

## NPT NEWS IN REVIEW



Civil society perspectives on the 2012 nuclear Non-Proliferation Treaty Preparatory Committee 30 April-11 May 2012

## 11 May 2012 No. 9

#### IN THIS ISSUE

- 1 | Editorial
- 2 | News in Brief
- 4 | Disarmament education
- 5 | In My Lifetime
- 5 | Nuclear crossword
- 6 | Parliamentary measures
- 7 | NATO nuclear weapons
- 8 | The irony of realist delusion
- 9 | Nuclear applications for agriculture
- 10 | Today's calendar of side events

The NPT News in Review is a daily publication produced by the Reaching Critical Will project of the Women's International League for Peace and Freedom during meetings of NPT states parties.

See reachingcriticalwill.org for infomation, statements, papers, reports, archived *NPT News in Reviews*, and more from the NPT.

## **Editorial: Taking stock and moving forward**

Beatrice Fihn | Reaching Critical Will of WILPF

At 6pm on Thursday, Ambassador Woolcott released his summary as the Chair of the first preparatory committee (Prep-Com) of the 2015 NPT review cycle. The document is not intended to be adopted by consensus and was submitted as a working paper.

At a first glance, the document accurately reflects the discussions during the two weeks of the PrepCom. The discussions have in many ways resembled those of the 2010 Review Conference, with the usual arguments on lack of progress on disarmament from some states and discussions on the additional protocol as the new verification standard from others. However, the discussions here in Vienna and therefore also the Chair's summary highlight some crucial developments since May 2010.

In particular, the catastrophic humanitarian consequences of any use of nuclear weapons and the relevance of international humanitarian law are described in three paragraphs. The summary notes states' deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons, and highlights that many stressed that in case of use, such consequences would be unavoidable and emergency relief could not be provided to affected areas. It was further noted that the humanitarian consequences of any use of nuclear weapons would be addressed during the current review cycle. Since 2010, the concerns over the destructive power of nuclear weapons, the unspeakable human suffering they cause, the difficulty of controlling their effects, and the threat they pose to the environment, our climate, and future generations have increased, culminating in a call by the Red Cross and Red Crescent for states to work on outlawing nuclear weapons "with urgency and determination". It is apparent that this topic has been placed firmly on the NPT agenda.

A second important development is the reference in the Chair's summary to concerns raised over continued modernization of nuclear arsenals, "including in connection with the ratification of nuclear arms reduction agreements, and the development of

advanced and new types of nuclear weapons and their delivery systems and related infrastructure." This reference shows that the significant modernization programmes ongoing and/or planned in all nuclear weapon states is viewed as a major obstacle to nuclear disarmament by many states. It demonstrates that stronger commitments to the elimination of nuclear weapons must be achieved in order to prevent these weapons from being extended indefinitely.

The Chair's summary also reflects several other crucial developments, such as the appointment of the facilitator and host government for the 2012 conference on a WMD free zone in the Middle East. It welcomes the report by Mr. Laajava and looks forward to his continued work on the issue. Unfortunately, the report also accurately reflects the lack of comments at the PrepCom about the nuclear catastrophe in Fukushima in March 2011. The report indicates that states only noted that the "accident ... demonstrate the need to strengthen nuclear safety". As noted yesterday, only a few delegations took the opportunity to use the first NPT meeting since the catastrophe to discuss the risks and costs of the nuclear fuel cycle and nuclear power generation. Instead, most delegations continued to devote attention to the "inalienable right" to develop nuclear energy. The section of the Chair's summary on "peaceful uses" of nuclear energy focuses on describing support for the IAEA, enhancing nuclear safety and security measures, and discussing multilateral approaches to the nuclear fuel cycle, but does not reflect the statements by those delegations that spoke about the negative effects of nuclear power.

While not a consensus document, the Chair's summary manages to continue the positive tone set at the 2010 Review Conference, while carefully moving forward and acknowledging recent shifts in debate, progress made, and initiatives undertaken. It signals that while states parties are focusing on implementing the commitments made in 2010, many are also ready to consider what additional steps need to be taken in 2015 to fulfill the commitments of the Treaty. •

### **News in Brief**

Ray Acheson | Reaching Critical Will of WILPF

## Specific issue: peaceful uses of nuclear energy and other provisions of the Treaty

#### Nuclear safety

- The US announced that its regulatory commission has completed a near-term safety review of its 104 active nuclear power plants and established a task force to develop recommendations for improving its regulatory framework and safety procedures.
- The Republic of Korea (ROK) said it has established a commission to ensure independence of its regulatory framework and that it has conducted a review of emergency preparedness of its power plants and will elaborate measures to heighten safety standards.
- Japan announced that 19 reports from stress tests on its reactors have been submitted and the results of two reactors have been endorsed by the Nuclear Safety Commission of Japan.
- Japan said it is taking measures to establish a nuclear regulatory agency.
- Japan said it has received an IAEA international mission on remediation and an IAEA Review Mission for evaluating the procedures applied in Japan's stress test review process.
- Romania said its reactors took part in the EU stress
- The US called on all states with nuclear power reactors to conduct safety reviews and ensure their reactors meet the highest, most up-to-date standards of safety.
- The US advocated for enhanced national nuclear safety infrastructures; establishment of strong, independent nuclear regulatory authorities; strengthened global emergency preparedness and response, with improved communication and transparency; increased participation in IAEA peer review programs; and commitment to a robust nuclear safety culture.
- The US highlighted the need for "a global nuclear liability regime to ensure that accident victims are compensated and to support a stable legal environment for nuclear energy's expansion," and described the Convention on Supplementary Compensation for Nuclear Damage as fitting this need.

### **Nuclear security**

- Argentina and Algeria said parties should focus on stocks and deposits of existing nuclear weapons because safety and security concerns are substantially larger when it comes to military programmes.
- Japan said it is strengthening domestic nuclear security measures such as reinforcing power supplies to the nuclear power plants and addressing vulnerabilities in the power supply system; strengthening its response procedures and inter-agency coordination manuals; strengthening special counter-terror security measures

such as increasing the number of armed security personnel and patrols, introducing redundancies in central alarm stations and enhancing protective measures for equipment located outside of the inner areas, and strengthening measures to block computer systems in nuclear facilities from outside networks.

- Romania said its regulatory body and the US Department of Energy (DoE) are implementing a bilateral agreement on upgrading the safety of its radioactive sources and nuclear material.
- Romania said it has invited an IAEA mission to certify its practices in nuclear safety and security.
- Nigeria reported it is establishing a national institute for nuclear security training.

#### Conversion

• Romania said it converted one of its research reactors from HEU to LEU with help from the IAEA and US DoE. Romania also said it has repatriated its HEU to Russia.

#### New nuclear development

- Romania said that it has two nuclear power plants under construction and plans to build one other.
- Nigeria projected that its first nuclear power plant will go online by 2020.

#### Withdrawal

- The US and Japan suggested consultations could take place with the withdrawing party prior to its withdrawal.
- The US suggested that NPT states parties could request the IAEA provide, before withdrawal becomes effective, "the conclusions the Agency can draw using the verification authorities available to it under the withdrawing state's safeguards obligations."

## NPT NEWS IN REVIEW 11 May 2012 | No. 9

Reaching Critical Will A project of the Women's International League for Peace and Freedom

777 UN Plaza, 6th Floor, New York, NY 10017 ph. +1 212.682.1265 | fax +1 212.286.8211 contact: info@reachingcriticalwill.org

Editors: Ray Acheson and Beatrice Fihn

The views expressed in this publication are not necessarily those of the Women's International League for Peace and Freedom or the Reaching Critical Will project.



- The US and Japan suggested that NPT states parties could require that any nuclear material or equipment they supply to another state party be subject to safeguards if the recipient state's NPT safeguards agreement is terminated.
- The US and Japan suggested that NPT states parties could include dismantlement and/or return clauses in their arrangements with other states parties regarding the transfer of nuclear equipment.
- The US suggested that NPT states parties could make it part of their policy on nuclear supply to suspend further supply to a withdrawing party that is determined to be in violation of its NPT and IAEA safeguards obligations.
- The ROK said the UN Security Council should be required to take appropriate actions in the event of a withdrawal.
- Indonesia argued that the decision-making process in the UNSC is biased due to its dynamics and composition.
- Indonesia suggested withdrawal issues should be addressed in the NPT framework through an emergency meeting that could be organized by past or current Rev-Con presidents.
- Brazil supported Indonesia's suggesting, saying it is the only proposal so far that does not assume NNWS are the only ones entitled to withdrawing from the Treaty.
- France advocated for agreement that after a state withdraws it remains liable for violations committed while it was a state party.
- Japan and Indonesia said it is important to both encourage states parties to remain in the NPT and to discourse them from withdrawing.
- South Africa called for care that proposal to interpret article X do not create ambiguity or loopholes.
- Iran argued that proposals for reinterpreting the articles of the NPT are tantamount to amending the Treaty, in which case a state party has to follow the amendment procedures provided for in article VIII.

### Universality

- The ROK called on non-NPT states parties to accede to the NPT as non-nuclear weapon states.
- Belgium called on India, Israel, and Pakistan to join the NPT.
- Iran criticized the NSG decision in September 2008, as well as continued economic and military aid to Israel, as making universality of the NPT less attainable.
- Iran called on the 2015 RevCon to make a decision on the complete prohibition and cessation of nuclear transfers to non-parties of the NPT; to appoint a facilitator for universality, who should report to the PrepComs and RevCons; to recognize that non-adherence to the NPT pose a threat to international and peace; to call

upon the non-parties to accede to the NPT as NNWS; to recognize that unsafeguarded nuclear facilities of the non-parties to the Treaty and providing nuclear cooperation and assistance to them threatens the peace and security; to express deep concern at the decision of NSG in 2008; and to reaffirm the commitment of all states parties to cease and prohibit completely nuclear transfers to non-parties without exception.

## Specific issue: improving the effectiveness of the strengthened review process

- Canada indicated that it will continue to seek ways to improve the NPT's responsiveness and governance through institutional strengthening and to increase accountability by states parties through regular reporting.
- Germany, Japan, and Netherlands indicated their support for examining these issues.
- Japan and the US called for cost neutral and cost savings proposals.
- The US said that in the 2010 review cycle it wanted to focus on reaching consensus on substance and now it is ready to consider proposals on procedure.
- The UK suggested that the review cycle consider: using an opt-in system for paper documents, whereby all official documents will be available electronically and delegations can request paper versions; webcasting or podcasting; putting time limits on interventions; and using Twitter and SMS for communication between delegations and the Secretariat. •





## Side event report: Disarmament education workshop

Lily Gardener | Reaching Critical Will of WILPF

What is disarmament education? How is it achieved? Is it important, and if so why? These are some of the questions discussed at the workshop on disarmament education facilitated by Tim Wright from the International Campaign to Abolish Nuclear Weapons (ICAN). The workshop brought together different perspectives from Austria, Australia, Czech Republic, Japan, Switzerland, and the United Kingdom. For the participants of the workshop, education on disarmament is important to engage future leaders, helping them to understand the problems they will inherit. Participants generally agreed that disarmament education could be taught at all levels of education, hopefully creating proactive citizens.

Mr. Wright explained the latest ICAN tool for disarmament education, Learn Peace, which is an activity book for primary and secondary school students. Activities include holding a mock UN debate on nuclear disarmament, designing a new peace symbol, conducting opinion polls on nuclear issues, and role-playing a nuclear crisis. Mr. Wright spoke about a workshop he held at a primary school in a lower socioeconomic area of Geelong, Australia. The group of students, aged between 10 and 12, were given the task of making paper cranes and sending them to their Prime Minister. Their

teacher was amazed at the level of engagement and enjoyment that the usually "naughty" class displayed. For these children, many of whom have difficult home situations, the opportunity to contribute to world issues was invigorating. They received a letter back from the Prime Minister and got their photo in the local paper. These children enjoyed being active citizens.

Participants also discussed engagement methods for both formal and informal education. While Mr. Wright would like to spend more time working in schools, due to time and resource constraints, he finds it useful to reach out to teachers through their networks (for example, the history teachers association). The group discussed the best way of engaging with teachers, many of who are short on time. Learn Peace has been curriculum-mapped for Australian teachers, to illustrate that it has educational merit. It also provides a counter-balance to pro-war resources produced by the Department of Veterans' Affairs.

Additionally, participants discussed innovative ways of engaging people with the issue, like providing students with the opportunity to shadow NGO staff. The idea of linking students from different countries through social media and Skype was also considered. •

## THE LEADING SHOW ON NUCLEAR DISARMAMENT.





Sen. Douglas Roche The biography of the bomb













### Film screening: In My Lifetime

Mia Gandenberger | Reaching Critical Will of WILPF

On Thursday morning Robert E. Frye held a screening of his film In My Lifetime. It portrays the history of nuclear weapons throughout the decades, giving a voice to different actors in the nuclear world.

Frye starts with historical footage of the first nuclear test and the dropping of the atomic bombs on Hiroshima and Nagasaki. Original recordings taken after the explosion together with interviews of survivors paint a vivid picture of the suffering caused by the bombings. What follows is a journey through time showing how the group of nuclear weapon states slowly increases, with Russia, Great Britain, France, and China testing their first nuclear weapons.

Important events like the Cuban missile crisis and the signing of the NPT by Russia and the US are explained using original images from the 1960s. Another anecdote Frye tells is how in 1987 US President Regan and Secretary General Gorbatschow met in Iceland and almost agreed to eliminate all of their nuclear weapons. Even if that didn't happen, it shifted the discussion form arms control to arms reduction.

Frye had been filming at the Preparatory Commission of the Comprehensive Test Ban Treaty and the Review Conference of the NPT in 2010. At one point the film brilliantly portrays international disarmament negotiations, when it shows uncommented footage of the word-juggling that took place in Main Committee I during the 2010 NPT Review Conference when "specific timelines" are deleted and "affirms" exchanged for "notes".

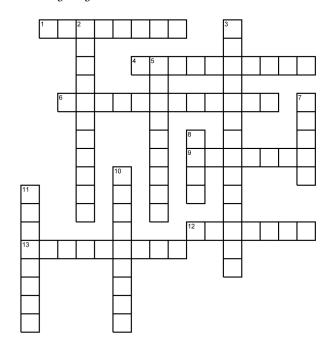
The film gives room for all stakeholders to make their case: former diplomats and scientists recall their memories of what happed; IAEA inspectors at work talk about their personal stories and motivations; civil society actors explain their work; disarmament education initiatives like Peace Boat are introduced, and Hibakusha of Nagasaki and Hiroshima tell their stories.

Since the film was finished right before the disaster at Fukushima, the dangers of the so-called "peaceful uses" of nuclear energy are only discussed in connection with the catastrophe at the Chernobyl reactor in 1986. However it touches upon most of the important issues like the need for a nuclear weapons convention and the problem of modernization.

This film's mission is to educate and inform people about the inner workings of the nuclear world. It is a great introduction for an audience not familiar with the history and most important developments in of nuclear weapons and even those working in nuclear disarmament will learn something new and maybe see a familiar face or two. See also http://thenuclearworld.org/for more information and material. •

### **Nuclear crossword**

Puzzles by Lily Gardener



#### Across

- 1. David Krieger, NAPF President, defined what as the "ability to destroy humanity and other complex lifeforms."
- 4. The first underwater nuclear explosions were part of which operation?
- 6. In 1958 who designed the logo of the Campaign for Nuclear Disarmament (2 words)?
- 9. France carried out its first test of an atomic bomb in which country?
- 12. In 2005, which country released a white paper stating its government would not be the first to use nuclear weapons at any time and under any circumstances?
- 13. What is the name of the summit at which, although talks collapsed, is seen as having resulted in the 1987 Intermediate-Range Nuclear Forces Treaty?

#### Down

- 2. Countries that possess nuclear weapons are sometimes referred to as what (2 words)?
- 3. What was the codename of the first Soviet nuclear test (2 words)?
- 5. Marie Skodowska-Curie died from an aplastic anemia, contracted from her long-term exposure to what?
- 7. As the only nuclear power to to have used a nuclear weapon, what does President Obama say the US has?
- 8. Support for an NWC is weakest among ... members. 10. Sadako Sasaki was inspired by what legend to fold 1000 oragami cranes?
- 11. For how many days did the Cuban missile crisis last?



## Side event report: Parliamentary measures for nuclear non-proliferation and disarmament

Susi Snyder | IKV Pax Christi

This event, organized by the Parliamentary Network for Non Proliferation and Disarmament (PNND) featured two parliamentarians, three PNND regional/national coordinators, and Ambassador Kairat Abdrakhmanov of Kazakhstan. Alyn Ware, global PNND coordinator, opened the event reflecting on the role of parliamentarians who are elected to represent the voice and concerns of societies.

Marit Nybakk, vice-president of the Norwegian Parliament and PNND co-president discussed the situation in Norway where there is excellent cooperation between the parliament and successive governments. Since 2007, there has been parliamentary unanimity in calling for a world free of nuclear weapons, and this has formed the basis for further action on the part of both the government and the parliament. Civil society has played a large part in this as well, educating and activating the public. This is well reflected by a poll several years ago showing that 92% of the Norwegian public favours making nuclear weapons illegal. The recent efforts by the Norwegian government to focus on the humanitarian aspects of nuclear weapons, including the 2013 conference is one way that Norway is working to put the will of the people into action. Ms. Nybakk hoped that other countries could take up different aspects of nuclear weapons in a way that is cooperative and complementary to the humanitarian focus that Norway is emphasizing.

Bill Kidd, Deputy Whip Scottish Parliament, reflected on PNND efforts for a parliamentary sign-on statement about the forthcoming conference on a Weapons of Mass Destruction Free Zone in the Middle East. He explained that over 270 parliamentarians had signed onto this letter, from 42 parliaments including Israel, Egypt, and Jordan. Mr. Kidd went on to explain that the most important role for parliamentarians is to stand up and be counted when called upon. In that regard, he noted that 73 of the 129 Scottish MPs in Westminster voted against Trident renewal, while only 16 voted in support of it. He said that Trident must, and will go, and that this will be Scotland's clear contribution to creating a nuclear weapons free world.

Rob van Riet, World Future Council disarmament programme and the UK Coordinator of PNND, introduced the draft Inter-Parliamentary Union Handbook on "Parliamentary measures to support nuclear non-proliferation and disarmament". This handbook highlights existing policies and practices aimed at furthering nuclear disarmament, curbing nuclear proliferation, and safeguarding nuclear security. The handbook also explores further actions parliamentarians can take to fashion legislative agendas to further these goals. During the discussion period, Mr. van Riet went on to

note the lack of transparency, especially around nuclear weapons budgets, that hinders parliamentary oversight on these matters and limits democratic security.

Muna Makhamreh, PNND coordinator for Arab countries, highlighted the ten Jordanian parliamentarians who signed onto the PNND Middle East statement, including the chairs of the health and environment committee, the energy committee, and the legal committee.

Jean-Marie Collin, PNND coordinator in France, offered a note of hope for the future of the often dismal French position. He explained that Hollande was the mayor of the 100th city in France to join Mayors for Peace and has already begun discussions with the Green and leftist parties in France. In addition, Mr. Collin discussed how France might benefit from the efforts of former Minister of Defence Paul Quiles (see NPT News in Review No. 3, of 3 May 2012) who could help shake France free of its reliance on nuclear deterrence doctrines.

Ambassador Kairat Abdrakhmanov of Kazakhstan reflected on the history of his country's engagement with nuclear weapons. He explained that more than 1.5 million people were impacted by the Soviet Union nuclear tests at the Semipalatinsk test site. 2012 marks 21 years since the site was closed, and on the International Day against Nuclear Testing, 29 August, Kazakhstan will host an international conference "From a Nuclear Test Ban to a Nuclear Weapons Free World" in Astana.

The lively discussion period focused on transparency, accountability, and parliamentary engagement opportunities for citizens. The efforts of the North East Asian PNND coordinator, especially around promoting a nuclear weapons free zone in that region, were also highlighted. One helpful tip from the speakers about accountability was to build reporting requirements into legislation ratifying agreements, or establishing government coalitions. •

# Follow Reaching Critical Will on Facebook and Twitter!

http://www.facebook.com/pages/ Reaching-Critical-Will/113156616083

@RCW\_



## NATO nuclear weapons: Too controversial, too expensive, and useless!

Arielle Denis | International Campaign to Abolish Nuclear Weapons

Illustrating Churchill's assertion that the most stupid but most of the countries assertion that the most stupid by Germany, are calling for their withdrawal. IKV Pax Christi's research report Withdrawal issues shows that less of the changes occurring in the world, since the end Christi's research report Withdrawal issues shows that of the cold war NATO nuclear policy has not moved "allied support for continuing the current deployment much. The new push in favour of a world free of nu- situation is extremely low." Half of the Alliance admits clear weapons is now shaking the old Alliance, showing they are actively searching for an end of the TNW degrowing divisions among the 28 members. Can the Chi-ployment. Ten more wouldn't object. Only three states cago Summit deliver some fresh air?

tions—and is now haunted by a horrifying spectra called to try to block processes leading to withdrawal. the economical crisis. US President Obama's commitment to a nuclear weapons free world in April 2009 was clear weapons makes these weapons unacceptable and warmly celebrated, but then the Obama administration just unusable. allocated huge budgets for its nuclear weapons programme. Russia also agreed to this goal but claims it to think about security without nuclear weapons and needs its nuclear weapons to compensate for deteriorating conventional forces and the French-British nuclear agreement. In fact, as shown in Reaching Critical Will's study Assuring destruction forever, the eight nuclear- Summit, NATO members would understand that they armed states—China, France, India, Israel, Pakistan, have "a special leadership role to play in support of Russia, United Kingdom, and the United States—are all global efforts to reduce reliance on nuclear weapons, modernizing their arsenals.

reconfirmed that, "as long as there are nuclear weapons Nunn and Helmut Schmidt argued in an article in the in the world, NATO will remain a nuclear Alliance." In New York Times on 13 April 2012. The best option to the same document, they decreased the reliance on nu- make this happen is to highlight people's demand for a clear deterrence and committed the Alliance: "to a goal treaty to eliminate nuclear weapons. • of creating the conditions for a world free of nuclear weapons."

This schizophrenia is irritating people's intelligence and many governments of states that have already agreed through the Non-Proliferation Treaty to never acquire nuclear weapons. According to a recent ICAN study, 146 states have declared their will to sign a nuclear weapons convention to completely ban and eliminate these genocidal weapons.

NATO's Defence and Deterrence Posture Review (DDPR), to be re-defined at the Chicago summit, perfectly illustrates these contradictions and raises many questions. Why does NATO need nuclear weapons? Because, "As long as there are nuclear weapons in the world, NATO will remain a nuclear alliance." So let's get rid of them! Does NATO seriously think it will ever use them? This would mean that the US would "risk New York to save Gdansk?" Seriously? Does NATO need nuclear weapons to fulfil its missions? The answer again is No. Nuclear weapons are not useful to fight—unpopular—wars in Afghanistan or in Libya, or any other NATO mission.

Another range of questions concerns the renewal of the B61 nuclear bombs based in European countries. These bombs and their delivery vehicles are a relic of the cold war and unanimously considered obsolete.

Illustrating Churchill's assertion that the most stupid But most of the countries where they are based, led (France, Lithuania, and Hungary) would object, and The current nuclear discourse is full of contradic- only one—France—is willing to invest political capital

The catastrophic humanitarian consequences of nu-

Each citizen and a fortiori each politician must start envisage a sustainable global security architecture for the globalization era.

If courage and lucidity would enlighten the Chicago to prevent their spread into dangerous hands, and ul-At the Lisbon NATO Summit, the 28 member states timately to end them as a threat to the world," as Sam





### The irony of realist delusion

Leo Hoffmann-Axthelm | NPT TV

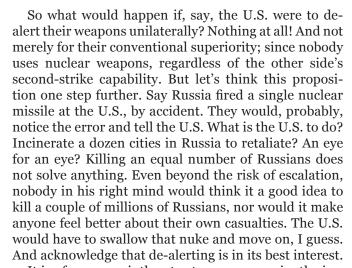
The fall of the Berlin Wall has become the symbol for the end of the Cold War. The confrontation of two blocs gave way to a brief phase of unilateral domination by the U.S., which accounts for almost half of global defense spending. As is often the case with blatant inequalities though, much of the world is catching up, as global military spending rises. Yet it has become consensus, as was acknowledged by the Obama administration, that the world has entered a multipolar phase in which no actor can solve any of the multiple global crises by itself.

This has been exacerbated by many developments unrelated to the end of the Cold War. The globalized economy and civil society, both heavily aided by the advent of the internet, make this multipolar world one of unprecedented interdependencies. The global financial crisis ravaging the world since 2008 bolstered the economic power of Brazil, China, and India, which will be reflected in international monetary institutions before long. If China wanted to antagonize the U.S., it would not need to use nuclear weapons; it could simply dump its three trillion dollars in foreign exchange reserves for the Euro. Only China's pivotal dependence on a functioning global economy can deter such a move, and financial stability is indeed in China's best interest.

All of the above is rather obvious to everyone. Everyone except a small clique of security people. They believe in evil, in power maximization. They believe they need nuclear weapons to deter nuclear attack, which implies that they themselves would use nuclear weapons against their worst enemies even if these dropped their own nuclear weapons. Luckily, they assure those states without nuclear weapons that they would never be targeted (leaving the ridiculous loopholes of many negative security assurances aside).

While everybody says they do not want to use nuclear weapons, these people actually believe that the other side would—if it could. This belief is so ridiculous that the public does not even bother checking Wikipedia for which states actually do have nuclear weapons: they could not care less.

Why then invest as much effort in nuclear disarmament, apart from the staggering waste of money, resources, and scientists? Well, in the decades after the end of the Cold War, and thus after the cessation of any institutionalized hostility between NWS, the weapons of the U.S. and Russia remain on hair-trigger alert. The thousands of weapons ready to launch 24/7 in 2 to 15 minutes are arresting; one would be tempted to think it the realm of historical movies on the Cuban Missile Crisis. Yet these countries are still threatening to wipe out all life on earth, unable to know why they had to even after the fact.



It is of course pointless to stress, once again, the impossibility to use nuclear weapons. But this does not mean nuclear weapons have to be useless: the DPRK for example no longer needs to fear foreign intervention. Iran, openly threatened by two nuclear armed states for its strategy of ambiguity vis-à-vis the IAEA, need not wonder why Iraq was invaded while the DPRK was not. Thus, nuclear weapons have come to be seen as the sole real guarantor against foreign intervention especially in a situation of conventional inferiority. Luckily, most states either do not fear intervention or chose to forego nuclear weapons out of principle: the IAEA safeguard agreements alone could hardly have kept them from proliferating.

The irony is that the very mechanisms meant to ensure NWS' security—continued nuclear armament—undermine the very NPT that is supposed to keep states from emulating this approach to national security. While NWS embrace disarmament in theory, the U.S. and Russia, which could dismantle thousands of weapons without any noticeable effect, only agreed on minimal reductions in New START, while highlighting the difficulty for even a disarmament-minded U.S. president to have such a minor reductions treaty ratified, let alone one on total disarmament.

From a theoretical point of view, NWS can either drop their reservations about intrusively verifiable, irreversible, and swift disarmament, or nuclear weapons will be kept indefinitely. And the retention of nuclear weapons will mean a failure in disarmament and, subsequently, a failure in the futile quest to keep some states from uprooting the NPT's discrimination by joining in. If a state really wants to go nuclear, it can, as the DPRK – one of the poorest countries on earth – has proven. The key is preventing it from coming to this. There are sufficient reasons not to want nuclear weapons, and indeed most states prove time and again that



## Side event report: Nuclear applications for agriculture—"Devising a model to develop a plan"

Dr. Marcus Yip MBBS

This session hosted by the Food and Agriculture Organisation (FAO) and International Atomic Energy Agency (IAEA) opened with Kofi Annan's quote at the Durban Climate Change summit in 2011, stating "climate resilient agriculture will help Africa adapt the effects of climate change". The FAO/IAEA have since then taken it upon themselves to "devise a model to develop a plan" for nuclear applications for food and agriculture (NAFA). Nuclear application topics discussed included: soil-water-nutrient management, mutation breeding, insect pest control, and animal production and health.

So-called "climate smart" soil-water-nutrient management involves expensive equipment to measure naturally occurring isotopes; tracing amounts of nitrogen needed in fertiliser and how much is taken up into the plants. Other 'breakthroughs' discussed included using drip irrigation over sprinkler irrigation to save water. For generations, farmers have planted two or three yearly nitrogen-fixing crops (i.e. legumes that increase nitrogen in the soil and hence making it more fertile), and drip irrigation was utilised in the late eighteenth century. Yet the IAEA talked about these 'new' technologies as their own.

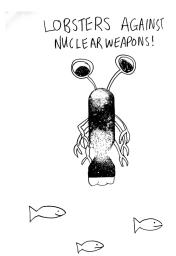
"Climate smart" mutation breeding involves irradiating plant seeds to cause mutations that may translate into desirable characteristics, such as drought resistance, increased stress tolerance, increased yield, disease resistance, better nutrition etc. Theoretically, the list of plausible beneficial qualities are endless. The presentation claimed that currently 1% of the world's sustainable food security is supplied by the IAEA's mutant strain varieties. Useful mutant strain varieties are owned by the states and therefore are theoretically freely distributable. Anecdotally, one out of 1000 mutant strains are classified as "useful".

It is somewhat true that the mutations caused by ionising radiation can be natural, and can generate useful genes, but mutations (including those that are harmful) can also occur in the remaining genome of the plant, unbeknownst to us. It's not only until these mutant variants are released into the environment, propagated for generations, harvested and consumed that we will really know the full long-term effects of these irradiated plants. Currently these plants are bred for 3 or 4 generations until they are sown as crops in countries/places of need. Upon questioning, there was no extensive or longitudinal environmental testing on the natural flora or fauna before these species are released. The argument is that the impact of agriculture is the same, but the extent of this is not true. As the plausible beneficial qualities are endless, so are the plausible detrimental qualities. These mutant variants could spread beyond their scope to ruin delicate ecosystems, be poisonous

to native endangered species, or even be unsuitable for ingestion (due to endless plausible mutants causing allergic reactions similar to gluten allergies, etc.). Additionally, the need for climate resistant foods is due to human's impact on the environment. Again, humans think we can solve this issue with technologies that seemingly cut corners. Now, we are again, risking the environment with unforeseeable consequences, ironically, for the environment.

The section on climate smart insect pest control was skimmed over—and no technical information was provided on how this is achieved. The question from a biological perspective is, if ionising radiation can cause mutation in plants to make them more tolerant with higher reproductive yield, can this also not adversely happen to insect pests?

All in all, from a scientific perspective most of these 'nuclear technologies or applications' appeared self-serving and boastful. Many of these 'agricultural technologies' are simply confirming generations of farmers' knowledge. A simpler and cheaper technique would be to share that information instead of using superfluous technology 'just because we can'. Furthermore, much of the claims made out to be the 'holy-grail' of the current agriculture crisis lack vigorous testing of longitudinal effects, which most scientific and biological science is held up to. •



## The irony of realist delusion, cont'd

they despise them. NWS say the same. But for the honourable goal of global zero to become a reality, NWS should not only focus their energy at preventing other states from copying their approach to national security and their disregard for international commitments, but should instead actually change their own strategy. And become part of the mainstream again. •



## NPT NEWS IN REVIEW

Calendar of side events for Friday, 11 May 2012
See www.reachingcriticalwill.org for a complete listing of events and regular updates

When	What	Where	Who
7:30	Interfaith prayer vigil	Square outside the VIC	Christian CND UK
8:00-8:50	Abolition Caucus	CR M2	Abolition 2000
9:00-9:50	Government Briefing for NGOs: Mexico	CR M2	Reaching Critical Will
13:15-14:45	Taking the Apocalypse off the Agenda: Maximizing Decisionmaking Time	CR M2	PND Flashpoints

