocks into four categories: weapons stockpiles; weapons material declared excess; civilian stockpiles; and non-weapons military (naval reactor) stocks. In his view, as nuclear arsenals are further reduced in the United States and Russia, civil separated stocks and naval reactor fuel stocks will be especially problematic from the perspective of verification and maintaining confidence in full compliance.

Arend J. Meerburg of the Netherlands presented the Panel's recommended draft elements for an FM(C)T, which provided for:

- IAEA verification;
- Prohibition on the production of all fissile materials;
- Dismantlement or conversion of all existing fissile material production facilities;
- Declaration of all civil stocks and military excess material;
- Possible verification for non-weapon military (naval reactor) stocks;
- Compliance to be dealt through a Conference of State Parties with a strong link to the IAEA, in order to get around the problem of a veto in the Security Council; and
- Provisions for the speedy entry into force—necessitating ratification of the eight countries with nuclear weapons—coupled with a serious review of the treaty after ten years.

Frank von Hippel and Alexander Glaser extensively discussed issues related to verification of an FM(C)T, concluding that the technical challenges are not as significant as the political challenges in negotiating a treaty. They also concluded that the cost of verification is not as large as the current IAEA budget. They expressed the view that verification costs will come down as military facilities are shutdown and dismantled. Rebutting the US position on verification, von Hippel said an FM(C)T would require of the nuclear weapon states the same as what is now required of the non-nuclear weapon states under the NPT.

IPFM also described the five greatest challenges toward effective verification of an FM(C)T:

1. Verifying the shutdown of uranium enrichment and plutonium reprocessing facilities—the Panel suggested this could be done simply through existing remote monitoring techniques;
2. Concluding managed access arrangements to confirm the absence of prohibited activities at military sites—the Panel suggested such access could drawn upon the procedures developed to ensure compliance with the Chemical Weapons Convention;
3. Verifying non-diversion of material at operating civilian

reprocessing plants—the Panel suggested the material flow be measured at strategic points, in addition to random short notice inspections and the annual cleanout and inventory of materials;

4. Verifying the non-production of highly enriched uranium—the Panel suggested a combination of production monitoring and swipe sampling, expressing the view that age dating of materials was possible to distinguish between material produced before and after an FMCT entered into force; and
5. Verifying the non-diversion of military-excess material—the Panel suggested techniques developed under the US-Russian-IAEA Trilateral Initiative could be applied and that the issue of naval reactor fuel could be address through establishing procedures around various points of control (e.g. stockpile, fuel fabrication, installation).

Regional Perspectives

South Africa. Jean Du Preez of the Center for Non-Proliferation Studies at the Monterrey Institute of International Studies explained South Africa's perspective on a Fissile Materials Treaty (FMT), from an academic perspective. Regarding scope, Du Preez said South Africa has been clear in its preference for a comprehensive treaty that covers military-excess stocks, thus fulfilling both non-proliferation and disarmament objectives. He speculated that South Africa might be excluding its own civilian and excess HEU from the scope of an FMT as a strategic bargaining chip. Du Preez stated that South Africa had changed its position on verification since 2002, and now advocates for IAEA verification instead of establishment of a separate authority. To deal with compliance issues, South Africa calls for a Conference of States Parties to be mandated to deal with issues within the time frame of a threat, with authority to refer cases to the UN Security Council.

India. M.V. Ramana of the Centre for Interdisciplinary Studies in Environment and Development explained India's position on an FMT. According to Ramana, India opposes participating in any production moratorium before the entry into force of a treaty. On the scope of an FMT, India supports a non-discriminatory treaty that does not include existing stocks. Ramana explained that India intends to maintain a large fissile material production capacity, with a sharp increase in its production expected in the coming decade as it brings online its prototype fast breeder reactor. Ramana speculated that India might need five to ten years to build up sufficient plutonium stocks to attain its undefined "credible minimum deterrent". Ramana suggested that global stockpile reductions could help relax India's position on an FMT.

Pakistan. Zia Mian of Princeton University explained issues related to Pakistan's position on an FMT. According to Mian, Pakistan supports an FMT that goes beyond covering existing stocks to include a program for the elimination of stockpile "asymmetries"—i.e. other countries should reduce their holdings to the levels maintained by Pakistan. Mian explained that Pakistan's notion of asymmetry likely takes into account India's breeder reactor potential as well as its civil plutonium stocks. In order to possibly keep the size of its stocks secret, Pakistan favors only non-intrusive verification. Mian suggested that dealing with existing regional asymmetries may ease Pakistan's concerns about participating in an FMT regime.

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FMCT Progress Report (cont.)

Implications of the US-India Deal. In their presentations and in the question and answer session chaired by UNIDIR director Patricia Lewis, Mian and Ramana both emphasized complications the US-India nuclear cooperation deal poses toward concluding an FM(C)T. Mian in particular stated that the arrangement would further drive Indian policy away from a “hyphenated” conception of South Asia, precluding regional solutions addressing the Indian-Pakistani nuclear arms race. He suggested that any deal for nuclear cooperation with India include the specific condition of the cessation of weapons-related fissile material production.

The 2008 Fissile Materials Report will present in full the IPFM’s work on an FM(C)T, including a draft treaty text and verification protocol. A subsequent report of the IPFM will also include a compilation of national perspectives on an FMCT. Please see www.fissilematerials.org for more information. •



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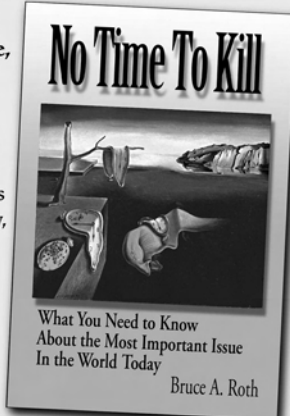
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Make the World free from WMD

Proposals for the NPT: A Review of Working Papers Submitted to the Second PrepCom

Ray Acheson, *Reaching Critical Will* and
Michael Spies, *Arms Control Reporter*

During the first week of the PrepCom, delegations submitted nearly two dozen working papers, containing their national views and making proposals toward developing and articulating the NPT regime. Below is a compilation of summaries, highlighting specific proposals from each of the paper. While most papers deal with specific topics or articles of the Treaty, some, including Germany’s proposal for a “New Implementation Baseline,” are intended as broad, cross-cutting initiatives designed to break the present impasse on advancing disarmament and non-proliferation objectives.

Cross-Cutting Proposals

New Implementation Baseline. Intended as “brainstorming piece” to “rekindle a sense of common purpose in the international community”, Germany, in WP.22, proposed a “New Implementation Baseline”. The Baseline, intended to be “result oriented,” consists of a two-track approach reflecting the fundamental bargain underlining the NPT. The non-proliferation track includes:

- a commitment to compliance and support for diplomatic efforts aimed at solving regional proliferation risks;
- improvement of verification, especially through making the IAEA Additional Protocol the verification standard;
- prevention of misuse of civilian nuclear programmes for military ends, in particular through a solution to the risks posed by the nuclear fuel cycle;
- development of a joint understanding on withdrawal from the NPT;
- institutionalizing UN Security Council resolution 1540 into the NPT context; and
- strengthening the role of the UN Security Council as “the final arbiter on the consequences of non-compliance.”

The disarmament track includes endeavours to:

- overcome the deadlock in the Conference on Disarmament, including negotiations on an FMCT;
- foster dialogue between Russia and the United States on a follow-up to START and SORT;
- establish an incremental arms control approach to non-strategic nuclear weapons;
- promote the entry into force of the CTBT and reaffirm the moratorium on nuclear test explosions;
- establish other commitments in implementation of the “cessation of the nuclear arms race” obligation, through the establishment of accountability and reporting obligations and the capping of nuclear arsenals; and
- recommit to existing security assurances and explore ways of formalizing them and bring all existing NWFZ into force.

Prioritizing Non-Proliferation and Disarmament Education. Japan, in WP.9, elucidated the value of disarmament and non-proliferation in the NPT context. The paper suggests that the recommendations in UN Secretary-General report A/57/124 on how to promote disarmament and non-proliferation education should be reaffirmed and followed. In order to implement the recommendations, the paper suggests that humankind should “share as objective information the experiences of nuclear devastation and the persistent effects of radiation on the environment and human health,” and that governments should support such efforts by civil society. It also suggests that efforts on education in the NPT context should include “deepening discussions among security and disarmament experts on the security benefits of and chal-

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Working Paper Review (cont.)

lenges to the NPT regime, and providing knowledge on these issues to the public,” and that these efforts should hold the need to develop critical thinking skills in an informed citizenry as one of the objectives. It recommends that experiences in education efforts should be shared among member states, international organizations, and civil society.

Compliance Mechanisms. Toward assessing and ensuring compliance with the Treaty, in its unofficial working paper on “Compliance and the NPT,” the United States called for states parties to adopt legal mechanisms, develop institutions and internal infrastructure, acquire staff, training, and equipment, and respond to non-compliance within their own borders or jurisdiction. The US proposal called on states, regional groups, and international organizations to “provide assistance to those who have identified gaps in their capacities.” The US working paper argues that states parties should make it their “highest priority” during the review cycle “to develop and implement improved ways to deter, detect, and reverse noncompliance with Articles I, II, or III of the Treaty—or with safeguards agreements.”

Compliance Review. In a competing initiative to address non-compliance, Iran proposed that the 2010 Review Conference conduct a thorough review of the implementation of Article I, III, IV, and VI, in WP.4 on “The issue of non-compliance with Articles I, III, IV and VI.” Iran further proposed that the Review Conference suggest ways in which states that are in non-compliance with these articles and how they could come into compliance with them. In particular, the working paper emphasizes that non-compliance with Article VI “merits a thorough consideration by the Review Conference,” particularly violations of this article that deprive states parties “from the exercise of their inalienable right and illegal as well as unilateral sanctions.”

Article III: Compliance and Verification

Vienna Group Measures on Compliance and Verification. The Vienna Group of Ten, in WP.12, called for the following measures:

- All states are called to submit all nuclear material and activities, both current and future, to IAEA safeguards;
- All states are urged “to cooperate fully with the IAEA in implementing safeguards agreements and in expeditiously addressing anomalies, inconsistencies and questions identified by the IAEA with a view to obtaining and maintaining the required conclusions;”
- All states are urged to conclude and bring into force an Additional Protocol—the Group recognizes the need of the IAEA to further facilitate and assist states in the conclusion and entry into force of safeguards agreements and additional protocols;
- All states with Small Quantities Protocol that are planning to exceed the criteria of the revised SQP are urged to renounce their SQPs and resume full application of Comprehensive Safeguards Agreement provisions without delay;
- All states with Small Quantities Protocol are urged to bring into force and Additional Protocol to provide maximum transparency; and
- All states are urged to ensure their State and/or Regional System of Accounting for and Control of nuclear material cooperates fully with the Secretariat.

Article III: Physical Protection and Illicit Trafficking

Vienna Group Measures on Physical Protection and Illicit

Trafficking. The Vienna Group of Ten, in WP.13, called for the following measures:

- The IAEA should take an active role to facilitate effective cooperation and coordination at the international and regional levels to improve the “global nuclear security framework;”
- All states are called to apply the recommendations on the physical protection of nuclear material and nuclear facilities contained in IAEA document INFCIRC/225/Rev.4 (Corrected) in order to maintain the highest standards of physical protection;
- All states parties to the Convention on the Physical Protection of Nuclear Material are called to ratify the amendment as soon as possible, and encourages them to act in accordance with the object and purpose of the amendment until it enters into force;
- Also called for in WP.17, all states are called to make a political commitment to the Code of Conduct on the Safety and Security of Radioactive Sources and the Guidance on the Import and Export of Radioactive Sources;
- The Group calls for the acceleration of efforts to develop and implement a fully effective global nuclear security framework based on prevention, detection, and response; and
- All states are urged to become party to the Convention for the Suppression of Acts of Nuclear Terrorism.

Article III: Export Controls

Vienna Group Measures on Export Controls. The Vienna Group of Ten, in WP.15, called for the following measures:

- All NPT states parties are urged to ensure their nuclear-related exports to non-nuclear weapon states “do not assist the development nuclear weapons or other nuclear explosive devices;”
- The Group recommends the Zangger Committee review its list of trigger items “from time to time;”
- The Group recommends that transparency in export controls should continue to be promoted within a framework of dialogue and cooperation;
- The Group reaffirms that supply of special fissionable material should require acceptance of full-scope IAEA safeguards and international legally-binding commitments not to acquire nuclear weapons or other nuclear explosive devices;
- The Group confirms that a safeguards agreement together with an additional protocol should be a condition for new supply arrangements to non-nuclear weapon states; and
- The Group affirms that transfers of nuclear material “should only take place if the recipient state has in place an effective and adequate national system of nuclear security.”

Articles III and IV: The nuclear fuel cycle

Vienna Group Measures on the Nuclear Fuel Cycle. The Vienna Group of Ten, in WP.16, called for the following measures:

- States should consider multilateral approaches to the nuclear fuel cycle, in order to complement other measures to reinforce the non-proliferation regime, such as the CTBT and an FMCT. In this context, states should carefully consider a multi-faceted approach that reduces the risk and limits the existing global inventory; and
- States should develop commercial fuel supply mechanisms with due regard to Article IV in conformity with the provisions under Articles I, II, and III. Any approach to ensuring

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Working Paper Review (cont.)

the supply of nuclear material through multilateral means should aim to “satisfy international needs and ensure commercial competitiveness.”

Articles III and IV: Nuclear safety

Vienna Group Measures on Nuclear Safety. The Vienna Group of Ten, in WP.17, called for the following measures:

- All states are urged to become party to the Convention on Nuclear Safety;
- All states are urged to apply the guidance in the Code of Conduct on the Safety of Research Reactors to the management of research reactors;
- Further cooperation is encouraged between the IAEA and relevant international organizations and stakeholders in promoting a coherent international policy regarding the radiological protection of the environment;
- Also called for in WP. 13, all NPT states parties are urged to make a political commitment to the Code of Conduct on the Safety and Security of Radioactive Sources and the Guidance on the Import and Export of Radioactive Sources;
- Relevant states are encouraged to give consideration to adherence to the 1997 Protocol to Amend the 1963 Vienna Convention on Civil Liability of Nuclear Damage, the Convention on Supplementary Compensation for Nuclear Damage, and the 2004 Protocol to Amend the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy; and
- All states are urged to become party to the Convention on Early Notification of a Nuclear Accident and to the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency.

Articles III and IV: Peaceful uses of nuclear energy

Vienna Group on Peaceful Uses of Nuclear Energy. The Vienna Group of Ten, in WP.18, called for the following measure:

- NPT States parties “should not engage in active nuclear cooperation with those States Party that are in non-compliance with the terms of their Safeguards Agreements.”

Compensation for Damages. Iran, in WP.6, called for the issue of compensation for damages arising from states breaching their obligations under the Treaty and the IAEA Statute relating to the peaceful uses of nuclear energy to be inserted on the agendas of the Preparatory Committees and Review Conference, and for establishment of a subsidiary body to consider the issue and make recommendations.

Articles V and VI: Comprehensive Nuclear Test Ban Treaty

Vienna Group Measures on the CTBT. The Vienna Group of Ten, in WP.14, called for the following measures:

- All states should refrain from any action that would defeat the object and purpose of the CTBT;
- All states should underline that existing moratoria on nuclear weapon test explosions and any other nuclear test explosions must be maintained; and
- All CTBT state signatories should support the work of the CTBTO by providing adequate resources, as well as relevant expertise.

Article VI: Proposals for Nuclear Disarmament and Security Assurances

Further Disarmament Measures. Reiterating some meas-

ures contained in the 13 steps, Japan, in WP.10, presented several disarmament measures to be taken by all the NWS, including: further reducing their nuclear weapons transparently, irreversibly, and verifiably; further reducing the operational status of nuclear weapon systems; diminishing the role for nuclear weapons in security policies; and to “keep the threshold for the use of nuclear weapons as high as possible.”

New Momentum toward an FMCT. Germany, in WP.21, suggested several steps for creating a new momentum in the NPT context toward an FMCT, including:

- a political declaration containing a fissile material cut-off commitment;
- a commitment to adopt the necessary measures for security, control, and accounting of weapon-usable materials; and
- a commitment to enter without preconditions into negotiations on a non-discriminatory legally-binding FMCT.

In addition, the paper suggests an alternative approach toward an FMCT. It calls for a framework treaty, charting the course for a gradual implementation process. Under this approach, states parties would separately conclude additional implementation protocols, developing an effective verification system and broadening the scope of the treaty. In parallel to this approach, the paper also suggests the establishment within the CD of a Group of Scientific Experts to examine technical aspects of an FMCT and the commencement of a “Fissile Material Control Initiative” as a voluntary arrangement to be pursued along with or independently of an FMCT.

Reaffirmation of Article I, the Unequivocal Undertaking to Disarm, and the 13 Steps. Iran, in WP.5, called on the Preparatory Committee and Review Conference to reaffirm the conditions of Article I “without exception and in particular to the Israeli regime,” to reiterate its unconditional global call for the full implementation of the unequivocal undertakings of the NWS to eliminate their nuclear weapons, and to assess the implementation of the 13 Practical Steps.

Ad Hoc Committee on Security Assurances. Iran, in WP.5, proposed that the Preparatory Committee establish an ad hoc committee to draft a legally-binding instrument on negative security assurances for submission to the Review Conference.

Preparatory Committee Decision on Use. Iran, in WP.5, proposed that the Preparatory Committee adopt a decision declaring “that the threat or use of nuclear weapons against non-nuclear weapon States shall be prohibited.”

Article VII: Proposals for Nuclear Weapon Free Zones

Implementing the 1995 Resolution on the Middle East. Three working papers, submitted by Syria on behalf of the League of Arab States, Egypt, and Iran, contained various proposals and calls for implementing the 1995 resolution of the Middle East:

- **Establishment of a Review Conference Subsidiary Body.** Syria on behalf of the League of Arab States and Iran, in WP.2 and WP.3 respectively, reiterated standing proposals for the establishment of a subsidiary body to Committee II of the 2010 Review Conference to follow up on implementation of the resolution. Contrasting with the more general approach of the Arab states, Iran, in WP.3, called on this subsidiary body to make concrete recommendations on steps for the implementation of the 1995 resolution



Working Paper Review (cont.)

- and on measures to “force” Israel to accede to the NPT.
- *Standing Committee.* Iran, in WP.3, called for the 2010 Review Conference to establish a standing committee to monitor implementation of the 1995 resolution. The standing committee would report to NPT states parties.
 - *Allocation of Time During Preparatory Committee Meetings.* Syria on behalf of the League of Arab States, in WP.2, reiterated standing calls for the allocation of a specific time periods during the Preparatory Committee meetings to consider the implementation of the 1995 resolution.
 - *Israel-Specific Calls and Proposals.* Syria on behalf of the League of Arab States and Iran, in WP.2, called for states parties to the Preparatory Committee to call upon Israel to accede to the NPT as a non-nuclear weapon state. Iran, in WP.3, called on the Preparatory Committee to condemn Israel “for its defiance of international calls and urge it to immediately stop its clandestine nuclear activities.”
 - *Interim Steps (League of Arab States).* Syria on behalf of the League of Arab States, in WP.2, called for some interim steps to implement the resolution, including: for the UN to convene an international meeting on the establishment of a NWFZ in the Middle East; for an emphasis on the need for nuclear weapon states to fulfill all their commitments under Article I of the NPT; to report on the implementation of these commitments to the 2015 review cycle, which are to be circulated by the UN Secretary-General.
 - *Measures to Implement the Resolution (Egypt).* Egypt, in WP.20, presented a non-exhaustive list of concrete measures aimed at operationalizing the 1995 Middle East resolution. It calls on the 2010 Review Conference to consider: calling on the NWS to convene a conference of all Middle East states to conclude a legally-binding and internationally and effectively verifiable treaty establishing a NWFZ in the Middle East, further inviting the NWS to undertake multilateral and bilateral consultations to define the modalities of this conference; calling on all states parties to require as a precondition that Israel accept IAEA full-scope safeguards and legally-binding commitments not to acquire nuclear weapons before entering into supply arrangements; calling on the IAEA to reduce the level of technical cooperation with Israel until it accedes to the NPT as a NNWS, further requesting all states parties take practical measures to bring about Israel’s accession to the Treaty as a NNWS; issuing a statement of support for establishment of a Middle East NWFZ within a declared time frame; and calling on states parties to submit reports to each Preparatory Committee meeting and Review Conference on their efforts toward implementation of the 1995 resolution.
 - *Other Measures.* Syria on behalf of the League of Arab States, in WP.2, also called upon states parties to the Preparatory Committee to renew their commitment to the 1995 resolution on the Middle East; and exert their utmost efforts to achieve its implementation and assist the 2010 review cycle identify the practical steps to this end.

Reaffirming the UNDC Guidelines on NWFZs. Slovenia on behalf of the European Union, in WP.23, proposed that the Preparatory Committee reiterate the principles and guidelines for the establishment of NWFZs as recommended by the UN Disarmament Commission in 1999 (A/54/42).

Comprehensive NWFZ Study. Mongolia, in WP.1, suggested that an updated comprehensive study on NWFZ in all their aspects be undertaken, highlighting the experiences of establishing NWFZ. It further suggested the study could under-

line the strengths and weaknesses of established zones and their advantages and role in promoting non-proliferation and nuclear disarmament.

Article X: Proposals for Responding to Withdrawal from the Treaty

Strengthening the Withdrawal Mechanism. Japan, in WP.11, proposed that the language on strengthening the withdrawal mechanism in the Chair’s summary from the 2007 Preparatory Committee be used as the basis for further work on issue. Specifically, Japan called for states parties to seek agreement on concrete measures to address the issue of withdrawal. Japan highlighted elements aimed at preventing withdrawal “by upholding a set of relevant principles of the international law, by clarifying the requirements stipulated in Article X of the Treaty, and by stressing the importance of appropriate responses, including the role of the Security Council.” Japan also specified that any withdrawing party should “return or neutralize any nuclear material, facilities, equipment, etc., transferred prior to withdrawal.”

Opposition to Amending Article X. Iran, in WP.24, opposed amending Article X, arguing there is no urgency or necessity to do so, as it is not a priority issue and “would only divert the attention of the States Parties from their real tasks.” •

All working papers circulated so far to the PrepCom are available online at www.reachingcriticalwill.org.

Environmental Aspects of Nuclear Energy

**Tuesday, May 6, 2008
3 – 5:30 pm**

Palais des Nations, Room XXV, Building E

Moderated by **Regina Hagen**
Coordinator, INESAP

Speakers:
Manuel Meyer
University of Hamburg

Philipp Wessels
University of Hamburg

Merav Datan
Greenpeace International, Tel Aviv (tentative)

Sharon Dolev
Greenpeace International, Tel Aviv



Universität Hamburg





ARMS CONTROL REPORTER

A Chronicle of Treaties, Negotiations, Proposals, Weapons, and Policy

VOLUME 26 SPECIAL EDITION

Backgrounder

Second Session of the Nuclear Non-Proliferation Treaty
Preparatory Committee for the 2010 Review Conference
28 April–9 May 2008, Geneva

Part I. Overview of the Treaty

Part II. Controlling the Nuclear Fuel Cycle

Part III. Global Nuclear Disarmament

Data and Analysis: US, Russian, UK, French, and Chinese Nuclear Forces

Part IV. Middle East Nuclear Issues

Data and Analysis: Israeli Nuclear Forces and Iran's Nuclear Fuel Cycle Program

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NEWS IN REVIEW



What's On Today's Calendar of Events

NGO Strategy Session

Where: NGO Room (Room VIII)

When: 8:30 - 9:00am

Contact: Anthony Salloum, Abolition 2000

Website: www.abolition2000.org

Government Briefing: Ambassador Soltanieh of Iran

Where: NGO Room (Room VIII)

When: 9:00 - 10:00am

Contact: Susi Snyder, WILPF

Website: www.wilpf.ch.int

Military Research

Where: NGO Room (Room VIII)

When: 10:15 - 12:00am

Contact: Reiner Braun, International Network of Engineers and Scientists for Global Responsibility (INES)

Website: www.inesglobal.com

Nuclear Free Middle East

Where: NGO Room (Room VIII)

When: 1:15 - 2:45pm

Contact: Merav Datan, Greenpeace

Website: www.greenpeace.org/med

Verification of Multilateral Nuclear Disarmament

UK/Norway/VERTIC

Where: Room IX

When: 1:15 - 2:45pm

The Russian Initiative on the Establishment of the International Uranium Enrichment Center

Where: Council Chamber

When: 1:15 - 2:45pm

Cryptoquote Answer from Friday, 2 May

"Before the terrifying prospects now available to humanity, we see even more clearly that peace is the only goal worth struggling for. This is no longer a prayer but a demand to be made by all peoples to their governments—a demand to choose definitively between hell and reason."

- Albert Camus, *Combat*, 8 August 1945

Nuclear Crossword

Across

- 1 The US, USSR, and which other country signed the Partial Test Ban Treaty?
- 3 In 1961, the UN General Assembly adopted a declaration stating the use of nuclear weapons was contrary to the "spirit, _____, and aims of the UN Charter." What is the missing word?
- 4 How many days after the CTBT is ratified by all 44 states listed in Annex II of the Treaty will it enter into force?
- 6 Which state submitted the Model Nuclear Weapon Convention to the NPT in 2007?
- 7 Which nuclear weapons are not covered by an arms control treaty, yet are more portable and diverse than strategic nuclear weapons?
- 9 How many billions of dollars does the US Department of Energy spend annually on weapons research, development, and production?
- 10 How many countries requested more than \$1 billion worth of US weapons in 2007?

Down

- 2 What is the name for the 1998 US/Russian non-proliferation program to create sustainable job opportunities for weapons scientists in Russia's closed nuclear facilities and help Russia accelerate downsizing its nuclear weapon complex?
- 5 How many member states does the Conference on Disarmament have?
- 8 How many hundred nuclear devices were detonated at the testing site Semipalatinsk between 1949 and 1989?

