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NUCLEAR/WMD PROLIFERATION AND MISSILE DEFENSE: FORGING A NEW PARTNERSHIP WITH RUSSIA

GENERAL REPORT

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TABLE OF CONTENTS

I. NATO-RUSSIA PARTNERSHIP: QUO VADIS?

1. Genuine partnership between the Euro-Atlantic community and Russia remains vital to global security. Although the global political landscape no longer revolves around two superpowers, Russia still owns roughly half of the world's nuclear weapons, it has a permanent seat at the UN Security Council, it is a major supplier of hydrocarbons and it remains a critical actor in several regions of the Eurasian continent. However, the durable framework for strategic dialogue with Russia has yet to be found: the relationships with Russia remains a roller-coaster ride which veers from occasional rapprochements to periods of tension. The current thaw in relations presents a unique window of opportunity to forge a robust long-term partnership between Russia and the Western countries.

2. Without ignoring the difficulties involved, this report offers an approach which is both pragmatic and based on a long-term vision. Non-proliferation of nuclear, biological and chemical weapons is the area in which the US/NATO and USSR/Russia have a long history of productive co-operation. Russia and the Western countries are engaged in several WMD (Weapons of Mass Destruction) disarmament initiatives; they are also both concerned about the potential threat posed by ambiguous nuclear programmes in countries such as the Islamic Republic of Iran and the Democratic People's Republic of Korea (DPRK). The Rapporteur believes that the notion of "Global Zero" provides a sound basis for a strategic partnership with Russia; it provides a means of making collective non-proliferation and disarmament efforts. Additionally, the role of missile defences is crucial to our efforts to establish a world free of nuclear weapons, and Russia's contribution in this area is instrumental. The Rapporteur fully supports the proposal of the NATO Secretary General Anders Fogh Rasmussen to move missile defence to the centre of the Alliance's agenda.

3. In particular, The Rapporteur wishes to suggest the following:

- The US/NATO-Russian partnership must be based on concrete and proven co-operation patterns. Rather than discussing elusive grand projects such as the "new European security architecture", the Euro-Atlantic community and Russia should co-operate on a very practical level and collectively aim to reduce global nuclear/WMD threats. At the 2006 Riga Summit, NATO leaders identified the spread of WMD and the possible acquisition of WMD by terrorists as the principal threats facing the Alliance over the next 10-15 years.
- The long-term vision of a nuclear-weapon free (or, even more ambitiously, WMD-free) world could become the underlying premise of this co-operation framework. However unfeasible it might be in the coming decades, the notion of Global Zero would give a sense of direction for joint disarmament and non-proliferation initiatives.
- Moving closer to Global Zero would require adequate progress in two other areas: 1) strengthening the global nuclear non-proliferation regime (to prevent the emergence of new nuclear weapon states); and 2) the development of missile defence systems as a last line of defence against breaches of the non-proliferation regime.
- In terms of non-proliferation, co-operation with the Russian Federation is critically important in order to: 1) strengthen the Non-Proliferation Treaty (NPT) (by universalizing the Additional Protocol; making it more difficult to withdraw from the Treaty; adopting clear rules to deal with violators and addressing the issue of dual-use technology); 2) deal with the Iranian nuclear challenge (first through dialogue and jointly presented alternative options and incentive packages, and then by agreeing on effective sanctions if the incentives are rejected); and 3) to reinforce other non-proliferation mechanisms (such as the Proliferation Security Initiative and missile control regimes, including the universalisation of the INF (Intermediate-Range nuclear Forces) Treaty).

- In terms of missile defence (MD), the US and NATO plans to install a MD system in Europe should not be regarded by Russia as a zero-sum game. The proposed system does not pose any threat to Russia's nuclear deterrent capability. Instead, it could provide a basis for mutually beneficial co-operation between the Western countries and Russia. A formula needs to be found to ensure that Russia has a voice, but not a veto, in a new MD architecture. As renowned security expert Mark Fitzpatrick put it: "In the long term, the availability of missile defences to defend against rogue nuclear-armed states may become an important element in the strategy for realising the dream of a secure, nuclear weapons-free world, which Obama and Russian President Dmitry Medvedev, among many other leaders, have set as national goals."[1] If nuclear and missile non-proliferation measures are sufficiently robust and effective, these MD systems could remain limited.
- This co-operation framework, if successfully implemented, could provide the basis for further rapprochement between the Euro-Atlantic Community and Russia, thus augmenting mutual trust and enhancing dialogue in other more sensitive areas.

4. It is evident that the existing co-operation framework needs to be revisited. The Rapporteur sees this report as a means of encouraging comprehensive discussion on the relations between the Euro-Atlantic community and Russia. While this report focuses on nuclear, chemical and biological non-proliferation and missile defence as possible cornerstones of the new framework, the Committee should also analyse the potential for co-operation with Russia on issues such as energy security, the High North, climate change and other environmental challenges.

5. It is essential that while discussing relations with Russia, NATO Allies take a pro-active and creative approach. The fundamental roadblocks that hinder their co-operation need to be identified and we must think outside the box while addressing the following questions:

- What is the role of Russia in the contemporary world, and is Russia's engagement crucial to achieving NATO's own objectives?
- How far can the Allies go in their relations with Russia?
- How would NATO react if Russia officially applied for membership of the Alliance? (As Secretary Hillary Clinton said when asked about Russian membership of NATO, "I can imagine it. I'm not sure the Russians can imagine it.")
- Should NATO circumvent sensitive issues or confront them?
- Is the existing format for NATO-Russia co-operation (the NATO-Russia Council) adequate?
- Is the bilateral format most suitable, or should more actors be involved?
- Can the Allies agree with Russia on common threat assessments and on the exact agenda of their partnership?

6. An honest discussion of these issues is particularly relevant as the Alliance prepares its new Strategic Concept.

7. The following chapters of this report are intended as a background to the discussion outlined above.

8. The Rapporteur also wishes to praise the efforts of his predecessor and the current Chairman of the NATO PA Science and Technology Committee, Michael Mates, for his work in the area of WMD proliferation and missile defence. In particular, Mr. Mates' reports on these subjects have provided an outstanding overview of the situation and offer precise and valuable policy recommendations for current policy-makers.

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1 A Prudent Decision on Missile Defence. By Mark Fitzpatrick. Survival: Global Politics and Strategy. Vol. 51, no. 6, December 2009–January 2010

II. CO-OPERATION IN THE FIELD OF NUCLEAR SECURITY

A. TOWARDS GLOBAL ZERO

9. In January 2007, George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn published their vision of a world without nuclear weapons. They also offered concrete steps on how to realize that vision. In his famous Prague speech in 2009, President Obama embraced the vision of Global Zero[2] and pledged to: 1) negotiate a new Strategic Arms Reduction Treaty (START), 2) strengthen the Nuclear Non-proliferation Treaty, 3) deemphasize the role of nuclear weapons in pending the US Nuclear Posture Review (NPR), 4) push for ratification of the Comprehensive Nuclear test Ban Treaty (CTBT) in the US Senate, and 5) aim to negotiate a Fissile Material Cut-Off Threat Treaty (FMCT).

10. The progress the Global Zero concept is making and the attention it is getting is due, in part, to the constructive atmosphere that currently exists between Washington and Moscow. A joint statement by President Obama and President Medvedev in April 2009 highlights this positive development. Both Heads of State made a common commitment to a world free of nuclear weapons and announced a framework agreement for new reductions in their nuclear arsenals. President Medvedev also unambiguously stated his country's commitment to nuclear disarmament and non-proliferation when he declared: "Today our common task consists in undertaking [every effort] . . . to make deadly weapons of mass destruction . . . a thing of the past."[3] The American and Russian reciprocal commitments indicate that, although the ultimate goal is not attainable in the foreseeable future, both nations are committed to the basic principle of step by step total denuclearisation.

11. Critics point out that while verbally embracing the Global Zero option, both nations continue to invest in nuclear weapons and delivery systems. President Medvedev declared in early 2010 that Russian forces would receive upwards of 30 ballistic land- and sea-based missiles, and three nuclear submarines. This decision mirrors Medvedev's conviction that maintaining the country's nuclear arsenal is crucial to its independence and sovereignty[4]. At the same time, although the US does not intend to acquire new nuclear devices, it is extending the service lives of existing warheads through the Stockpile Stewardship Program. The Rapporteur wishes to underline, however, that there is no inconsistency between support for the long-term vision and support for near-term steps to maintain and sustain smaller nuclear arsenals.

12. The military doctrine of Russia does not yet reflect the spirit of Global Zero, although there are some positive signs that point in this direction. The new 2010 Doctrine puts more emphasis than the 2000 Doctrine on conventional forces as opposed to nuclear arms. It further raises the threshold for the use of nuclear weapons. Instead of "situations critical for national security", the 2010 version authorises resorting to nuclear weapons only when "the very existence of [Russia] is under threat". However, the view of NATO as Russia's main threat remains unchanged in the new Russian Military doctrine, as does the belief that a US first strike still represents Russia's most serious external security threat.

13. The new US Nuclear Posture Review, completed in April 2010, supports Global Zero goals and reduces the relevance of nuclear weapons in the US' national security strategy. For the first time, the United States clearly stated that it would not use its nuclear arms against non-nuclear

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2 Global Zero refers to phased and verified reduction of existing global nuclear arsenals. The world without nuclear weapons is the ultimate goal, although it will not be achieved in the foreseeable future.

3 Statement of President Dmitry Medvedev at the Global Zero Summit in Paris, February 2-4, 2010, http://www.globalzero.org/en/opening-day-statement-global-zero-leaders.

4 Fang Yang, "Russia not to enhance nuclear deterrent: Medvedev", in: Xinhua, 5 March 2010, http://news.xinhuanet.com/english2010/world/2010-03/05/c_13198823.htm.

countries that comply with NPT commitments. Even in the case of a chemical or biological attack, the United States would only respond with conventional weapons. The US also committed itself to refraining from developing new nuclear weapons and from future nuclear testing. In the medium term, however, these commitments will not change the US' interim reliance on "a safe, secure, and effective nuclear deterrent"[5].

14. The backing of Global Zero by other nuclear weapon states is of crucial importance. As President Medvedev put it recently: "Global zero is a beautiful idea but [...] this idea can only be reached as a result of concerted work by all nuclear states". In this respect, British Prime Minister Gordon Brown strongly supported the Global Zero vision by stating that "a world free of nuclear weapons is not only achievable, but one of the most important policy objectives of our times. [...] It will be difficult, but I am pledged to do what it takes to enable all countries to give up their nuclear weapons, verifiably and irreversibly."[6] One must recognize the profound unilateral arms reductions the United Kingdom (UK) has made in the past years. The recent Strategic Defence Review announced further cuts in both operational warhead number and the size of the overall stockpile.

15. With regards to China, the country committed itself, in a joint declaration with the US, to: 1) "the eventual realization" of a world free of nuclear weapons, 2) uphold the NPT, 3) aim to ratify the CTBT as soon as possible, and 4) work more closely in the area of nuclear safety and security. However, China is also believed to have enlarged its nuclear arsenal.

16. Of all NATO countries, France took the most sceptical stance on the Global Zero initiative, portraying it as a distant dream that does not appropriately account for the threats posed by more and more states engaging in nuclear development programmes. Although France is committed to nuclear disarmament and non-proliferation, the country does not see Global Zero as an initiative on which nations can collaborate in the present and the medium-term without compromising their security. In this vein, President Sarkozy said France would not abandon the French deterrent without being sure that the same thing was happening everywhere. [...] "As I said to President Obama: 'We'll reduce our level of nuclear weapons when the United States and Russia have come down to the same level as us'." This viewpoint might explain France's plan to modernize, in the meantime, its sea-based ballistic missile submarine force and the airborne missiles carried by nuclear-capable combat aircraft.

17. In sum, the possibility of accepting the Global Zero concept as a commonly held philosophy by the official nuclear weapon states is a difficult but feasible task. It must be clearly understood that Global Zero is a long-term vision that might not be achieved in our lifetime, as President Obama noted. The vision should not be implemented at the expense of our nations' security. That said, accepting this vision would create a basis for durable partnership between the Western powers and Russia. It would offset feelings of insecurity resulting from disarmament by the parallel progress being made in the non-proliferation and missile defence areas.

B. THE DISARMAMENT INITIATIVES

1. The New START

18. On 8 April 2010, the United States and Russia signed a pivotal arms control agreement – the new START treaty. The 'old' START was a quintessential arms control agreement between the United States and the Soviet Union/Russia. Its extension is widely seen as a symbol of Russo-American 'reset' and an indication that official nuclear weapon states are indeed taking

5 Hillary Clinton, in: Hwang Doo-hyong, "Clinton pledges continued efforts for N. Korean denuclearization", in: Yonhap News Agency, 7 March 2010, http://english.yonhapnews.co.kr/national/2010/03/07/25/0301000000AEN20100307002500315F.HTML.

6 Statement from Prime Minister Gordon Brown, Global Zero Summit, Paris, February 2-4, 2010, http://www.globalzero.org/en/opening-day-statement-global-zero-leaders.

their disarmament commitments under the NPT seriously. The old START Treaty, which was signed in 1991, entered into force in 1994 and expired in December 2009, not only sought to limit the permitted number of offensive strategic nuclear warheads, and their long-range delivery vehicles, in the United States, Russia, Belarus, Kazakhstan, and Ukraine, but also to restrain the locations and movements of ballistic missiles, launchers and heavy bombers via a complex verification scheme. START's mandate additionally allowed the parties to deploy 6,000 "attributed" warheads on no more than 1,600 nuclear delivery vehicles, which represented a significant cut from the past[7]. The 2002 Strategic Offensive Reductions (SORT) Moscow Treaty envisaged even deeper cuts of deployed warheads, but it lacked START's verification mechanisms. The new treaty, once ratified, will replace both the 'old' START and SORT.

19. Although the American and Russian negotiators missed their December 2009 deadline, the new agreement is hailed as a milestone in nuclear disarmament. First, the 10-year treaty requires Russia and the US to reduce their strategic nuclear arsenals to 1,550 deployed warheads. This represents a roughly 75% reduction when compared to the old treaty and a 30% cut when compared to SORT. The number of launchers and other delivery systems is also subject to drastic cuts, and covers both deployed and non-deployed launchers. Each nation will have a mere 800 platforms (700 deployed and 100 in reserve), which compares to 1,600 in the original START Treaty (SORT did not address delivery platforms at all). Second, the treaty entails use of adequate verification mechanisms. Third, it shows that Russia and the US are serious about their disarmament commitments. The new START, in short, represents a significant progress towards the goal of Global Zero.

20. However, the new treaty has yet to be ratified. Putin's and Medvedev's United Russia party, which has far more seats than necessary for the Treaty's ratification, has signalled its support for the new START. However, Russian deputies are reluctant to vote on ratification only to see the agreement fail in the US Senate.

21. The US Senate will give its advice and consent to the ratification of the Treaty by approving the resolution of ratification by a vote of 2/3 of the Senators. On 16 Sept, the Senate Foreign Relations Committee voted 14-4 to approve the New START Treaty, sending it to the full Senate for consideration. It is not likely, however, to be considered until after the November elections. Sceptical members of the Senate will need to be convinced that the Treaty does not hamper US missile defense plans, and that the verification measures, while less extensive than old START, are still adequate. If the sceptics' concerns are sufficiently addressed, the prospects that the Senate will approve the New START are good.

2. Comprehensive Nuclear Test Ban Treaty (CTBT) and Fissile Material Cut-Off Treaty (FMCT)

22. The CTBT, which was adopted in 1996, bans all nuclear explosions on earth, regardless of whether their intended purpose is military or peaceful. It also provides for the establishment of a global verification system to monitor compliance with the treaty's provisions. The main benefit of the CTBT is that nuclear powers stop testing their weapons while keeping those without a nuclear capability from pursuing the nuclear option. Although 153 states have already ratified the Treaty, ratification by China, Egypt, India, Indonesia, Iran, Israel, North Korea, Pakistan and the United States are necessarily in order to for CTBT to come into force.

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[7] Before START entered into force, the United States possessed more than 10,500 warheads deployed on nearly 2,250 delivery vehicles, their number declined to 5,916 warheads on 1,188 delivery vehicles by July 2009. Over the same period, Soviet nuclear forces dropped from more than 10,000 warheads to 3,897 warheads and from 2,500 delivery vehicles to 809 delivery vehicles. Additionally, all nuclear warheads and delivery systems that were stationed in Kazakhstan, Ukraine and Belarus were either destroyed or returned to Russia by the end of 1996.

23. American and Chinese ratification would encourage other remaining seven states to follow suit – India for instance is sending signals that its possible accession to the CTBT depends upon on the US and Chinese CTBT ratifications. The US Senate rejected the CTBT in 1999, but Mr. Obama's dedication to get it approved as soon as possible (although no specific timeframe is set) is encouraging. However, the Obama Administration faces the difficult task of securing significant Republican support in the Senate. Although less concrete than the latest American actions, recent comments by the Chinese government with regard to ratifying the CTBT are positive. Russia is constantly urging the US and China to ratify the treaty. In its previous reports, the NATO Parliamentary Assembly also expressed its strong support for the ratification of the treaty. Most experts believe that the CTBT's entry into force would not weaken America's security, particularly since the US has voluntarily refrained from nuclear testing since 1992. On the contrary, the universal ban on nuclear weapons testing with a comprehensive verification system would significantly hinder progress of nuclear weapon programmes in countries that are hostile to the United States.

24. FMCT is further from realization than the CTBT, as its terms have not yet been fixed at the UN-backed Conference on Disarmament (CD). The aim of the negotiations is to ban the production of fissile material (highly-enriched uranium and plutonium), and thus to reduce the total material available to build nuclear bombs and lower the probability that it will fall into terrorists hands. Unfortunately, the CD failed to launch negotiations in 2010 since Pakistan rejected the plan of work, citing disadvantages compared to its nuclear-armed rival India. However, ongoing small-group talks in parallel to the CD sessions might help to overcome the deadlock. The successful negotiation and ratification of a FMCT would constitute a breakthrough in terms of nuclear non-proliferation and disarmament, as it would require all key fuel-cycle facilities across the world to be placed under international safeguards. Since uranium enrichment and plutonium separation processes are likely to become increasingly widespread (with more and more states relying on the "inalienable right" to nuclear energy, as stipulated in Article IV of the NPT), accounting for and controlling the fissile materials that are produced or otherwise available is the only secure method of ensuring that new nuclear bombs will not be developed. Given that the Nuclear Weapons States are believed to have ended their production of fissile material for weapons in the 1990s, the proposed FMCT would primarily constrain three non-NPT states -India, Israel, and Pakistan.

C. THE NON-PROLIFERATION AGENDA

25. Russia and the Western powers have a high level of common interest in preventing nuclear proliferation, meaning the illicit spread and/or acquisition of nuclear weapons or nuclear weapons-grade material. The core of the international non-proliferation regime is the NPT. This chapter will discuss the prospects of strengthening the NPT as well as other non-proliferation initiatives that provide potential areas for enhanced Western-Russian co-operation.

1. Strengthening the Treaty on Non-Proliferation of Nuclear Weapons (NPT)

26. The NPT is the cornerstone of the global nuclear non-proliferation regime, particularly because almost every state in the world, except Israel, India, and Pakistan, and the DPRK (which opted out unilaterally in 2003), is a treaty member. It was concluded in 1968, entered into force in 1970, and was extended indefinitely in 1995. It is designed to: 1) prevent the spread of nuclear weapons and nuclear technology, 2) further nuclear disarmament to its ultimate conclusion, and 3) promote co-operation on the peaceful use of nuclear energy. As stated previously, it contains a tantalizing quid pro quo: countries that possess nuclear weapons shall move towards nuclear disarmament (Art. VI), while countries without nuclear weapons will not acquire them, and in exchange will acquire access to peaceful nuclear energy (Art. IV). In order to further the goal of non-proliferation, the Treaty additionally provides an inspection-based safeguards system under the auspices of the International Atomic Energy Agency (IAEA).

27. Although the NPT has been instrumental in halting the spread of nuclear weapon capabilities worldwide, it is also evident that it contains some flaws. In particular, it does not address the problem of dual-use nuclear technology, such as uranium enrichment or spent fuel reprocessing. Therefore, it does not effectively prevent the pursuit of military nuclear programmes disguised as purely civilian ventures. The IAEA's stringent verification measures can only be applied in countries that voluntarily chose to sign and ratify the so-called Additional Protocol. Furthermore, the Treaty does not contain clear provisions to discourage a member's withdrawal from the NPT, which the DPRK has exploited. Finally, there are no clear and country-neutral rules on how to deal with Treaty violators. To counter challenges such as these, NPT review conferences are held every five years to overview the implementation of the Treaty and to discuss measures to strengthen the regime. Unfortunately, attempts to rectify these shortcomings failed badly at the NPT Review Conference in 2005.

28. It was frequently suggested that two failed Review Conferences in a row would irreparably damage the credibility of the global non-proliferation regime. It is therefore encouraging that the recent Review Conference in May 2010 has been at least partially successful, although partly because failure of the 2005 Conference set the bar of success very low. The Conference reached a consensus on a 64-point action plan which asks NPT member states to take specific actions reinforcing all three pillars of the treaty. The US Special Representative of the President for Nuclear Nonproliferation Susan Burk referred to the outcomes of the Review Conference as a "glass half full".

29. On a political level, the most daunting non-proliferation task is to find a balance between the interests of the nuclear weapon states and those of the non-nuclear-weapon states. Being a bargain between these two groups, the NPT suffers from fundamental disagreements between those who focus on disarmament commitments (many developing nations) and those who seek to strengthen non-proliferation measures (the US and its allies). Both sides maintain that one facet of the Treaty is receiving less attention than it should. This pulling and hauling became again obvious at this latest Review Conference. Egypt, holding the chair of the Non-Aligned Movement (NAM) effectively vetoed tougher non-proliferation steps tying it with the nuclear weapon states refusal to accept a time-bound process for negotiating nuclear disarmament.

30. Nevertheless, it is difficult to ignore significant progress made in the field of disarmament: the importance of the START Treaty and the new US Nuclear Posture Review has already been noted. Moreover, the US and UK publicly announced the number of nuclear warheads they possessed. That said, more progress on disarmament at the Review Conference could have been achieved if not for the reported China's opposition to fissile material production ban and Russia's reluctance to include references to tactical nuclear weapons. Progress in the disarmament field is a decisive precondition to reinforce the basic deal between nuclear and non-nuclear states and to universalise the NPT. The nonofficial nuclear weapons states (Israel, Pakistan, India, and the DPRK) need, sooner or later, to become integral to the non-proliferation-for-disarmament deal. Formally accepting Israel, India, Pakistan and North Korea as official nuclear weapons states would send a crucial signal to compliant states or nuclear aspirants. Thus, the NPT member states, headed by Russia, unequivocally call for those outside the Treaty to join it immediately. As desirable as their access to the Treaty is, however, there are also difficulties as regards their potential involvement. Should they, for example, be pressured to join as non-nuclear-weapon states and consequently destroy any warheads they might have built? This option is rather unlikely at present or in the foreseeable future. Therefore, the four countries must be engaged, both within and outside of the NPT's framework. One such possibility includes inducing them to ratify the CTBT and the FMCT. Verification of implementation of disarmament initiatives as well as working on confidence-building measures is also of critical importance. The 2007 cooperation agreement between the United Kingdom and Norway (a non-nuclear weapon state) designed to elaborate better verification and confidence-building methods serves as an excellent example that could be replicated by other states. The project breaks new ground in this area, technically as well as

politically. There is much work to be done in strengthening disarmament verification, including solving access issues for foreign inspectors visiting highly sensitive facilities, such as warhead disassembly sites.

31. In terms of non-proliferation, the Western powers wanted the 2010 NPT Review Conference to agree on a plan that would make it harder for countries like Iran and the DPRK to violate NPT obligations, thereby hindering their abilities to acquire sensitive technology and to build nuclear weapons. Therefore, stronger collective measures against NPT violators, as well as an obligatory, universal 'entering-into-force' of the IAEA Additional Protocol, are essential. As Russia sees no alternative to the NPT and underscores its viability, it also supports modifications towards stricter controls. Its representatives have said that the Protocol "considerably increases the Agency's capability to detect undeclared activities and nuclear materials and provides credible assurance of their absence. We strongly believe that in the future, Safeguards Agreements and the Additional Protocols to them should become a universally accepted standard to verify the compliance of states parties to the NPT with their non-proliferation obligations"[8]. The Action 32 of the Review Conference's action plan called on those member states that have not signed or ratified the Additional Protocol to do so as soon as possible. However, the Review Conference failed to introduce stricter non-proliferation measures. Due to consensus rules, the US was unable to name Iran in the compliance section of the final document. That said, Iran found itself in a more difficult position than during at the earlier conferences, as its traditional NAM allies also criticised the country for breaching its safeguard agreements and enriching uranium up to 20%. The most concrete result at this year's conference was the call for convening a special meeting in 2012 to negotiate the establishment of a nuclear-weapons free zone in the Middle East. This meeting will be attended by all states of the region (including Israel and Iran). Israel was also specifically called by name to join the Treaty as a non-nuclear weapon state. North Korea was requested to fully meet its denuclearization obligations and to continue the Six-Party Talks (including with the United States and Russia).

32. As far as the "third pillar" is concerned (the access to peaceful nuclear energy), the Conference unambiguously endorsed further development of nuclear energy. The spread of nuclear technology, however, should go hand in hand with functioning safeguards and export controls. Although the dilemma of dual-use technology was not resolved, the Conference expressed support to multilateral approaches to the nuclear fuel cycle and reaffirmed the key role the IAEA plays in preventing misuse of nuclear technology.

2. Other Initiatives to Prevent Nuclear Terrorism

33 President Obama has identified the threat of terrorist groups acquiring nuclear weapons as "the most immediate and extreme threat to global security". The menace of terrorism remains acute in the 21st century: major incidents take place periodically, including the Christmas Day terrorist attack on a Detroit-bound airliner in 2009 and the most recent Times Square bombing attempt in New York. While thus far no acts of nuclear terrorism were recorded, such possibility should nevertheless be taken seriously, particularly given the potential catastrophic consequences of such an attack. Acts of radiological terrorism (using conventional explosives to disperse radioactive substances) would cause little physical destruction but could cause considerable panic as well as economic losses.

34. Al Qaeda has been reportedly seeking nuclear materials and technology. Stockpiles of low- or highly-enriched uranium, plutonium, spent nuclear fuel and other dangerous substances are abundant and scattered all over our planet (it has to be noted, however, that handling these substances, particularly plutonium, is a serious technological challenge and terrorist organization

[8] Miles E. Pomper, Report from the NPT Preparatory Committee 2009, in: CNS Feature Stories, 26 May 2009, http://cns.miis.edu/stories/090526_npt_report.htm.

would be unlikely to build a plutonium bomb without an assistance from a state-supported nuclear weapons program). Security of these stockpiles is an utmost priority for nations possessing them. It is mostly a national responsibility, but international co-operation mechanisms do exist to assist some nations, including Russia, to ensure that these substances do not fall into the wrong hands.

35. As one Northern Irish terrorist put it after a failed bombing attempt, “today we were unlucky, but remember we only have to be lucky once. You will have to be lucky always”. In order to prevent nuclear terrorism, a multilayered system is needed which includes efficient intelligence, physical security of storages and other related sites, and trafficking interdiction.

36. In terms of physical security, the US and Russia has a long and successful co-operation experience in the framework of the Nunn-Lugar initiative, launched in the early 1990s and designed to assist Russia and other countries of the former Soviet Union ensuring that the nuclear legacy of the USSR remains secure. The programme was remarkably successful and was later expanded to include other donor countries (in 2002, the G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction was launched and it includes multinational programmes in biological and chemical weapon sectors as well). It succeeded in securing almost all nuclear weapon storages and material sites in Russia, as well as in eliminating surplus of Highly Enriched Uranium (HEU) and plutonium stockpiles and dismantling decommissioned nuclear submarines. A number of issues remain though, most notably the uncertainty over sustainability of American investments in security upgrades, i.e, if Russia will be able to ensure adequate funding in the future. Also, further improvements in security culture and personnel training are necessary. That said, the Nunn-Lugar programme is an excellent example of productive Russo-American co-operation in nuclear security, and this experience should be extended to other regions and countries.

37. In terms of practical results, the Proliferation Security Initiative (PSI) is another successful multinational non-proliferation effort. The US launched this informal arrangement in 2003, in an attempt to block the transfer of WMD to terrorists or rogue states. In addition to the US, France, the UK and Russia, there are more than 90 countries co-operating in this venture. In contrast to international treaties, the PSI focuses specifically on the practical prevention of the spread of WMD by means of shared intelligence, sea patrols, and military co-operation in specific situations. It does not create any new legal authorities, but it is successful, and acts in compliance with international law and UN resolutions. So far, this promising model has only been applied to the open seas, but could be buttressed by expanding its charter further, both in terms of members and scope. It is even praised by some as a pillar of a Global Security Architecture.

38. A number of other multinational non-proliferation mechanisms were set up in recent years, including the Global Initiative to Combat Nuclear Terrorism (largely a product of US-Russian partnership; it is designed share best counter-terrorist practices among the parties), Convention for the Suppression of Acts of Nuclear Terrorism (which focuses on police and law enforcement co-operation), Convention on Physical Protection of Nuclear Material (which provides guidelines for security or nuclear sites), UNSC Resolution 1540 (which requires nations to adopt relevant national legislation), the Nuclear Suppliers Group (which gives guidelines to its 45 members regarding export policies of nuclear materials and technologies) as well as *ad hoc* events such as the Nuclear Security summit. This summit was held in Washington DC in April 2010 and resulted in a non-binding communiqué and brought some practical results such as Ukraine’s decision to give up its stockpile of HEU and an additional Russo-American agreement on disposal of 34 tons of weapons-grade plutonium. However, the multitude of these international initiatives and mechanisms is confusing and making the global nuclear security architecture rather cumbersome. The US, other NATO countries and Russia should enhance their efforts to streamline this architecture and to strengthen it in order to establish clear, universal and stringent standards and security requirements for nuclear/radiological material sites that would mandatory to all nations possessing these materials.

3. Dealing with Iran's Nuclear Ambitions

39. Diplomatic engagement, the imposition of non-military sanctions, and the use of military force remain the tools available to more or less effectively prevent more states from developing nuclear weapon capabilities. In the case of Iran, apparently, neither the Obama Administration's engagement approach nor previous sanctions have yet been able to exert leverage on Tehran's nuclear stance. Since the military option is extremely undesirable, a strong and unified position by the international community is the only possible way to ensure that non-military measures are effective in dealing with proliferation-prone countries. The upcoming section briefly addresses Iran's current capabilities, the new round of sanctions, and Russia's role in dealing with Tehran's nuclear program.

40. To achieve a break-out capability, the main challenge for Iran probably remains the production of a sufficient amount of highly enriched uranium (HEU). Experts believe that about 700 -1000 kg of low enriched uranium (LEU) would give the country the capability to produce enough HEU for a nuclear warhead, provided that it is able to enrich LEU up to 90%. Iran's LEU production came to 2776 kg by September 2010 – if further enriched, this amount would be sufficient to produce 1-2 nuclear bombs. The Islamic Republic also started to enrich uranium up to 20% in its Pilot Fuel Enrichment Plant in Natanz in February 2010 (allegedly for the production of medical radioisotopes). About 25 kg of such material are believed to be produced so far. Iran has also indicated that it would start working on a third uranium enrichment facility. Iran's current nuclear activities do not pose an immediate threat, but they do represent a clear breach of UN Security Council Resolutions and other international obligations, since the country started further enrichment in the absence of IAEA inspectors. Whatever the intention of Tehran's nuclear program might be, the mere fact that the country is getting closer to the capability to build The Bomb is highly alarming.

41. Ahead of these recent advances in Iran's nuclear program, the major powers of the United Nations Security Council (UNSC) and Germany (the P5+1) agreed on a dual track strategy of engagement and pressure. Unfortunately, the latest UN-backed proposal, submitted jointly by the US, Russia and France in October 2009[9], was not responded positively by Iran. One positive "side-effect" of the very public effort by the P5 +1 to exhaust all diplomatic means has been to bring the US, Europe, Russia, and China closer together in their position towards Iran.

42. UNSC adopted a fourth round of sanctions in June 2010, despite the announced agreement between Brazil, Turkey and Iran on a fuel swap mirroring the one proposed in October 2009. The sanctions broaden the international weapons embargo imposed on Tehran and bar states from providing licenses to Iranian banks linked to the nation's nuclear or missile efforts. Moreover, they also prohibit any Iranian "activity related to ballistic missiles capable of delivering nuclear weapons"[10]. Although it was very important to reach consensus among the permanent members of the UNSC, these measures are far less than the "crippling" sanctions the US and its key allies had sought. Therefore, the US and the EU decided unilaterally to go beyond UNSC Resolution 1929 and penalize firms selling gasoline to Iran. It's too early to assess if the new sanctions brought some sort of success, but they seem to slow down the nuclear program and stir up tensions between the different fractions of the political establishment in Iran. While the country insists its uranium work is non-negotiable, supreme leader Ayatollah Ali Khamenei said Iran would be willing

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9 It suggested that Tehran send the bulk of its LEU to Russia and France in exchange for 20%-enriched fuel and internationally monitored quantities

10 UNSC: Resolution 1929 (2010). 9 June 2010, http://www.iaea.org/NewsCenter/Focus/IaeaIran/unsc_res1929-2010.pdf.

to resume talks on disputed elements of its nuclear program in September, if some sanctions were dropped.

43. During the past years, Russia's position towards the Iranian nuclear program seems to have oscillated between strategic temptations and proliferation concerns. On the one hand, it is in the Kremlin's interest to uphold good political and economic relations (especially in the field of nuclear technology and weapons sales) with an important player in the adjacent Middle East. Russia unequivocally pursues economic interests in Iran; it is a key market for Russia in terms of military sales and nuclear technologies (one of the main commodities Russia can export). Furthermore, a number of large Russian enterprises are fulfilling contracts with Iran and therefore seek to prevent a worsening of Iranian-Russian relations due to further sanctions. Kremlin supported the last round of sanctions against Iran, but together with China, it always made clear that it rejects unilateral punitive measures that restrict Iran's oil and gas sector by targeting companies in third-party nations. Russia is the only state to have openly co-operated with Iran in the nuclear field in the fourteen-year period (1995 - 2009) during which Tehran has developed a light-water reactor in Bushehr. After years of delay, the plant was announced to be operational this summer. The announcement has caused some concern of the international community, despite the clause in the Russo-Iranian agreement whereby Russia would be the only supplier of uranium fuel to the plant and would take away all spent nuclear fuel (which contains plutonium). The critics point out that the agreement is signed for the period of ten years only, while the reactor's lifespan is roughly 50 years. Also, the Iranian engineers will acquire invaluable experience from their Russian colleagues in terms of operating nuclear facilities and dealing with nuclear substances, thus increasing Iran's "nuclear break-out" potential. Therefore, the role of Russia (as well the IAEA since the plant is under the Agency's safeguards) will remain critical to ensure that the Bushehr reactor continues to operate as a purely civilian enterprise.

44. On the other hand, a nuclear armed Iran would run against Russia's policy of upholding nuclear non-proliferation and preventing a potential nuclear arms race in the already fragile neighboring region. In 2002, the Kremlin was shocked, perhaps even more than the Western countries, when Tehran admitted that it had been conducting clandestine nuclear research activities. Currently, it appears that nuclear concerns outweigh Russian economic and geopolitical interests. In addition, as terrorism remains one of the key threats to Russia's security, the reported links between Tehran and certain hostile non-state entities cannot but raise concern in Moscow. The delivery of Russia's advanced S-300 antiaircraft missile system to Iran is now officially cancelled, a decision in line with the spirit of the latest UN resolution on sanctions against Iran.

45. Russia, perceiving itself as a dialogue enabler between Iran and the Euro-Atlantic community, has made several proposals to enrich uranium for Iran's nuclear program on Russian territory. In 2005, Moscow offered to build a Russian-Iranian enrichment joint-venture in Russia, and, one year later, an international joint venture. However, the initiatives failed, since Iran finally insisted on the uranium enrichment taking place on its own soil. Russia's offer to do this for Iran in the international fuel cycle center in Angarsk, Siberia, still stands.

46. In recent years, Moscow's special interest in co-operating with Iran on the one hand, and Washington's refusal to talk directly with Tehran on the other hand, rendered a constructive and common US, European and Russian stance towards Iran impossible. Now the preconditions have changed. The US is willing to talk to Tehran directly, and Iran's continued non-compliance with IAEA norms constitutes a turning point for Russia. As US-Russian relations improve, the possibility of their adopting a strong united approach towards Iran is increasing considerably. Russia, the United States and Europe should continue to make a concerted effort to engage and simultaneously pressure Iran, in order to take advantage of this window of opportunity.

III. INTERNATIONAL BAN ON BIOLOGICAL AND CHEMICAL WEAPONS

47. In addition to the nuclear security area, Russia and the Western powers are also key actors when it comes to addressing threats posed by the two other categories of weapons of mass destruction – chemical (CW) and biological (BW) weapons. These weapons can also be highly lethal: for instance, the death rate from BW varies hugely, from several dozen to 88 billion deaths per kg of anthrax agent[11]. CW or BW could be an option for countries or non-state actors that lack the expertise or capability to develop nuclear weapons.

48. While, according to the NPT, the permanent members of the UNSC are temporarily entitled to possess nuclear weapons, international law – namely, the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC) – entirely bans the development, production, stockpiling and transfer of chemical and biological weapons. Engagement with Russia in strengthening these Conventions is particularly important in the context of approaching BWC Review Conference in December 2011 and CWC Review Conference in 2013.

49. **CWC** is nearly universal. Only a handful of small countries are not members of the Convention, but most of them are in the vulnerable Middle East region: Egypt, Israel, and Syria. North Korea also remains outside of the Convention. CWC has a strict verification system: its agency, the Organization for the Prohibition of Chemical Weapons (OPCW), monitors the chemical weapons stockpile destruction and conducts on-site inspections of chemical plants.

50. Collectively, the US and Russia possess 95% of chemical weapons worldwide, which corresponds to 70,000 tons of this category of weapons. Both countries are in the process of destroying them, but will probably not technically be able to do so before the final deadline expires on April 29, 2012.

51. In addition to ensuring adequate funding of CW destruction programmes, Russia and the US and its Allies need to address the existing loopholes in the CWC system, which provide state parties with the leeway to cheat, without much risk of their being detected. Some next-generation precursors and agents are excluded, e.g. ”calmative” agents, which both the US and Russia have developed for “law enforcement, including domestic riot control” under the CWC’s exceptional clause. Also, the majority of inspectors are busy monitoring the destruction of chemical weapons, which leaves them with far less time to inspect registered and “other” production facilities. Greater use of remotely operated equipment as well as the use of sampling analysis during routine inspections should be enhanced, while additional steps to prevent the revealing of trade secrets and national security intelligence need to be taken[12].

52. The **BWC** was signed and ratified by 163 states. Thirty-two countries remain outside of the Convention, mostly in Africa and the Middle East (again including Egypt, Israel and Syria). Since the regime does not stipulate verification instruments, its effectiveness is gravely curtailed. Furthermore, noncompliance can only be addressed by bilateral or multilateral consultation (Art. 5) or by a UNSC request to investigate under Article 6 of the Convention.

53. Several efforts have been made to strengthen the BWC in terms of verification and enforcement, but parties eventually failed to agree on a compliance protocol. The major technical hurdle to be overcome in order to bolster the BWC is that only small quantities of biological agents are required for a devastating attack. Even worse, these agents can be produced on a small scale, mainly using dual-use equipment that is available worldwide. In addition, life science research

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11 Allison MacFarlane, “All Weapons of Mass Destruction Are Not Equal”, MIT 2005, http://web.mit.edu/cis/pdf/Audit_6_05_Macfarlane.pdf, last accessed on April 6, 2010.

12 Jonathan B. Tucker, “Verifying the Chemical Weapons Ban: Missing Elements”, Arms Control Association, January/February 2007, http://www.armscontrol.org/act/2007_01-02/Tucker, accessed on April 2, 2010.

(particularly genomics, synthetic biology and neuroscience) usually pursues civilian goals but could, potentially, be misused for malign purposes. In this context, the United States authorities argue that BWC is essentially unverifiable. When Russia and the EU nations, among other countries, called for resumption of the verification negotiations in 2007, the US found that the costs of reviving them would outweigh the benefits[13]. The US opposition to the BWC Verification Protocol is consistent and dates back to 2001. The Obama Administration also rejected the protocol.

54. As a result, the focus shifted back to national strategies to address bio-threats. That said, discussions on possible ways to strengthen the international biological non-proliferation system still continue. Proposals include increasing the number of national data submissions; merging BWC and CWC (particularly since some new substances can be qualified as both CW and BW); or introducing "consultative visits" to biological facilities of concern, initiated at the request of a BWC member state. Partnership with Russia (which had an extensive BW programme during the Soviet period) is essential to creating an international mechanism that would: 1) deter any country from developing BW programmes; and 2) prevent leakage of BW to terrorist groups or hostile individuals.

IV. EUROPEAN MISSILE DEFENCE: CHALLENGES AND OPPORTUNITIES

55. One of the principal objectives of this report is to highlight the potential of missile defences (MD) both as as the "new glue" for the Alliance[14] and a game-changer in relationship with the Russian Federation. It is increasingly being regarded as a "silver bullet" to rectify relations with Russia and a even as a principle foundation for durable strategic partnership. While two-three years ago MD was considered the biggest bone of contention between the US/NATO and Russia, now the completely opposite view is beginning to prevail. A renowned Russian international relations expert Dmitri Trenin even suggests that MD "could actually be a 21st century equivalent of Russia's membership in NATO or a bilateral security alliance with the United States".[15]

56. This view is advocated not only by independent experts, but also by political figures of the highest calibre. An outstanding American politician Sam Nunn, former Russian foreign Minister Igor Ivanov and the Chairman of the Munich Conference Wolfgang Ischinger co-wrote an article which urging North America, Europe and Russia "to make defense of the entire Euro-Atlantic region against potential ballistic missile attack a joint priority". That, they argue, would "in a single stroke undermine much of the threat analysis that sets Russia against NATO, and prove that trilateral cooperation on a key security issue is possible." The three authors also believe that this cooperation would play critical role bolstering global nuclear non-proliferation effort.[16] NATO Secretary General Anders Fogh Rasmussen is also a vocal supporter the US-European-Russian MD co-operation idea.

57. Missile defence is an integral part of the WMD disarmament and non-proliferation debate. In July 2009, the presidents of the US and Russia signed a joint statement that included a reference to "interrelationship of strategic offensive and strategic defensive arms". However, there is a fundamental disagreement between the US and Russia on the nature of this linkage:

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13 Jonathan B. Tucker, "Seeking Biosecurity Withoug Verification: The New U.S. Strategy on Biothreats", Arms Control Association, January/February 2010, http://www.armscontrol.org/act/2010_01-02/Tucker, accessed on 3 April 2010.

14 Nuclear Weapons in NATO's New Strategic Concept. By Simon Lunn. A report prepared for the Monterey Institute of International Studies. August 2010.

15 Missile Defense Could Be the Silver Bullet. By Dmitri Trenin. The Moscow Times. 3 November 2009.

16 All Together Now: Missile Defense. By Sam Nunn, Igor Ivanov and Wolfgang Ischinger. The New York Times. 21 July 2010.

- Moscow believes that the progress in nuclear disarmament – specifically the conclusion of the START successor treaty – depends, to a large extent, on the willingness of the US to abandon its plans for MD in Europe. The START follow-up agreement does not prevent parties from developing missile defences. However, Russia's foreign minister Lavrov warned that Russia would withdraw from the Treaty "if a quantitative and qualitative build-up of the US strategic anti-missile potential begins to significantly affect the efficiency of Russia's strategic nuclear forces"[17].
- From the US perspective, the expansion of the MD system does not contradict the disarmament goals. On the contrary, MD could become an important prerequisite for the implementation of the Global Zero vision.

58. It is crucial to align the positions of Russia and the Western countries on MD by demystifying it and focusing on the technical characteristics of the proposed system. It has to be made absolutely clear that the MD system the US and NATO are pursuing is fundamentally different from President Reagan's "Star Wars" programme. The latter addressed the possibility of creating a shield capable of protecting the US from the Soviet inter-continental ballistic missiles (ICBMs) carrying nuclear warheads. The programme proved to be unfeasible to implement at the time, but hypothetically such capability would have profoundly impacted the global security environment by rendering the Mutually Assured Destruction (MAD) doctrine obsolete.

A. THE KEY FEATURES OF THE MISSILE DEFENCE PROPOSAL

59. The new MD proposal – both as proposed by President Bush and as revised by the Obama Administration – does not entail developing a comprehensive anti-missile shield. It is deliberately designed as a limited one, capable of intercepting a small number of missiles launched from unpredictable countries, such as North Korea and Iran. The proposed system, with several dozens of interceptor missiles, would be ineffective against thousands of Russian ICBMs.

60. Furthermore, MD bases in Europe will be located in geographic areas that would make them incapable – even theoretically – of intercepting US-bound Russian missiles. The nature of ballistic missiles is to travel to their destination via the shortest possible global route (the so-called 'grand circle'). The shortest way from Russia to the US is over the Arctic Ocean. Therefore, interceptor missiles based in the Balkans – or even in Poland as per the original plan, and on ships deployed in the Mediterranean and Aegean Seas, cannot possibly be used against the Russian ICBMs.

61. Thus, Russian strategic nuclear deterrence is in no way affected by US and NATO MD plans. This fact must be clearly understood by the decision-makers and the public, both in Western countries and in Russia. MD ought to be considered, not as a scarecrow, but rather as an integral component of the US/NATO-Russia co-operation framework, aimed at reducing global nuclear, chemical and biological threats.

62. The original Bush Administration proposal to station elements of its MD system in Poland and the Czech Republic was considered – rather unjustly – to be controversial. It deeply antagonised Moscow. Despite the fact that Poland is, hypothetically, on the direct missile path from Iran to the Eastern coast of the US, elements of the general public perceived Poland to be too distant from the Middle East and too close to Russia for the base not to be perceived as a means of defence against Russia. To some, the Ground-Based Interceptors (GBI) to be deployed in Poland were wrongly perceived as similar to silo-based offensive ICBMs (which are, in fact, fundamentally different as they do not carry warheads at all and only intercept incoming missiles by way of kinetic impact). The original proposal (officially referred to as the Ground-based Midcourse Defence – GMD) was also criticised in the US for being ineffective and technologically unsound. The test record of GBI stationed in Alaska and California is rather poor – tests were

[17] Russia threatens to quit new nuclear treaty before the deal is signed. Times On Line. 7 April 2010.

characterised by many experts as unrealistic and pre-scripted. The most recent test mimicking the hypothetical Iranian missile attack failed, although, reportedly, the interceptor missile performed normally and the failure was caused by a malfunction in a Raytheon-built radar. The Bush proposal was also criticised for being based on bilateral as opposed to Alliance-wide arrangements.

63. The new plan, announced by the Obama Administration in September 2009, addressed some of the flaws (whether real or perceived) of the original proposal. The US President stressed that the US did not abandon the idea of anti-missile protection, but instead was replacing the old proposal with one that "will provide stronger, smarter, and swifter defenses of American forces and America's allies". The plan to deploy GBI in Poland was dropped and the focus shifted to Standard Missile-3 (SM-3) interceptors that are mounted on *Aegis* ships of the US Navy. SM-3 missiles have a sound performance record and their credibility was explicitly demonstrated in 2009 when one SM-3 missile successfully destroyed an inoperative satellite. A small number of Aegis ships, each carrying approximately 100 SM-3 missiles, will be deployed closer to Iran, in the waters of the South-Eastern Europe, thus negating any allegations that it is directed against Russia. Development of land-based SM-3 missiles is also planned with possible deployment in Romania within the 2015 timeframe.

64. The MD system championed by the Obama Administration is less controversial and more flexible than that proposed by the previous Administration. However, some questions have yet to be addressed. For instance, the question of cost: while the US government claims that the new system will be more cost-effective, the Congressional Budget Office estimated that the deployment of the advanced sea-based version of SM-3 projected to enter service by 2018 would be considerably more expensive than GBI. The land-based version of SM-3 would be less costly but potentially just as controversial as GBI[18].

65. Unlike GBI, SM-3 is currently incapable of intercepting long-range missiles[19]. Therefore, in the short-term, the Aegis ships deployed in the Mediterranean and the Aegean Sea would only provide protection against short- and medium-range missiles. The US experts believe that SM-3 missiles can be gradually upgraded to meet long-range missile threats as well. Advanced sea- as well as land-based versions of SM-3, currently under development, will provide coverage for increasingly larger territories in Europe. By 2020, the US plans to deploy SM-3 Block IIB missiles, which are potentially capable to intercepting ICBMs launched against the United States. The silo-based GBI will continue to be perfected and the possibility of their deployment in Europe has not been ruled out.

66. Thus, the Obama Administration is replacing the 'capabilities-based' approach with the 'threat-based' approach to MD.[20] Accordingly, the new MD plan is tailored to meet missile threats as the Iranian missile capability develops.

67. Iran is developing a formidable medium-range ballistic missile capability. Its Shahab missile programme, originally based on technology transfers from Russia, China and North Korea, is developing rapidly as Iranian rocket engineers are mastering the ballistic technology. Its upgraded Sejil 2 missile, test fired in May 2009, has a range of 2,000 km and is thus capable of reaching targets in Israel, Turkey or South-Eastern Europe. It also uses solid rather than liquid fuel, making it less vulnerable to pre-emptive strikes (liquid-fuel rockets need to be filled up before a launch; an activity that could be detected by adversaries).

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18 Missile Defence in Europe - Pie in the Sky. The Economist. 19-25 September 2009.

19 The widely accepted categorisation of missiles according to their range is the following: 1) short-range – up to 1,000 km; 2) medium-range – from 1,000-3,500 km; 3) intermediate-range – from 3,500-5,500 km; 4) intercontinental-range – from 5,500 km.

20 Winning on Ballistic Missiles but Losing on Cruise: The Missile Proliferation Battle. By Dennis M. Gormley. Arms Control Today. December 2009.

68. In 2009 and in January 2010, Iran also successfully test-fired multi-stage satellite rockets, designed to deliver objects to space. Iran claims that it is an entirely civilian capability but, from a technological standpoint, satellite carrier rockets intrinsically resemble inter-continental offensive missiles. However, according to the latest US intelligence assessment, Iran is unlikely to develop a long-range ballistic missile capability before the end of this decade when the advanced SM-3 Block IIB missiles are expected to enter service.

69. Among other advantages of the new MD plan, the US will develop a much more flexible and versatile system of ground-, sea-, air- and space-based sensors to detect launches of hostile missiles and to track them. This will reduce the need for a large ground-based X-band radar, such as the one originally due to be installed in the Czech Republic. This radar caused considerable irritation in Moscow, which claimed it would be able to see deep into Russian territory.

70. Some experts also point out that the proposed MD system could enhance security in the Middle East. The Aegis ships would provide some degree of additional anti-missile protection for Israel, which, according to Israel's strategic calculations, would reduce the relevance of a pre-emptive strike option against Iran[21].

71. One also has to bear in mind that MD is relatively young and rapidly developing sector. Technological progress is difficult to predict, and one cannot rule out that new emerging capabilities will require revisiting current plans and assessing potential implications for international relations. For instance, the US defence companies are rapidly mastering MD systems capable of intercepting hostile missiles in the boost phase of their flight. The Airborne Laser (ABL) programme as well as projects to develop high-speed interceptor rockets mounted on patrolling aircraft or UAVs (such as Predators) when completed might require new deployment and engagement patterns. Boost-phase interception is preferable because ascending missiles are slower, more visible and more vulnerable; besides debris from interception would fall onto the territory of an attacker. On the other hand, boost-phase interception requires extremely swift decision-making and data exchange mechanism among the Allies and partners as response time is 2-4 minutes. It also entails constant patrolling in the vicinity of a potential source of threat. It is imperative therefore that relevant national and international bodies, including this Assembly and its Science and Technology Committee, closely follow these developments and analyse their political and national security implications.

B. MISSILE DEFENCE AND NATO COHESION

72. The revised plan is much more Alliance-centric than the previous one. In fact, in the initial stages, the proposed MD architecture would not have provided any protection for the US and would only have covered the territory of the United States' European Allies. The US authorities announced they "will work with our Allies to integrate this architecture with NATO members' missile defense capabilities, as well as with the emerging NATO command and control network that is under development". Also, the US "will be consulting closely at NATO with Allies on the specific deployment options"[22]. NATO Secretary General has strongly endorsed the new plan. It remains to be seen if the growing support for MD as one of future cornerstones of the Alliance will be reflected in the new NATO Strategic Concept.

73. The increasing number of analysts argue that development of the Alliance-wide missile defence system could ensure NATO's cohesion in a context when the future of the US nuclear weapons in Europe is being questioned. Many of these weapons, as well as their delivery systems,

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21 A Prudent Decision on Missile Defence. By Mark Fitzpatrick. Survival: Global Politics and Strategy. Vol. 51, no. 6 December 2009–January 2010.

22 A "Phased, Adaptive Approach" for Missile Defense in Europe. White House press release. 17 September 2009.

approach the end of their lifetime. The modernisation proposals for these weapons and systems would likely meet considerable opposition in some European countries; they would also send a message which directly contradicts the spirit of President Obama's 'nuclear zero' vision. If, however, the US nuclear weapons are withdrawn from Europe, there is a risk of weakening the transatlantic link and reducing the relevance of the NATO Nuclear Planning Group. In that case, the Allies' involvement in force planning in the framework of missile defence could provide an opportunity to sustain the cohesion of the Alliance[23].

74. The implementation of the revised MD plan must be accompanied with specific measures, designed to reassure Central and Eastern European Allies, particularly Poland and the Czech Republic. It goes without saying that these nations considered the original MD proposal a means of directly increasing US presence in the region. The announcement by the US government that the original plan has been shelved caused some resentment in Central and Eastern Europe. A headline in the leading Czech newspaper *Mlada Fronta Dnes* read: "There Will Not Be Radar. Russia Won". In their famous statement, a group of distinguished former Central and Eastern European statesmen, including Vaclav Havel, Lech Walesa, Valdas Adamkus, Alexander Kwasniewski, Mart Laar, and Vaira Vike-Freiberga, while welcoming the 'reset' with Russia, regretted the shelving of the original European missile defense plan which was "a symbol of America's credibility and commitment to the region". The influential American Republicans, including Senate Minority Leader Mitch McConnell and the House Minority Leader John Boehner, also criticised this decision by the US President as capitulation to Russia[24].

75. In this context, the announced deployment of the US Patriot anti-missile unit in Poland is a welcome step. The deployment poses no threat to Russia as Patriot MD capability is designed to protect deployed troops against short-range missiles. The US-Polish agreement is a symbolic gesture of strategic partnership of the two nations. The Czech Republic expects similar gestures of solidarity.

C. ENGAGING RUSSIA

76. The Rapporteur is convinced that Russia could and should become a part of the joint missile defence effort. Moscow has been sending contradictory signals on this issue. On the one hand, Moscow vehemently opposed the proposal of the Bush Administration to install an MD system in Poland and the Czech Republic. President Medvedev threatened to postpone the dismantling of the Kozelsk ICBM unit from the Kaliningrad enclave and to deploy modern short-range Iskander ballistic missiles there, which would be capable of hitting targets in Poland and other Central and Eastern European countries. This idea was called off in response to the US decision to shelve the original MD plan. However, although the US now plans to deploy MD capabilities closer to Iran, a step that Russian officials have been arguing would be a logical one, Moscow still refuses to endorse the revised MD proposal. In particular, Russian officials expressed their concern about the announced deployment of Patriot anti-missile systems to Poland. Also, Russian officials, including the Foreign Minister Sergei Lavrov[25], have started to raise new concerns that SM-3 systems might threaten the Russian nuclear deterrent. This claim is unsubstantiated as even when SM-3 missiles receive upgrades which enable them to intercept ICBMs, the numbers and geographical deployment of Aegis ships or ground-based SM-3 would prevent them from posing a threat to the Russian nuclear forces. That said, the US and NATO might consider the possibility of offering additional guarantees to Russia as the most advanced versions of SM-3 become available.

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23 NATO, Missile Defence and Extended Deterrence. By Oliver Thränert. Survival: Global Politics and Strategy. Vol. 51, no. 6, December 2009.

24 Obama Shifts Gears on Missile Defense. By Cole Harvey. Arms Control Today. October 2009.

25 Mikhail Tsypkin. Russian politics, policy-making and American missile defence. International Affairs. 85:4 (2009).

77. On the other hand, Russia is not fundamentally opposed to MD *per se*. After all, Russia maintains an MD system near Moscow, which dates back to the Cold War era. Reportedly, the Russian capital is protected by interceptor missiles that are nuclear-tipped. Also, when the Bush Administration announced its MD plans for Europe, Moscow suggested that it could also join this project and offered the Russian-leased early warning radar based in Gabala, Azerbaijan as well as a brand new detection radar in Armavir, Southern Russia, as a potential contribution to the proposed system. Activation of the US-Russian Joint Data Exchange Centre in Moscow, set up in the late 1990s, but never previously invoked, is yet another possibility to develop co-operation, although it is uncertain if Moscow still has much interest in moving this project forward.

78. All these proposals have to be considered seriously by the US and NATO. The White House welcomed “Russian co-operation to bring its missile defense capabilities into a broader defense of our common strategic interests”. US Secretary of State Hillary Clinton has explicitly urged Russia to take part in a MD project: "Just as Russia is an important partner in efforts to prevent nuclear proliferation, so should it be in missile defense”. While establishing joint command system would not be realistic, the ultimate arrangement should include effective sharing of MD-related data between the US/NATO and Russian radar systems. However, safeguards must be in place to prevent either side from abusing or leaking sensitive information and from being able to stall or disrupt the swift decision-making process in MD. NATO-Russia Council is also exploring ways to incorporate territorial MD into its agenda.

79. Another important aspect of the MD co-operation with Russia is joint missile threat assessment. Experts note that as the new US Administration shifted its focus from Iranian intercontinental- to medium-range missile capability, the American and Russian assessments of the Iranian missile programme “are now in sync”[26]. The arrangements were made during the visit of President Obama to Moscow in July 2009 to establish a bilateral threat assessment group.

D. ADDRESSING MISSILE PROLIFERATION

80. Last but not least, the Euro-Atlantic community, together with Russia, must redouble their efforts to curb proliferation of missiles and missile technology. This is a challenge of paramount importance. If the issue is addressed effectively, such efforts will not merely serve to pre-empt or respond to potential threats, but will also help prevent the growth of missile capabilities in certain hostile countries, thus enabling the US and NATO to avoid further developing their missile defences to a point that might undermine the strategic global nuclear balance.

81. There is no universal treaty or convention that prohibits proliferation of missile technology. The Missile Technology Control Regime (MTCR) establishes export policy guidelines in order to curtail proliferation of missiles (and related technologies) that could carry weapons of mass destruction. MTCR unites only 34 nations, excluding some of the suspected missile proliferators. Nevertheless, it has been remarkably successful in reducing the pace of missile programmes in some countries, including Egypt, Iraq, Libya, and Syria. Yet, the regime needs to be revisited in order to close certain gaps, particularly when it comes to cruise missiles.

82. Experts note that non-proliferation measures are particularly important in cases when a country decides to pursue ICBM capability. The move from medium- to long-range capability represents a considerable technological leap which is extremely difficult to accomplish without foreign assistance[27]. Preventing countries like Iran from developing multi-stage ICBMs could be a successful endeavour which would benefit the US, NATO and Russia (since the Western system

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[26] Second Day: A Missile Decision Based On Facts And Values. By Marc Ambinder. The Atlantic. 17 September 2009.

[27] Winning on Ballistic Missiles but Losing on Cruise: The Missile Proliferation Battle. By Dennis M. Gormley. Arms Control Today. December 2009.

of missile defence could remain limited as opposed to comprehensive). It would also enhance the global security situation in general.

83. In one of his statements, President Medvedev pointed out that Russia and the US “will work together to develop effective measures against the risks of missile proliferation.” The United States and Russia should lead the global effort to strengthen the missile non-proliferation mechanisms. The universalisation of the US-Soviet 1987 Intermediate-Range Nuclear Forces Treaty – which eliminated the entire class of missiles from the arsenals of these two superpowers – could serve as a basis for the new framework.