



Deterrence, Disarmament, and Arms Control

Heinz Gärtner

Working Paper 68 / May 2013

Abstract

In an April 2009 speech in Prague US President Barack Obama spoke of a world free of nuclear weapons. Obama stated that the United States would maintain nuclear deterrence during the disarmament process. This presentation discusses the limitations and deficiencies of the traditional mutual nuclear deterrence and assesses why progress in nuclear disarmament since the end of the Cold War has fallen short of expectations. Comprehensive deterrence is more complicated than normally assumed. It covers not only nuclear weapons as such but consists of several categories of nuclear and conventional weapons that are related. Arms control issues are linked although they are dealt with in separate arms control fora. An arms control and disarmament approach has to be applied broadly and should cover all or most of them. Transparency and confidence building measures cannot be improved unless they cover the interconnected arms and arms control issues including strategic, non-strategic, deployed, non-deployed and conventional weapons as well as missile defense.

Der US-Präsident Barack Obama hat im Juni 2013 angekündigt, die Anzahl der strategischen Nuklearwaffen um ein weiteres Drittel reduzieren zu wollen. Diese Zahl orientiert sich an dem mit Russland abgeschlossenen Neuen START-Vertrag, der die einsatzfähigen strategischen Nuklearsprengköpfe auf jeweils 1550 beschränkt. Im April 2009 hatte Obama seine Vision einer Welt ohne Nuklearwaffen präsentiert. Die Reduktionen sollen aber im Rahmen einer wirksamen Abschreckung erfolgen. Das Konzept der Abschreckung ist allerdings kompliziert und umfassend. Es besteht aus strategischen und nicht-strategischen, einsatzfähigen und nicht-stationierten Nuklearwaffen, aus konventionellen Waffen und möglichen Raketenabwehrsystemen. Diese Waffen sind ein Vermächtnis des Kalten Krieges. Die Kategorien werden aber – wenn überhaupt - in unterschiedlichen Rüstungskontrollforen behandelt. Umfassende nukleare Abrüstung kann aber nur durch umfassende Rüstungskontrolle erreicht werden. Dazu gehören rechtlich bindende Verträge, politische Übereinkommen und Verpflichtungen, sowie eine aufgeklärte Selbstbeschränkung.

Keywords

Global Security Governance, Disarmament, Nuclear non-proliferation, Arms control

Author

Heinz Gärtner is the Director of the Austrian Institute for International Affairs (oiip) and Professor at the Institute for Political Science at the University of Vienna. His key research areas are Global Security Governance, Power Transition and Diffusion and Comparative Foreign & Security Policy Analysis.

Contents

MAD5

Nuclear Arms Control and Non-Proliferation Are Not Disarmament7

Linked issues and first use scenarios9

Deterrence..... 14

Beyond mutual nuclear deterrence..... 16

Conclusion 17

Notes..... 18

References 19

MAD

The so-called four horsemen, Henry Kissinger, Bill Perry, Sam Nunn, and George Shultz, have published several articles in the *Wall Street Journal* on how to reduce the significance of nuclear weapons. In their 2011 piece (Kissinger), they conclude that this is only possible if the strategy of Mutual Assured Destruction (MAD) will be replaced by a “new and more stable form of deterrence with decreasing nuclear risks and increasing measure of assured security for all nations.”

Decreasing the significance of MAD will only be successful if reliance on nuclear weapons and their hazardous consequences is addressed. The concept of deterrence as a war fighting strategy is ineffective.

What is MAD? It is the capacity to inflict maximum damage on an adversary. What does nuclear deterrence mean? It is the capability to retaliate if attacked or threatened with attack by a nuclear weapon power. Although MAD implies that the ability to eliminate the enemy once would be sufficient, the deterrence strategy of the Cold War resulted in a nuclear arsenal that could destroy the world 50 times.

Why did this happen? Mutual deterrence was not simply the threat with mutual destruction, it was destruction organized in a certain sophisticated way. Nuclear weapons became smaller and were equipped with a single warhead to cause limited damage. The idea was that after a first nuclear strike the enemy would blink and withdraw. Yet it goes without saying that there was no guarantee how the other side would react. Therefore, several strategies were developed to control a possible escalation. NATO adopted “flexible response”: small tactical nukes should be used against a conventional attack by the Warsaw Pact; retaliation could escalate by several steps (intermediate, strategic). The aim was to achieve escalation dominance – not only to be capable of striking first, but also striking last. Missiles with multiple warheads (MIRVs – multiple independently targetable reentry vehicles), deeply buried in silos and transportable on tracks, were expected to make this possible. Again, there was no guarantee that one side could ever reach this aim. Missile defense was seen as dangerous because it would invalidate deterrence by preventing

retaliation. Anti-ballistic-missile (ABM) systems were prohibited by a 1972 Treaty (which was abandoned by the Bush Administration in 2002).

But there was also an autistic dimension (Senghaas, 1981) to these arms race dynamics. Arms-planning was based more on anticipation of what an enemy might plan than on what it had already produced. Technology was another driving force. Metaphorically one could argue that if one side disappeared but the other side did not know, then the arms race would continue. In the end, the legacy of the Cold War was nuclear arsenals that could annihilate the world half a hundred times.

Deterrence requires specific targeting. Push and pull factors determine nuclear planning. This would not be changed by political decisions. This observation is based on the “Nuclear Posture Review” (NPR) of George W. Bush that was capabilities-based rather than threat-based, which means that it was not based on a threat analysis but on all kind of contingencies and cases. The current U.S. Operations Plan (OPLAN) 8010 of February 2009 is based on Bush administration guidance and target lists (Kristensen 2010, 2011). Without abandoning the concept of deterrence immediately, first steps could be reductions in the number of targets, missions and categories of targets. Targeting in this type of nuclear planning is a driving force for modernization of nuclear weapons. It goes without saying that for all these weapons to be effective, targets had to be identified. Together with an increasing number of nuclear weapons, the number and categories of targets grew throughout the Cold War as well. Strike options multiplied. Nuclear infrastructure, the political and military leadership and all kinds of forces were targeted. During the 1970s, MAD slowly moved from counter-value (the destruction of cities and population centers) to counter-force (force on force) planning. The result was a further expansion of targeted weapons and strategic assets. In turn, missions against the adversary’s country became broader, and they also included territories of allies in case they would be occupied. With the end of the Cold War, the target lists were not reduced. On the contrary, more targets and target categories have been added, such as weapons of mass destruction (WMD) and terrorist groups, which have been defined very generally.

Nuclear Arms Control and Non-Proliferation Are Not Disarmament

There have been several attempts to control this process of arms built up. Arms control negotiations during the East-West conflicts were not disarmament, however. The “Strategic Arms Limitation Talks” (SALT) and “Strategic Arms Reduction Talks” (START) negotiations and agreements were a controlled or managed arms race, without even arms limitations. The negotiations on a “Fissile Material Cut Off Treaty” (FMCT) were never intended to reduce stocks of fissile material but at best to decrease its production. Only one agreement, the 1987 “Intermediate-range Nuclear Forces” (INF) Treaty, eliminated a category of weapons, and this was only possible because they could be compensated for by deploying technologically advanced sea-based missiles. First the European NATO members had thought that the US-Pershing II and Cruise Missiles would deter the Soviet SS-20 because they did not trust the US to use their strategic weapons. Then they eventually resisted the deployment of the INF because they were the primary targets of a nuclear exchange that could be limited to the European theater and would spare the superpowers themselves.

The administration of George W. Bush in the aftermath of 9/11 was strong on non- and counter-proliferation. It started several initiatives in these areas, including the “Global Initiative to Combat Nuclear Terrorism” and the “Proliferation Security Initiative” (PSI), which was a series of bilateral agreements that allowed interdiction of suspicious shipments, and it sponsored UN Security Council Resolution 1540 prohibiting transfer of WMD and related materials to non-state actors. However, the Bush administration ignored and even despised arms control and disarmament.

By contrast, President Barack Obama spoke of “a world free of nuclear weapons” and also of disarmament of the nuclear weapon states in an April 2009 speech in Prague. What he suggested was not disarmament but arms control measures: a follow-up treaty to START, ratification of the “Comprehensive Nuclear Test Ban Treaty” (CTBT), achievement of the Fissile Material Cut-off Treaty and a fuel bank to secure vulnerable loose nuclear material. Obama’s proposals all fall within the concept of mutual deterrence. His 2010 “Nuclear Posture Review” stresses the “fundamental role” and not the “sole purpose” of nuclear weapons for deterrence. The approval of the New START-Treaty in the Senate in 2010 was

only possible in combination with a U.S. \$85 billion modernization of the nuclear weapons complex.¹ President Obama also continues to support a non-proliferation policy. After Obama's initial period in office, it became clear that arms control plus non-proliferation – although helpful – does not automatically lead to disarmament.

Space and missile proliferation are two other separate but related topics. They do overlap in a broader way in the context of emerging threats and challenges. On the one hand there are the missile proliferation and the emerging missile threats from new and potentially new nuclear powers. Missiles become really dangerous if they are connected with weapons of mass destruction (WMD), however. On the other hand there is the question on how to prevent the potential use of space for military purposes. A special challenge is the dual use of delivery systems and space technology.

There is an inter-connection because there is a link between space-launch vehicle programs and ballistic missile programs, several regimes address both of them. There is the "Hague Code of Conduct against Ballistic Missile Proliferation" (HCOC), also known as the "International Code of Conduct against Ballistic Missile Proliferation". Its norms and standards are not binding, but the regime encompasses both ballistic missiles and space programs. On the one hand, there are measures against the proliferation of ballistic missiles and delivery systems, and on the other hand it addresses space-launch vehicle programs. Then there is "Missile Technology Control Regime" (MTCR) with an overlapping agenda with the HCOC. The "Outer Space Treaty" does not include ballistic missiles. There is also the well-known Russian-Chinese CD (Conference on Disarmament) Working Paper to prevent an arms race in outer space with the acronym PAROS.

Concerning space and the EU, the European draft of the "International Code of Conduct for Outer Space Activities", which is also not legally binding, tries to map out guidelines to create and maintain sustainability, safety and security in space. But it is not only a European issue. In the US there is a debate about whether to join this agreement because there are fears that the agreement could restrict missile defense program of the US and their national security. The US also never excluded that some components of a missile defense system might be deployed in orbit. So there is another link between missiles and space.

Linked issues and first use scenarios

Arms and arms control issues are linked although they are dealt with in separate arms control fora. Strategic and non-strategic nuclear weapons, missile defense systems, global prompt strike forces, conventional forces in Europe, space and even cyber-security are complex, and related topics (Browne, 2013). An arms control and disarmament approach has to be applied broadly and should cover all or most of them. Transparency and confidence building measures cannot be improved unless they cover the interconnected arms and arms control issues including strategic, non-strategic, deployed, non-deployed and conventional weapons as well as missile defense.

Nuclear weapons possessing states cite real or perceived imbalances in conventional weapons as reasons why their own nuclear arsenal need to be maintained. Non-strategic, tactical nuclear weapons have not been addressed by the bilateral US-Russian arms control negotiations and agreements. For NATO they have been the rationale to counter superior conventional Warsaw Pact forces during the Cold War. Now NATO does not consider Russia as its adversary. However, Russia sees its tactical nuclear forces to counterbalance NATO's superior conventional forces in Europe which means it would keep the option open to use them first if there is the risk to lose them in a conventional war. In turn, some NATO members see the Russian tactical nuclear weapons as threatening. In total Russia is supposed to possess five to ten times more of them than NATO's 200 warheads. That is why the Republicans in the US-Congress requested from President Obama to begin talks about these weapons as one condition for the ratification of the New START-Treaty. Some argue that because of this numerical imbalance strategic and non-strategic nuclear weapons should be addressed together. It goes without saying that conventional weapons in Europe will have to be part of the equation as well. Furthermore, there is not only a link between large conventional forces and non-strategic nuclear weapons but also between these two and strategic nuclear weapons. A large-scale conventional attack always can escalate to the strategic level unless all sides renounce a first use of nuclear weapons. A limited first nuclear strike against a large-scale conventional attack is only credible if it is backed up by strategic

nuclear forces. No side can ever be sure that deterrence works and remains stable,² however (Sokov, 2013). The other side could always retaliate with a second strike on the next higher level of nuclear weapons.

Obama's NPR maintains strategic deterrence at reduced nuclear force levels. The "fundamental role" of nuclear weapons is not to be war-fighting weapons but to deter a nuclear attack as long as nuclear weapons exist. The NPR declares that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations. The NPR shields away from the political and diplomatic consequences associated with a "no-first-use" pledge. According to the NPR, the US is not prepared at the present time to adopt a universal policy that deterring nuclear attack is the "sole purpose" of nuclear weapons, but will work to establish conditions under which such a policy could be safely adopted. This means that the US reserves both the option of using nuclear weapons first in response to massive non-nuclear aggression for example with conventional weapons and a preemptive first strike against the adversary's nuclear forces in "extreme circumstances". However, the most likely scenario in which the US would use nuclear weapons first is a conventional war that was escalating to a point when the US assumes that the adversary is about to use nuclear weapons. In this case the US would try to preempt such an escalation by using small nuclear weapons against the adversary's conventional and/or nuclear weapons (Perkovich, 2013).

Since President Obama and Russian President Dmitry Medvedev signed the New START-Treaty in April 2010, the US administration has repeatedly stressed that the treaty does not limit or constrain US options for deploying missile defenses. The preamble of the New START-Treaty recognizes that offensive and defensive strategic arms are interrelated, however. This was the logic behind the 1972 Anti-Ballistic Missile (ABM) Treaty that George W. Bush scrapped in 2002. The official U.S. position remains that the limitation of the number of strategic warheads (New START) is independent of missile defense. If the New START-Treaty had included an explicit link between offensive and defensive weapons, it would have jeopardized ratification by the Senate.

If the United States is going to follow a policy of deterrence, it cannot rely on strategic missile defense to intercept large numbers of long-range missiles. The efficacy of deterrence can be reduced by a strategic missile defense system. There has been a connection between offensive and defensive weapons since the invention of the sword and the shield. It will become more important as strategic nuclear arms are reduced. The strategic missile defense can be a driving force for new offensive weapons. Whether strategic missile defense actually works will always remain uncertain, so it cannot replace deterrence. Russia still has reservations about U.S. missile defense plans in the Middle East and in South East Europe. However, tactical missile defense on an operational and non-strategic level should not be a danger for Russia. In March 2013 the United States has canceled the final phase of the European based missile that was considered to be a major obstacle to further nuclear arms reductions which appears not to be sufficient for Russia to drop its suspicion so far.

Since China's nuclear forces are believed much smaller than those of the US or Russia it would be unable to retaliate to a first strike and could be tempted to a preemptive attack (Arbatov, 2013a). This Chinese perception might be reinforced by the missile defense systems of the US and Russia (Arbatov, 2013b). In China's view they would undermine its deterrence capabilities since they could intercept Chinese remaining strategic missiles after a first strike. Also, China might conclude that the US was about to attack its nuclear arsenal with conventional weapons and a nuclear retaliation would be prevented by missile defenses; so China might use nuclear weapons first, because they do not want to lose them. Not surprisingly, the 2013 Chinese white paper on defense omits for the first time its "no-first use pledge" that was explicitly and unconditionally included in each of China's previous defense white papers (New York Times, 2013).

There is another fairly new issue that will have an impact on the global balance of forces. The conventional global prompt-strike weapons, when deployed, would provide the capabilities to hit targets worldwide within minutes. The US advantage in this area could do both replace some nuclear ICBMs and give NATO the opportunity to reduce conventional weapons that are deployed in Europe. However, Russia tries hard to succeed in enhancing its prompt strike precision-guided conventional capability (Sokov, 2013). The development, deployment, and employment of prompt-strike capabilities could have two opposing

consequences: Either they can replace gradually strategic nuclear weapons with long-range conventional systems. Or, states which fear that they could be a target of an attack would all the more rely on nuclear weapons.

Arms and arms control issues are related in manifold ways:

- The number of nuclear warheads includes strategic, non-strategic, deployed, non-deployed weapons.
- Non-strategic weapons are seen as counterbalance to conventional weapons in Europe (includes first use).
- An escalation of a large-scale conventional attack to the strategic level is possible (unless there is a non-first-use policy).
- A limited first nuclear strike requires escalation dominance up to the strategic level or a stable deterrence.
- The US and Russia keep the option of a preemptive use of nuclear open when a conventional war is likely to escalate to the nuclear level.
- Missile defense systems might be an obstacle for drastic reductions of the number of strategic nuclear warheads and even provoke an arms race. Mutual nuclear deterrence prevents the development of a full scale missile defense system.
- China might be afraid to lose its second strike capability through a nuclear and/or first strike and the missile defense system and might use nuclear weapons first.
- Global prompt-strike weapons could either replace strategic nuclear tipped missiles or reinforce the will to keep nuclear weapons in potential target countries.

How could this arms-menu be addressed with arms control or disarmament talks?

- Any further reductions must include non-deployed warheads that are held in reserve, and deployed strategic as well as non-strategic warheads.
- A discussion of non-strategic warheads postures must involve the link to conventional weapons (Seay III, 2013) since there are asymmetric relationships in both categories. There also can be a link to strategic nuclear weapons, however.

- Lesser steps such as transparency and confidence-building might be useful but not sufficient.
- Once the concept of mutual deterrence is abandoned missile defense can be powerful instrument against new nuclear weapon states. Until then the US, NATO and Russia could provide written political commitments not to deploy their missile defense systems in ways it would undermine their strategic deterrence (Browne, 2013).³
- Global prompt-strike weapons must be brought into the equation of strategic and conventional weapons.
- Deterring states of concern from using nuclear weapons is better achieved by conventional weapons and other non-nuclear options (e.g., damaging telecommunication networks). Tailored conventional strikes involving less firepower are a more credible and useful alternative to Cold War-era strategic nuclear deterrence. Militarily they can be more effective and they drastically reduce unintended casualties.

This grand agenda of arms control and disarmament might be too complex to negotiate (Ingram, 2013). No legally binding treaty can cover all the issues. Treaties can limit and cut what all sides see as unnecessary forces for their deterrence. Until deterrence as such will be questioned the other issues will have to be treated with political commitments and enlightened self-restraint. Why should states want to do this? If states act according to the principle of “relative gains” they would always want to have more advantages than the others. If states apply the principle of “absolute gains” they appreciate the net advantages they get in on area even though they have to make some net sacrifices.

Deterrence

Obama wants to be on the safe side: he wants to retain a deterrent capability as long as nuclear weapons exist even though no one knows whether deterrence actually works. Realists like Kenneth Waltz strongly believe it does work because there was no nuclear war between the United States and the Soviet Union. But in reality we do not know if this is true since you can't prove the negative – why something did not happen. The avoidance of nuclear war between the two Cold War superpowers probably resulted from a combination of political and military factors, such as arms control negotiations, confidence-building measures and cooperation in the Conference on Security and Co-operation in Europe (CSCE) and in other regimes and institutions.

Deterrence is a combination of two strategies: avoiding war and winning a war in the case the first option fails (Betts, 2013).⁴ In order to be credible as a “peace-keeping strategy” it also has to be a “war-fighting strategy”. This contradiction is in many ways not reconcilable. Therefore, the lessons of mutual nuclear deterrence, in both theory and practice, demonstrate that deterrence has several problems (Green, 2011; Wickersham, 2011; Krieger, 2011):

- Nuclear deterrence is only credible if the adversaries permanently demonstrate that they are serious about using nuclear weapons. This in turn threatens them with self-destruction.
- Deterrence does not prevent conventional wars. Nuclear powers were involved in conventional wars. In Korea the Chinese, in Vietnam the Vietcong, and the insurgents in Afghanistan and Iraq did not care about the American nuclear bomb. In the Falkland war Argentina was not afraid of the British one. Arab states attacked Israel 1973 that had already nuclear weapons. Two nuclear powers, India and Pakistan, went to war in 1999 and Pakistan probably was behind the terrorist attacks on the Parliament of the nuclear armed India in 2001. Moreover, possession of nuclear weapons could encourage conventional provocation or backing for terrorist groups.

- The concept of deterrence only works with rational actors. It requires adversaries to rely on each other to respect deterrence and adhere to its principles. Furthermore, they have to communicate with each other and understand each other's signals.
- Deterrence promotes hostility and mistrust when adversaries permanently threaten each other.
- Reliance on mutual deterrence causes nuclear proliferation and arms races. This was evident during the Cold War, but it is also true for regional conflicts, such as India-Pakistan. Deterrence is North Korea's rationale for possessing nuclear weapons, and it could lead to an arms race in the Middle East. Indeed, mutual deterrence and disarmament are opposing concepts.
- Deterrence can create instability and dangerous situations through miscalculations, miscommunication and technical accidents. The film classic "Dr. Strangelove" shows how just such a possibility could occur. The dissolution of the bipolar world and the potential emergence of new nuclear powers might lead to a "multinuclear world" that would multiply such risks and uncertainties.
- The threat of nuclear retaliation is useless against terrorists.
- Deterrence is a weak tool against cyber-attacks, because it is extremely difficult to identify the attacker (Betts, 2013).
- The United States and NATO want to build a missile defense system against missiles from the Middle East, but Russia opposes it. As a result, missile defense has become the major stumbling block to further arms reductions. However, missile defense below the strategic level should not be a threat to Russia. Yet if the United States and NATO keep open the option to upgrade missile defense, they can no longer rely on effective deterrence. Missile defense only works properly outside a system of deterrence.
- The announced intention to annihilate large parts of humanity is both unlawful and immoral. The International Court of Justice ruled that "the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law" (ICJ, 1996, 44).⁵ The pope regularly encourages the international community to work toward the elimination of nuclear weapons.

- Mutual deterrence is expensive because it requires continuous modernization and the development and production of new weapons to close real and assumed loopholes in the system.
- If deterrence failed, it would be a global disaster.⁶

Beyond mutual nuclear deterrence

What can be done to reverse the negative trends caused by nuclear deterrence?

- A true “no first use” doctrine would remove conventional, chemical and biological weapons from the target list. Nuclear weapons should be seen as strictly for retaliation against a nuclear attack. They are not necessary for any offensive or preventive purpose, nor are they useful for defense, except as a deterrent to an intentional nuclear attack. The notion that nuclear arms are essentially no different than conventional weapons should be abandoned. Nuclear weapons should be retained only for a second strike.
- An unconditional commitment by nuclear weapon states to “negative security assurances” would remove all non-nuclear weapon states from the target list. Nuclear weapon states should commit themselves to “negative security assurances.” This is the guarantee not to use nuclear weapons against non-nuclear weapon states.
- The creation of “Nuclear Weapon Free Zones” must be combined with “negative security assurances”.
- The list of countries that are targeted for US nuclear strikes is outdated and can be reduced. Bush’s classified NPR and OPLAN 8010 both target China, Russia, North Korea, Iran, Syria, Cuba (only in the NPR) and an unnamed country that hosts terrorists (supposedly Pakistan).
- General target categories like WMD, non-state actors, war supporting infrastructure and military-political leadership are too sweeping and should be redefined and minimized.

- Counter-force planning associated with preemption, launch on warning and all kinds of military targets should be abandoned.⁷
- The use of small nuclear weapons to control and limit damage is not feasible and produces unrealistic expectations.
- Likewise expectations that damage can be regulated and making distinctions between 100 percent, 80 percent, “light,” “moderate” or “severe” destruction are absurd. There is no difference between rubble, gravel or dust after a bombardment.⁸

Conclusion

Nuclear deterrence is the main cause of arms races. As long as deterrence goes unaddressed, global zero will be impossible to achieve. Arms control and non-proliferation can create a more stable situation, but they are not sufficient for disarmament. Deterrence of states of concern is more credible and effective using conventional weapons. The suggestions outlined above would not abolish nuclear deterrence right away, but they are steps toward a minimal deterrence. They would mitigate the worst consequences of the concept of deterrence and create the preconditions for nuclear disarmament. Comprehensive deterrence is based not only on one category of nuclear weapons but on a mix of nuclear and conventional arms. Arms control and disarmament efforts should cover all or most of them. This can be done best by a combination of legally binding treaties, political commitments, and enlightened self-interest.

Notes

¹ Russian Prime Minister Vladimir Putin committed himself to spend about U.S. \$800 billion for military modernization for the next 10 years which includes strategic nuclear missiles.

² Nikolai Sokov assumes that “the threat of a limited nuclear strike remains credible (only) as long as strategic deterrence remains stable in the ‘old’ sense of the term...”

³ Legally binding guarantees, as Russia requests, are not much stronger as the unilateral withdrawal of the US from the ABM-Treaty demonstrates.

⁴ Richard Betts sees deterrence as one strategy for combining two competing goals: countering an enemy and avoiding war.

⁵ The Court does not conclude definitively whether extreme circumstances of self-defense, in which the very survival of a state was at stake, would be lawful or unlawful.

⁶ This argument is based on the assumption that deterrence works, however.

⁷ It should not be forgotten that a counter-force strike would also kill millions of civilians.

⁸ For the last five points see also Note No.² and (Sokov, 2013).

References

Arbatov, A. and Dvorkin, V. (2013a) The Great Triangle. *Carnegie Moscow Center*, 1 April.

Arbatov, A., Dvorkin, V. and Bubnova, N. (2013b) Missile Defense: Confrontation and Cooperation. *Carnegie Moscow Center*, 8 April.

Betts, R.K. (2013) The Lost Logic of Deterrence: What the Strategy That Won the Cold War Can – and Can't – Do Now. *Foreign Affairs*, March/April 2013.

Browne, D. *et al* (2013) Building Mutual Security in the Euro-Atlantic Region: Report Prepared for Presidents, Prime Ministers, Parliamentarians, and Publics. *Nuclear Threat Initiative* (NTI).

Chinese white paper on defence (2013) The Diversified Employment of China's Armed Forces. *Information Office of the State Council, The People's Republic of China*, Beijing, April.

Green, R. (2011) Breaking Free From the Nuclear Deterrence Scam. *Huffington Post* online 25 February.

http://www.Huffingtonpost.com/Robert-green/breaking-free-from-the-nu_b_828390.html

ICJ - International Court of Justice (1996) *Legality of the Threat or Use of Nuclear Weapons*. Advisory Opinion, 8 July.

Ingram, P. (2013) Engaging Russia on Tactical Nuclear Weapons: Next steps on confidence building. *British American Security Information Council (BASIC)*, April.

Kissinger, H.A., Nunn, S., Perry, W.J. and Shultz, G.P. (2011) Deterrence in the Age of Nuclear Proliferation. *Wall Street Journal*, 7 March.

Krieger, D. (2011) The Flaws in Nuclear Deterrence. *CounterPunch*, 2 March.

Kristensen, H.M. (2010) Obama and the Nuclear War Plan. *Federation of American Scientists Issue Brief*, February.

Kristensen, H.M. and Norris, R.S. (2011) A Presidential Policy Directive for a new nuclear path. *Bulletin of the Atomic Scientists*, 10 August.

National Journal (2012) See Pakistani Backing for Extremist Attacks on India Risks Nuclear Conflict, U.S. Admiral Says. 10 February.

New York Times (2013) Is China Changing Its Position on Nuclear Weapons? 18 April.

Perkovich, G. (2013) Do Unto Others: Toward a Defensible Nuclear Doctrine. *Carnegie Endowment for International Peace*, 1 April.

Senghaas, D. (1981) *Abschreckung und Frieden*. 3rd ed. Frankfurt am Main: EVA Europäische Verlagsanstalt.

Seay III, E.E. (2013) Theatre Nuclear Weapons and the next round of bilateral New START Treaty follow-on talks. Nuclear Policy Paper No. 12, *British American Security Information Council (BASIC) et al*, January.

Sokov, N. (2013) Multilateralization of Nuclear Arms Reduction process: Russian Attitude and Prospects for US-Russian Cooperation. Paper: *Center for Nonproliferation Studies (CNS)*, February.

Wickersham, W. (2011) Nuclear deterrence a futile myth. *The Columbia Daily Tribune*, 1 March.