



**Priorities in Nuclear Arms Control and  
Non-Proliferation:  
Comparing Approaches of Russia and the  
West**

**Moscow, Russia, 25-28 April 2007**

**Report by  
Mikhail Lebedev**

**Introduction**

Convened at the International Federation for Peace and Conciliation, the conference gathered 50 participants from 12 countries and 5 international organizations. In the Conference participated International Pugwashites, including Professor Paolo Cotta Ramusino, Secretary General of the Pugwash Conferences.

**Aim and Rationale**

As new nuclear dangers evolve and old ones persist, international approaches and preferences to prevent nuclear weapon proliferation have become diverse, it is important to try to re-establish common ground. But there have been surprisingly few efforts to comparatively analyze non-proliferation and arms control measures by leading nuclear weapon states inside and outside NATO. The workshop hence sat out to comparing and, if possible, tuning approaches of Russia and the West.

This goal was partially accomplished. While there was a general understanding that the international arms control community faces a series of challenges and that all efforts should be made at handling lingering nuclear threats and at preventing both horizontal and vertical proliferation, little consensus was gained on how to do this: The US missile defence, and associated plans and prospects, already at this stage cast long shadows. As arms control treaties are eroding, Russian analysts claim that the US arms build-up is becoming dangerous and making Russia vulnerable, while its future ability to retaliate may be endangered. This may be a

recipe for new arms races, putting additional strains on a battered Non-Proliferation Treaty.

### **Core Challenges**

The START I Treaty expires in December 5, 2009, three years before SORT reductions are to be completed. That leaves SORT without verification procedures. In the summer of 2006 at the G8 summit in Petersburg Presidents V.Putin and G.Bush instructed MFAs and MODs to start consultations on replacing START I with any new arrangement, or extending procedural side of it. The current US administration has no formal position, as yet. While the Russians insist on a legally binding agreement, the Americans have focused on "transparency and confidence-building measures" that would still allow both sides to verify each others' arsenals and capabilities. The primary aim of a new agreement could be the creation of a new verification mechanism, with apt schemes and procedures in accordance with specified goals.

According to western estimates, Russia possess about 4,384 strategic nuclear warheads and US maintained 3,878 warheads in 2006. While there are no official figures on TNW, the Russian stock consists of about 3,300 sub-strategic (tactical) nuclear warheads. However, another 9,000 are estimated by Western sources to be in reserve, since SORT Treaty (2002) does not require destruction of warheads, just their decommission. Russia, on its behalf, is dissatisfied with large American reserve arsenals. Destruction or limitation of reserves remains an important unresolved issue.

A recent Russian nuclear review outlined proposed cuts in the Russian strategic nuclear arsenal to reach 2,022 strategic nuclear warheads by 2015. ICBM warheads would drop from over 2,200 to 750 by 2010. Additional assistance will be needed for warhead transport and railcar maintenance for dismantlement to SORT Treaty warhead levels.

The status of warheads headed for storage pursuant to the SORT treaty is unclear; however, SORT requires that both US and Russia each reduce the number of deployed strategic warheads to between 1,700 and 2,200 by the end of 2012.

Yet, the Russian MoD announced 17 new modern nuclear Topol-M missiles to be added in 2007, while previous several years average rate was 6 per year. After SS-18 and SS-19 type ICBMs with multiple independently targetable re-entry vehicles are retired, Russia may decide by the end of this decade to deploy multiple warheads on its SS-27 ("Topol-M") silo- and mobile-based ICBMs to maintain parity with the United States. Russia is concerned that the United States continues to keep its nuclear long-range sea-launched cruise missiles (SLCMs) ready for deployment. In the past, Russia made numerous failed attempts to include nuclear-armed SLCMs in strategic arms limitation treaties. The first vessel in the new Russian generation strategic nuclear submarines was recently put to sea.

Russia officially sees it's main priorities in WMD disarmament to be elimination of decommissioned nuclear submarines and fulfilling it's obligations under CWC, postponing elimination of accumulated Pu and HEU for foreseeable future. At the same time, because of dangers of nuclear terrorism, European countries insist on placing more priority to elimination of huge (more than 1,000,000 kg) stocks of HEU in Russia. Priorities of adding more transparency and opening negotiations on sub-strategic nuclear weapons are understood differently between European NATO-member countries, from one side, and the USA and Russia, from the other.

Russia has dismantled 145 out of 197 decommissioned Soviet-era nuclear submarines. Russia has signed cooperation agreements on the disposal of decommissioned nuclear submarines with the United States, Britain, Canada, Japan, Italy and Norway. The disposal program will cost an overall \$2 billion. Disposal of 17 boats is underway and 32 more will be scrapped in the future by 2010. 38 subs are awaiting dismantlement, 17 in the Northern Fleet and 21 in the Pacific Fleet. There is an immediate need to improve security and storage for spent fuel at shipyards pending final disposition, especially in the Far East.

There would be legal problems in implementing CTR (Cooperative Threat Reduction, renewed in mid-June 2006) programs without START. These projects are currently carried out under the CTR umbrella agreement, formally called the U.S.-Russian Agreement Concerning the Safe and Secure Transportation, Storage and Destruction of Weapons and the Prevention of Weapons Proliferation. The elimination procedures of Russian strategic weapons are regulated by the

START conversion or elimination protocol and verified under the START inspection protocol. Thus, the United States and Russia would have no legal basis for the elimination of Russian arms and the verification of this elimination even if the efforts continued to be financially supported under the CTR programs.

Transparency efforts have faced several set-backs. The nuclear transparency inter-MFA US-Russian working group has been disbanded. While it has been substituted by some new mechanism, there is a lack of transparency on transparency measures. There have been no public declarations or transparency announcements on TNW since 2004. With the planned US ABM stations in Europe, TNW are back in demand. In this setting, removal of remaining US TNW from Europe may make a significant difference, while it remains highly unclear whether it would motivate Russia to further cut its own TNW arsenal.

Russian officials announced in early 2007 that Russia might withdraw from INF Treaty (of 1987) and re-create an arsenal of short and intermediate range missiles. INF has been given an unlimited time frame and it seems worthwhile upholding it. Two competing withdrawal-motivations are given by the Russian leadership:

1. "because third states like Iran, North-Korea, Israel, etc, developed intermediate range missiles" (V.Putin in Munchen and FM Lavrov)
2. "because USA will be deploying ABM elements in Poland and Czech Republic till 2012 (Chief of General Staff Yu.Baluevsky)

Potential Russian withdrawal from INF will inevitably raise anti-Russian fears within NATO and would further militarize NATO, which in its turn would decrease Russian security. Moreover, withdrawal from INF would be a violation by a nuclear power of NPT Article VI obligations. Russia hints that it may use INF missiles in non-nuclear mode, as conventional vehicle in regional balances. Although NATO governments stress their continued interest in cooperating with Russia on missile defense issues, including within the NATO-Russian Council, they refuse to negotiate with Moscow parameters of BMD architecture NATO countries plan establish for Europe.

The CFE (Conventional Forces Treaty) is considered by many sides as less and less binding.

Withdrawal of conventional from Moldova and Georgia require significantly more time than the West allocates to Russia for this task. US plans to deploy elements of ABM in Poland and Czech Republic may motivate Russian side redeploy more conventional forces to areas from which they can threaten or cover by strike those new military objects in Eastern Europe. These steps may lead to violations of the CFE Treaty. Would that be an extra argument for Russia to abandon the CFE Treaty? Putin has hinted at this.

The multilateral plutonium disposition program will need total funding of roughly \$2 billion (\$1 billion in capital costs, \$1 billion in operating costs) to dispose of the 34 tons of Russian Pu covered by the 2000 agreement; approximately half this amount has been pledged. To remain on schedule, the fossil fuel plant construction at Zheleznogorsk needs additional funding from Global Partnership donors amounting to at least \$100 million to reach the estimated total program cost of around \$1 billion.

DOE plans to repatriate 1,370 kilograms of HEU to Russia by 2010, and to return or validate acceptable disposition of 22,743 spent fuel assemblies of U.S. origin by 2019. The deadline for U.S. acceptance of spent fuel was extended in 2004 from 2009 to 2019; all shipments of U.S. and Soviet-origin HEU fuel are to be completed on a priority basis according to level of security threat.

Programs for Russian-origin HEU reactors targeted for conversion by 2014 or repatriation by 2010 will only succeed if stronger incentives are given to host nation governments to convert these facilities. GP countries should work together to use diplomatic influence and financial assistance to accelerate this effort. An estimated 45% of the research reactors currently using HEU fuel are not targeted for conversion by GTRI. These also need to be addressed.

After some 15 years of joint MPC&A-cooperation much has been accomplished, yet much, and probably the hardest tasks persist. The remaining 51% of material that not has received any security upgrades is concentrated at a few large sites-including two nuclear warhead assembly and dismantlement facilities -Elektrokhimpribor at Lesnoy and the Instrument Making Plant at Trekhgornyy -- where an estimated one quarter of the material is housed. As an increasing

number of GP donors contribute to these efforts, greater coordination is needed to prevent duplication of efforts and prioritize projects while respecting Russian security concerns.

The planned completion dates for all bunker security upgrades is end of 2008. A large number of warhead storage sites - potentially as much as 50% of estimated sites - are not set to receive DOD/DOE upgrades at all. Security upgrades for nuclear warhead handling sites (temporary storage sites where warheads are handled during training operations or deployment) have been limited due to a 2003 U.S. inter-agency decision preventing work at operational storage sites that support Russian military units. Other GP donors should provide assistance to these sites.

Upon its completions, the current U.S.-Russian HEU agreement will convert 500 metric tons of HEU from dismantled warheads into LEU (equivalent to 20,000 nuclear warheads) by 2013. After downblending these 500 tons, over half of Russia's estimated inventory of military HEU will still remain. Plans are needed to accelerate current blend-down efforts and substantially increase the quantity of weapons HEU stockpiles targeted for downblending. This could involve re-instating the DOE effort to downblend additional HEU, or constructing a managed storage facility for LEU to offset effects on the market. Studies show that an increase is feasible, with very little investments. Accelerated downblending, however, rests on new Russian HEU-excess declarations.

Roughly \$2 billion (\$1 billion in capital costs, \$1 billion in operating costs) is needed to dispose of the 34 tons of Russian Plutonium covered by the 2000 agreement; to date, approximately \$1 billion has been pledged by the U.S., the UK, France, Italy, Japan, Canada, and the Netherlands. There is no current anticipated start-up date for the Russian MOX facility, but if agreed upon by Russia, construction may not be completed until after 2010 and disposition of substantial amounts of Plutonium would not begin before 2012. The 34 tons is not expected to be disposed until the 2020-2030 time frame based on the current commitment of 4 tons per year. There are no agreements addressing civilian plutonium stocks

## **Assessments and Key Findings**

On a positive side, no country supports nuclear proliferation in general. Countries may decide that they need to possess nuclear weapons, but no government is buying the argument that "more is better" when speaking about nuclear weapon states. There is a growing concern with the state of international nuclear affairs - and the prospects of new nuclear possessors, and possible uses.

However, the type of innovative arms control thinking needed is unlikely to find much fertile ground in the current setting. From the very onset of the conference it became clear that views are diverging on best policies to stem nuclear proliferation. More so, while acknowledging the problems, each and one of the major players - the US, Russia and NATO - all seem fairly content with their own current and planned non-proliferation practices. The problems are "elsewhere", and the need for and the interests in any self-examination accordingly. This is, of course, a poor starting-point for any "tuning" between Russia and the West of priorities in the spheres of both arms control and non-proliferation. It is, moreover, likely to maintain rather than solve mounting proliferation challenges.

A brief comparison of nuclear postures of the US and Russia is given in Table 1, making clear that an antagonistic pathway seems the most apparent mode of interaction between the former superfoes-turning-into strategic partners.

<b>Table 1. Russian and US nuclear postures compared</b>	
<b>Russia</b>	<b>US</b>
Keep nuclear weapons and their production infrastructure	Keep nuclear weapons and their production infrastructure
CTBT ratified in 2000	Testing moratorium, yet testing capabilities maintained
US is still a major adversary	Russia is just one of many possible adversaries
1700-2200 warheads after 2012	1700-2200 warheads after 2012
Keeping the "triad"	NPR's "New Triad" concept
"Minimally sufficient" level of deterrence	Adaptive planning
ABM penetration means	National ABM system

There is a difference in threat perceptions, a difference in preferred countermeasures, and a profound difference in the understanding of the state of the nonproliferation regime. The issue of missile defense (and its impact onto strategic nuclear balance), fissile material cut-off treaty, etc. remain understood differently in Russian and Western strategic mentality. The Reykjavik-consultations in 1987 between Reagan and Gorbachev on the abandoning of nuclear explosives, seems further away than ever.

### **The Nuclear Non-Proliferation Regime**

Countries may decide that they want to acquire nuclear weapons for two basic reasons:

1. The presence of an external threat, especially, but not exclusively, when the external threat is represented by nuclear weapon states (whether official or de facto).

The prestige and the power which is associated with nuclear weapons.

The NPT up to now had done a remarkable job in inducing countries to refrain from the acquisition of nuclear weapons by addressing, albeit in an imperfect way, both of the motivations above. The principle of non-proliferation in the NPT helps in creating an environment partially free from nuclear threats, while the principle of disarmament aims at decreasing both the relevance of nuclear weapons and the prestige associated to their possession. The NPT, as is well known, discriminates between haves and have-nots. This discrimination was meant to be temporary, as it has always been understood that the only way to move towards a stable equilibrium was to resolve the distinction between haves and have-nots by eliminating nuclear weapons, namely by making them illegal (as in the case of chemical and biological weapons). Progressing towards such stability is tantamount to having a manifest, unequivocal and sustained progress in nuclear disarmament.

Moreover, paying lip-service to the NPT and its provisions will only lead to a further marginalization of this cornerstone treaty. NATO, itself a multilateral entity, needs to pay particular attention to how to operationalize this vital arms control treaty in its internal discussion. Not only would this provide considerable leverage with regards to the preventive role



- and thinking - of NATO. As a tool, the NPT provides a set of unique requirements for reducing the political and military role of nuclear weapons. Hence, the treaty provides the legal back-cloth for dealing with both state intentions as well as capabilities. As such, it should provide an apt framework even in the post-cold war era, given the needed political support and investment.

One of the most notable problems facing the NPT is that some nuclear weapons states, most notably the United States, as well as some other countries have developed a strategy wherein, while paying formal tribute to the role of the NPT, in fact sidetrack it. As it now looks, an unilateralist approach has created more problems than results, and has significantly eroded the large consensus about the general non proliferation regime. Besides, both the US and Russia would have to engage substantially in nuclear disarmament in order to lose their nuclear superiority.

This is true today, and was true in the past. Indeed, the NPT was born as an agreement between states having a very different vision of the world. In the NPT, the "imperialistic" US cooperated with the "evil empire" (USSR) in keeping proliferation under control and, for some time, in dramatically reducing the nuclear arsenals. Different visions of the world did not impede the NPT from working. This should be true even now when the states antagonistic to the US are not as powerful as was the USSR, but may still in general be unlikely to yield to repression.

The NPT itself was extended indefinitely in 1995, contributing to what seemed to be a bright perspective for nuclear non proliferation and disarmament. The sentiments of a "failed NPT" - largely based on the flawed outcome of the 2005 NPT Review Conference, rather than a comprehensive assessment of the role and provisions of the treaty in confining nuclear explosives over four decades - stand a severe risk of becoming self-fulfilling prophecies. Fluffy talks about NPT-substitutes and add-on, may fail to recognize the inherent complexities and obligations embedded in the treaty.

But after the mid-1990's, the condition of three legs of the NPT began a significant shift. First, Russia and the US basically froze their disarmament agenda, with the last signed treaty leaving some 1700-2200 deployed strategic weapons per side and an unspecified number of tactical, as

well as retired-but not destroyed,-nuclear weapons per side. Moreover, the other (smaller) nuclear powers, France, the UK and China, stayed very clear of the complete nuclear disarmament threshold. In 1998, two new declared (but unofficial from the standpoint of the NPT) nuclear powers arose, namely India and Pakistan. And later, for the first time, one country exited the NPT and made a nuclear test (North Korea).

Moreover, some remarkable initiatives-such as the establishment of a treaty prohibiting nuclear tests and hence hindering the development of new types of nuclear weapons-basically failed to become a reality, thus contributing to the feeling that the era of nuclear disarmament was over. Some basic initiatives (the 13 steps) aimed at reinvigorating nuclear disarmament and nuclear non-proliferation were discussed and approved at the 2000 NPT Review Conference, but were not even mentioned in the 2005 Review Conference, which ended without any final document.

A specific country (Iran) has been under extensive scrutiny and has been accused of developing an indigenous fuel cycle with the undeclared purpose of taking steps forward in the direction of building nuclear weapons. Today, the most likely position of the regime is to pursue the program and to achieve a military option, but not to build the bomb itself. The core issue in this attitude is the aim to master the enrichment technology. Since 2003, throughout all international discussions, there has never been any serious indication that Iran would be ready to give up this aim or to "sell" it for any Western incentives. The misunderstanding by European negotiating partners of this crucial point was one of the reasons for the failure of their approach.

The only Iranian concession in this respect was to suspend the enrichment activities in view of an agreement, which - for Tehran - had to contain a form of national enrichment. Art. IV of the NPT stipulates implicitly the right to enrich, however the article is explicitly conditioned by the fulfilment of Art. II: the obligation of a non-nuclear-weapon state to refrain from any military nuclear activities. Doubts about Iran's compliance with Art. II are the basis for demanding the suspension of enrichment.

In spite of increasing political tensions between different forces within the regime, there seems to

be a broad consent in Iranian politics to pursue the program along these lines. Criticism has been uttered by former President Rafsanjani or by reformists against Ahmadinejad's provocative positions, but not against the program itself. The program has broad national support, as it is presented and understood as a national project for technological progress. In reaction to all international pressure so far - a series of IAEA resolutions, three resolutions by the UN Security Council, UN-sanctions as well as further unilateral measures and the explicit threat of a military attack by the US and Israel - the Iranians have not manifested any flexibility in their determination to pursue the enrichment activities.

Tehran defies international obligations as decided by the Security Council, but only stated its readiness to negotiate without preconditions, whereby a diplomatic solution would have to be found outside of the Security Council. The current strategy of escalating sanctions could become a prologue to military action on the part of the United States. Obviously, the development of the conflict surrounding the Iranian nuclear program will also influence the future of the Nuclear Non-Proliferation Treaty.

## **Recommendations**

The need to see non-proliferation and nuclear disarmament as a pair and something that is worked on under the provisions of international law where applicable, and a spirit of collective security where necessary is obvious - yet further away than ever since the end of the Cold War. Mutual adjustment of nuclear mentality of Russia and the West must lead to better co-ordination of their policy line in keeping and advancing the non-proliferation regime. Co-coordinating priorities in dealing with Iranian and North Korean nuclear crises, as well as with other proliferation challenges, may contribute a lot to increasing the level of international - and hence, national - security.

What follows here is a list of reasonable, visible minimum steps that could be taken by the nuclear powers to support the credibility of the NPT, by carrying on their obligation under art. VI and more generally steps that could reinvigorate nuclear disarmament - and hence, nuclear proliferation.

1. Russian and American strategic weapons and SORT. First, the SORT agreement itself should clearly be made irreversible, and second, a further significant progressive reduction of strategic nuclear weapons should be planned with some stringent deadlines. Withdrawn weapons and delivery systems should be destroyed.
2. Tactical Nuclear Weapons. Tactical Nuclear Weapons have only been withdrawn by force of unilateral measures. Agreements should be signed for the removal and the dismantlement of tactical nuclear weapons.
3. CTBT/FMCT. The Comprehensive Test Ban should enter into force and this depends primarily on the decision of the United States to rescue the treaty. The FMCT should be discussed and negotiated in a short time.
4. The smaller nuclear powers should also contribute to the disarmament agenda. Modernization of nuclear forces (Chinese forces, Trident in the UK, etc. ) should be indefinitely postponed.
5. Nuclear weapons should not be allowed to be deployed on other countries' territories. Only American nuclear forces are currently deployed in other countries (6 European countries). Other official or de-facto nuclear powers might decide to do the same in the future, creating possibly very dangerous situations.
6. Nuclear Weapon Free Zones. The nuclear powers should agree with no reservation whatsoever to respect all proposals for establishing nuclear weapon free zones, and commit to respect the zones once established.
7. Reliance on nuclear weapons should be manifestly reduced. Nuclear weapons should be all de-alerted
8. De-facto nuclear powers should contribute also to the disarmament agenda, by signing all the arms control treaties other than the NPT, by respecting the basic NPT constraints, and by stopping nuclear modernization and plans for future developments of nuclear weapons.
9. There is a need for visions, and prospects for mutual nuclear security. Maybe this was the most important contribution of this and similar workshops: to maintain enough dialogue to set the foundations for the next round of genuine arms control, with clearly defined and measurable scopes, and associated verification schemes.

10. In this regard, the need for pragmatism and flexibility should be acknowledged, as should the need for genuine, long-term commitment along the lines of traditional arms control and international law. On an overarching level, inter-state and cross-cultural assessments of the arms control architecture of the 21st century seem paramount. Dedicated study-groups should be set up accordingly.

*More information on the meeting is available at the web-site of the International Federation for Peace and Conciliation: [www.ifpc.ru](http://www.ifpc.ru), and news from Russian Pugwash is available at [www.pugwash.ru](http://www.pugwash.ru)*