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# Nuclear Arms and Missile Defense in Transatlantic Security\*

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The debate about the future role of nuclear arms in Europe for transatlantic security has intensified. It can be expected to continue after NATO's Lisbon summit of November 2010, on which occasion the alliance adopted its new strategic concept. One important reason why the debate within NATO about nuclear weapons and nuclear disarmament will go on is US President Barack Obama's vision of a world without nuclear weapons. To make its contribution to this long-term goal, Germany wants all the remaining US nuclear forces on its territory to be removed, albeit not without consultation within the alliance. Some NATO partners that also host US nuclear forces, such as the Netherlands and Belgium, support Germany. Others, like Italy and Turkey, are less enthusiastic.

After Lisbon, two important topics remain on NATO's agenda for the coming years. As long as US nuclear forces are deployed in Europe, decisions will have to be taken about the modernization of the respective delivery systems. At the same time, the US and NATO will have to decide if and to what extent non-strategic weapons should become part of future arms control negotiations with Russia.

These discussions will be held against the background of developments in the Middle East. If Iran becomes a nuclear power, NATO's security landscape will be altered significantly. If Iran cannot be stopped from developing a nuclear weapons option, it will become a new focus of

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NATO's deterrence thinking. Missile defenses and 'deterrence by denial' strategies (i.e. the possibility to neutralize a first attack) will gain more importance for NATO, while at the same time nuclear weapons and 'deterrence by punishment' (e.g. the threat of a nuclear retaliation) will become less significant.

The NATO summit in Lisbon has been an important milestone on this way. In its new strategic concept NATO describes the capability to defend NATO populations and territories against ballistic missile attacks as a core element of its collective defense. At the same time, an appropriate mix of nuclear and conventional capabilities remains a core element of NATO's strategy. In the coming years, the alliance will continue this adjustment to a new security environment. It will have to find common ground on the future nuclear weapons and missile defense relationship.

An important element of this adaptation process needs to be a new partnership with Russia. For if NATO wants to avoid its missile defense projects to stand in the way of improved relations with Russia and of further nuclear reductions, it has to find ways of discussing possible cooperation in this field with Moscow. The invitation extended to Russia for missile defense cooperation, appreciated by Russian President Dmitry Medvedev in Lisbon, is a first step into that direction.

#### US NUCLEAR FORCES IN EUROPE: STILL RELEVANT?

Extended deterrence based on the threat of punishment has historically been the bedrock of NATO's nuclear policy. During the Cold War, the United States guaranteed its European non-nuclear partners as well as Canada that its nuclear forces would not only counter a potential Soviet attack on the US homeland, but also one on the territories of its allies. More specifically, a special arrangement called 'nuclear-sharing' was established, according to which European delivery systems and their crews were prepared and trained to use US nuclear weapons based in Europe.

Extended deterrence has never been an easy undertaking, mainly because the requirements of deterrence and assurance often are not

identical. What has become known as the 'Healy Theorem' illustrates this best: 'It takes only five per cent credibility of US retaliation to deter the Russians, but 95 percent credibility to reassure the Europeans.'1

More than twenty years after the end of the Cold War, extended deterrence is still relevant for NATO, as has been pointed out by NATO secretary-general, Anders Fogh Rasmussen, when he has described the stationing of US nuclear forces in Europe as an essential part of a credible deterrent.<sup>2</sup> Likewise, the Obama administration's Nuclear Posture Review argues that the presence of US nuclear weapons combined with NATO's nuclear-sharing arrangements contribute to alliance cohesion and provide reassurance to allies and partners who feel exposed to regional threats.<sup>3</sup> More recently, the NATO strategic concept reiterated that as long as nuclear weapons exist, NATO will remain a nuclear alliance. The allies continue to participate in collective defense planning on nuclear roles and basing of nuclear forces.<sup>4</sup>

The US deployed nuclear forces in Europe for the first time in 1953-54. Their numbers peaked in 1971 at around 7,300 nuclear warheads of thirteen different types. Since the end of the Cold War, these figures have been drastically reduced. Today, only 150-200 non-strategic, airlaunched gravity bombs remain. They are stored in Germany, the Netherlands, Belgium, Italy, and Turkey, and would be deployed by aircraft that are on extremely low-level alert. The NATO strategic concepts of 1991 and 1999 defined the role of these weapons as political: deter potential adversaries and preserve peace. The NATO strategic concept of

<sup>1.</sup> David S. Yost, "US Extended Deterrence in NATO and North-East Asia", in Bruno Tertrais (ed.), *Perspectives on Extended Deterrence,* Recherches et Documents no. 3/2010, Paris: Fondation pour la Recherche Strategique, pp. 15-36, p. 17.

<sup>2.</sup> Press Conference by NATO Secretary General Anders Fogh Rasmussen at the informal meeting of NATO Foreign Ministers, Tallin, Estonia, 22 April 2010.

<sup>3.</sup> US Department of Defense, *Nuclear Posture Review Report*, Washington D.C., April 2010, p. xii.

<sup>4.</sup> Active Engagement, Modern Defence, Strategic Concept For the Defense and Security of The Members of the North Atlantic Treaty Organisation, adopted by the Heads of State and Government in Lisbon (http://www.nato.int/lisbon2010/strategic-concept-2010-eng.pdf).

2010 suggests that the circumstances in which use of nuclear weapons might have to be contemplated are extremely remote.<sup>5</sup>

It is widely acknowledged that in today's strategic environment, NATO's non-strategic systems have little military operational relevance. The respective combat aircraft have limited flight-ranges. Although they would be escorted by other aircraft to penetrate the opponent's airspace, they cannot be expected to be very effective when attacking well defended targets. One important military option remains, though. In a crisis, those NATO partners that participate in nuclear-sharing could demonstrate their willingness to conduct a nuclear strike together. It is questionable, however, how valuable this option is under current circumstances. Moreover, there are even concerns regarding the safe and secure storage of nuclear weapons at US sites in Europe, making them potential targets of theft.<sup>6</sup>

While the argument above provides a rationale for the withdrawal of US nuclear forces from Europe, such a decision would contribute to already widespread sensitivities, particularly in new NATO countries. They might interpret such a move as evidence that their security needs are not taken care of. Central and East European NATO members would apprehend that such a nuclear withdrawal would only be the pretext of a complete American retreat from Europe, making them more vulnerable to Russian assertiveness and intimidation.<sup>7</sup>

This is not to say that old NATO members do not value the US nuclear presence in Europe; they do. In the view of new and old members alike, US nuclear forces in Europe are an essential link with the strategic US forces and help maintain allied cohesion and solidarity. Furthermore, those countries that host US nuclear bombs and participate in nuclear-

<sup>5.</sup> Op. cit.; see also Raymond Knops, *Non-strategic nuclear weapons in Europe: A fundamental NATO debate*, 2010 Spring Session of the NATO Parliamentary Assembly.

<sup>6.</sup> Hugh Beach, "The End of Nuclear Sharing? US Nuclear Weapons in Europe", in *The RUSI Journal* vol. 154, no. 6, December 2009, pp. 48-53, p. 49. It is asserted that the training for nuclear security regimes is too short. Moreover, it is not possible to perform no-notice security checks due to host nation/NATO requirements.

<sup>7.</sup> Ronald Asmus, Stefan Czmur, Chris Donnelly, Aivis Ronis, Tomas Valasek and Klaus Wittmann, *NATO*, *new allies and reassurance*, Centre for European Reform, Policy Brief, London 2010.

sharing (the so-called DCA countries<sup>8</sup>) are aware that in doing so they have a special status within the alliance. Their impact on NATO's nuclear policy-making is more significant than that of other NATO members. True, apart from France, all NATO countries take part in the work of the Nuclear Planning Group. But this body would certainly lose its prominence if the US and Britain would remain as the only members directly related to nuclear affairs. The United States on its part welcomes the participation of allies in extended deterrence, including NATO's nuclear-sharing, because the latter is an instrument of burden-sharing in terms of financial costs as well as political risks and responsibilities.<sup>9</sup>

However, the group of DCA countries does not speak with one voice. While Germany, the Netherlands and Belgium are in favor of a US nuclear withdrawal, Italy and Turkey are opposed to it. In the case of Italy, the country's status within the alliance seems to be an important factor. In Turkey many fear to be confronted with a dilemma. If Iran becomes a nuclear power and at the same time the US removes all its nuclear weapons from Turkish territory, Ankara's security would be diminished. If, however, the United States removes its nuclear forces from other NATO countries but not from Turkey in a situation where it would remain unclear whether Iran would develop a nuclear option, then Ankara would have a hard time to explain to its non-NATO neighbors why it still hosts nuclear weapons while all other NATO countries are pulling them out. 10 This problem might become particularly delicate as the 2010 NPT Review Conference decided to convene a conference to discuss a WMD free-zone in the Middle East in 2012.

Finally, one should also not forget that the stationing of US nuclear forces in Europe has always had a non-proliferation dimension. One important reason why the concept of nuclear-sharing was developed in the

<sup>8.</sup> DCA is the acronym for 'Dual-Capable Aircraft'.

<sup>9.</sup> David S. Yost, 'US Extended Deterrence in NATO and North-East Asia,' op. cit.; see also David S. Yost, *The Future of NATO's Nuclear Deterrent: The New Strategic Concept and the 2010 NPT Review Conference – A Workshop Report*, NATO Research Division, Rome: NATO Defense College, 2010.

<sup>10.</sup> See Mustafa Kibaroglu, 'Reassessing the Role of US Nuclear Weapons in Turkey,' in *Arms Control Today* (June 2010) (www.armscontrol.org/act/2010\_06/Kibaroglu).

1950s and 1960s was to convince the Federal Republic of Germany to renounce nuclear weapons. Today, few believe that Germany would ever develop nuclear weapons of its own (in fact, Germany is legally bound by the two-plus-four treaty on German unification to renounce nuclear weapons). But other NATO members might change their mind in case nuclear proliferation at NATO's periphery were to take place. Again, this particularly applies to Turkey. While a nuclear weapons program would not be an easy undertaking for Ankara both politically and technically, some already fear that one of the reasons why Turkey is currently so eager to establish a civilian nuclear program is to keep the nuclear weapons option open. The non-proliferation aspect of extended deterrence is particularly valuable from an American point of view. The 2010 Nuclear Posture Review argues that the forward deployment of US nuclear forces reassures non-nuclear allies that their security interests can be protected without their own nuclear capabilities. 12

#### THE MODERNIZATION VS. REDUCTION TRADE-OFF

#### Modernizing US nuclear forces in Europe

In case NATO does not give up on US nuclear forces in Europe, certain modernization decisions will be unavoidable. Otherwise, nuclear-sharing will wither away over time as ageing platforms become obsolete within the next five to ten years. But any modernization of nuclear-capable platforms would be hard to sell to the public in most European countries. Most importantly, such a decision would signal that the alliance is inclined to extend nuclear deterrence until 2050 and beyond – a proposition in stark contrast with current initiatives to renounce all nuclear weapons.

Today, there is only one type of US nuclear weapons stationed in Europe, the B-61 free-fall bomb. This warhead, first produced in 1966, be-

<sup>11.</sup> Sebnem Udum, "Turkey's Nuclear Comeback, An Energy Renaissance in an Evolving Regional Security Context", *The Nonproliferation Review* vol. 17, no. 2, July 2010, pp. 365-377.

<sup>12.</sup> See *Nuclear Posture Review Report*, op. cit., p. 31.

longs to the oldest types of US nuclear weapons. However, it has been modernized several times. The Obama administration has made it clear that it will conduct a full scope B-61 Life Extension Program to enhance safety and security.<sup>13</sup> As far as platforms are concerned, the US plans to replace its F-16 based in Italy and Turkey for nuclear missions with dual-capable F-35 Joint Strike Fighters (JSF) beginning in 2016.

There seems to be much more uncertainty regarding the modernization of aircraft used by European forces. To begin with, it is publicly not known to what extent Greece (where no US nuclear weapons are stationed anymore) and the Turkish Air Force still participate in NATO's nuclear-sharing. Both countries continue to take part in exercises that are related to nuclear training, but reports indicate that their pilots are no longer certified for nuclear missions. Apparently, both air forces serve as a non-nuclear air defense escort.

Belgium and Germany are the most unlikely to replace their current platforms for nuclear use, the F-16 and the Tornado, respectively. Belgium is not participating in the F-35 Joint Strike Fighter program, but rather concentrating on the Airbus 400M transport aircraft project. Brussels may in the future abandon all its fighter aircraft, leaving no room for future nuclear missions. Germany does not take part in the F-35 Joint Strike Fighter project either. In replacing the Tornado dualcapable aircraft, it is introducing the Eurofighter Typhoon into its air force for conventional operations. This new aircraft could be licensed by the US for nuclear missions, but this would make cost-expensive changes of the aircraft necessary. Moreover, it is doubtful whether the European consortium that is producing the Typhoon would be willing to disclose all technical details of the Eurofighter to the US - the Pentagon's precondition for issuing a nuclear license. Most importantly, the current conservative-liberal government in Berlin seeks the complete abandonment of US nuclear forces from German territory. This policy rests on a parliamentary consensus reaching across the entire party spectrum and resonating well with the German public. Any decision to modernize rather than forgo nuclear weapons would be opposed by the vast major-

<sup>13.</sup> Op. cit., p. 27-28.

ity of Germans. Against that background, such a decision seems extremely unlikely.

The Netherlands and Italy present a slightly different picture in that regard. Both countries participate in the F-35 JSF project, granting themselves the option for the introduction of such aircraft for nuclear missions. As of yet, both governments have not passed any decisions in that regard. The Hague gives Germany some political support in its efforts to make the European NATO allies nuclear-free. Italy so far keeps away from such initiatives.

In light of these political, financial, and technical uncertainties, a modernization of European platforms for nuclear use is doubtful in most cases. Whether individual countries would take such a decision if others choose not to do so, is an open question. He US could deem it necessary to continue basing nuclear weapons and related platforms in Europe and modernize the respective aircraft. But even if this were the case, nuclear-sharing would be ended as European NATO partners would not be involved any more. Taking into consideration that integrating NATO allies into the alliance's nuclear activities has been the main reason for the US to base non-strategic nuclear weapons in Europe, this possibility seems rather remote.

### Negotiating reductions of non-strategic nuclear forces in Europe

Russia's non-strategic arsenal is estimated at between 2,000 and 6,000 warheads. <sup>15</sup> Uncertainty as to the exact numbers suggests the need for more transparency to be reached through arms control initiatives. But such negotiations would face a number of complicated issues.

<sup>14.</sup> Ian Anthony and Johnny Janssen, *The future of Nuclear Weapons in NATO*, Berlin: Friedrich Ebert Foundation, April 2010; Ian Anthony, "NATO's Nuclear Future: New Security Challenges and the Role of Deterrence", *International Politics and Society* no. 3/2010, pp. 145-158.

<sup>15.</sup> Amy F. Woolf, *Non-strategic Nuclear Weapons*, Congressional Research Service Report for Congress, Washington, D.C., 14 January 2010, p. 17. The lower number reflects the number of deployed weapons and the higher number includes weapons in central storage.

For starters, there is no commonly accepted definition of the term 'non-strategic' nuclear weapons. The best that one can say is that this category covers all those US and Russian nuclear systems that are not subject to the New START and Intermediate-range Nuclear Forces (INF) treaties. Such weapons range from gravity bombs to sea-launched systems such as torpedoes or cruises missiles based on submarines and surface vessels, as well as to nuclear warheads for air and missile defense systems still stored in Russia. These weapons serve different military purposes. For example, the Russian navy apparently perceives nuclear weapons on attack submarines as absolutely essential to confront the US navy in a conflict, but the Russian Air Force believes its remaining gravity bombs to be insignificant. Whether such a great variety of weapons systems can be negotiated within the next round of arms control talks remains rather questionable.

Verification would be difficult, too. In recent agreements, verification mainly focused on the destruction of delivery systems. In the case of the remaining non-strategic nuclear forces, though, most of the delivery systems are of dual-use nature and are mainly operated in a conventional role. Therefore, verification would need to concentrate on the destruction of warheads. This would imply complicated issues of confidentiality. For the first time, accounting for individual warheads would become necessary, so that inspections would need to take place at nuclear warhead storage sites. <sup>17</sup>

Furthermore, it remains unclear to what extent Russia has any interest in negotiating its non-strategic forces. Mirroring NATO's Cold War attitudes, Russia is relying upon nuclear weapons as a counterweight to NATO's conventional advantages. More important, many in Moscow would see negotiations on strategic and non-strategic nuclear weapons as an unwelcome political concession in case the imbalance between

<sup>16.</sup> Miles Pomper, William Potter and Nikolai Sokov, "Reducing Tactical Nuclear Weapons in Europe", *Survival* vol. 52, no. 1, February/March 2010, pp. 75-96, p. 77-78.

<sup>17.</sup> Miles A. Pomper, Nikolai Sokov and William C. Potter, "Breaking the US –Russian deadlock on non-strategic nuclear weapons", *Bulletin of the Atomic Scientists*, 4 December 2009, http://www.thebulletin.org/web-edition/op-eds/breaking-the-us-russian-deadlock-nonstrategic-nuclear-weapons.

NATO and Russia in terms of conventional weapons is not addressed in parallel.  $^{18}$ 

In addition, when negotiations begin, there would be a temptation for Russia to try to influence public opinion in the West and to divide NATO governments. Moscow's goal is to introduce the basic principle that nuclear weapons should only be based on the territories of the countries that own them. This implies the complete withdrawal of US nuclear forces from Europe – a long-standing demand of Russian and Soviet foreign policy. At the same time, Russia is unwilling to abandon its own non-strategic weapons. Such a Russian approach would be popular with many European publics and governments alike, but opposed by others. Maintaining alliance cohesion, therefore, would be a tough challenge.

Finally, Russia can be expected to argue, as it already did in the 1980s, that British and French nuclear forces should become part of a future agreement. Particularly Paris can be expected to oppose such a move on the grounds that it does see all its nuclear forces as strategic and it regards the maintenance of its *force de frappe* as an element of its independent foreign policy. London, too, is not enthusiastic about complicating its already difficult decision process on the future of its Trident nuclear forces with participation in arms control negotiations.

On top of all these difficulties, one should not forget that the next round of US-Russian arms control talks will be a complex matter. Specifically, further strategic reductions seem unfeasible so long as Washington and Moscow do not reach consensus on how to deal with the missile defense issue.

Against the backdrop of all these complexities, the new strategic concept of NATO argues that the alliance should seek agreement with Russia to increase transparency on its nuclear weapons in Europe and the possible relocation of these weapons away from the territory of NATO members.<sup>19</sup> Indeed, such an approach seems to be promising at least as a first step.

<sup>18. &#</sup>x27;Reducing Tactical Nuclear Weapons in Europe,' op. cit.., p. 78.

<sup>19.</sup> Active Engagement, Modern Defence, op. cit.

#### REFOCUSING EXTENDED DETERRENCE

#### From Russia to the Middle East

Despite numerous efforts to improve NATO-Russia relations, including through the establishment of the NATO-Russia Council as well as Russian President Medvedev's participation in NATO's Lisbon summit, lingering suspicions on both sides remain. Russians perceive NATO's policy of enlargement as a challenge to Moscow's own goal of establishing a sphere of influence in what many call the 'near-abroad'. Against the background of their still vivid memories of Soviet occupation, new NATO members continue to perceive Russia as a threat. Russian oil cutoffs, trade embargos, cyber-attacks as well as the 2008 war against Georgia have all contributed to this threat perception. Indeed, it can hardly be expected that western and Russian interests will become identical in the near future. This is due to Russia's sheer size, making it both a European as well as an Asian player; its possession of a nuclear arsenal comparable only to the American one; as well as its domestic development, which combines both democratic and autocratic elements.

Still, Russia and the West share important interests. One of the latest examples has been the signing, after a relatively short period of negotiations, of the New START agreement to limit US and Russian deployed strategic nuclear forces. Another example is Moscow's acceptance of new and more forceful sanctions adopted by the UN Security Council that are meant to convince the Iranian leadership to change its current nuclear course. The NATO-Russian relationship can be characterized as a mix of cooperation and confrontation.

But NATO's extended deterrence is not only dependent on Russia and may continue to be even if NATO and Russia were to achieve substantial progress in their relationship. Only, its regional focus would shift from Russia to the Middle East. We do not know yet whether the E3 plus 3 – Britain, France, Germany plus Russia, China and the US – will be successful with their two-track approach of sanctions and incentives to stop Iran from developing a nuclear weapons option. Nor do we know whether military action will be taken to end Iran's controversial nuclear program, or what the result of such a military operation would be. What

we know is that an Iranian nuclear capability – even if Tehran were not to withdraw from the Nuclear Non-Proliferation Treaty (NPT) and openly test nuclear weapons – would definitely change NATO's security environment significantly (although it will never be comparable to the threat the Soviet Union imposed during the Cold War).

NATO partners at its southern flank would not be the only ones to feel less secure. In the event that Iran develops nuclear weapons and also ballistic missiles that could reach Berlin or Brussels within this decade, Central European NATO countries would also need to be reassured and protected. In addition, NATO could hardly be indifferent in case Israel or one of those Arab countries that participate in NATO's Mediterranean Dialogue or the Istanbul Cooperation Initiative became the victim of Iranian military pressure. In sum, as a consequence of a possible nuclear dynamic in the Middle East, this region would gain importance for NATO.

The United States is already cooperating with Israel as well as a number of Arab countries in the field of missile defenses and deploys such systems in some of these countries. If these efforts already underway were to become part of an American containment policy *vis-a-vis* a nuclear Iran, NATO would be affected. This holds true even if NATO's own missile defenses were not directly linked to regional defense architectures in the Middle East.

#### From nuclear weapons to missile defense

The Obama administration aims to reduce the salience of nuclear weapons. Its 2010 Nuclear Posture Review values conventional power-projection capabilities as well as effective missile defenses for regional security architectures.<sup>20</sup> Particularly missile defenses can be expected to gain importance.

As the Group of Experts on a New Strategic Concept for NATO observed, NATO missile defenses could enhance transatlantic sharing of re-

<sup>20.</sup> Nuclear Posture Review, op. cit., p. v.

sponsibility and reinforce the principle that security is indivisible.<sup>21</sup> NATO's new strategic concept describes the development of capabilities to defend populations and territories against ballistic missile attack as a core element of its collective defense. In fact, an extended deterrence strategy focusing more on denial rather than punishment might be preferable, provided that effective defense systems become available. Because such a strategy stresses the importance of defenses, it might overcome credibility problems always involved in extended deterrence mainly based on nuclear threats. During the Cold War, Europeans have always questioned Washington's promise to escalate to the strategic nuclear level in case a conflict with the Soviet Union had occurred. If extended deterrence relied more upon defenses, such credibility problems might become negligible, as the US would not put its own existence at stake. <sup>22</sup>

President Obama's missile defense plans include a number of important advantages as compared to George W. Bush's approach. In contrast to Bush's, Obama's defense architecture is not American-centric. The US now intends its missile defense effort to be multinational and integrated with NATO members' defense capabilities – a fact that led NATO secretary-general Rasmussen to welcome Obama's decision. Besides, Washington now focuses on more immediate and realistic threats, i.e. medium-range missiles that could hit Europe rather than intercontinental missiles that could reach the US homeland. The envisioned stationing of the sea- and land-based versions of the navy's SM-3 interceptors is more capable of defending Europe, including its southern flank (which was neglected by Bush). At the same time it is more flexible.<sup>23</sup>

A NATO missile defense system would make sense particularly with a view to a potential nuclear dynamic in the Middle East. Nuclear newcomers of that region would most likely not be as irrational as to directly attack NATO, which is still the most powerful military alliance in the world. But they might behave assertively or even conduct aggression

<sup>21.</sup> NATO 2020: Assured Security; Dynamic Engagement, Analysis and Recommendations, op. cit.

<sup>22.</sup> David S. Yost, op. cit., p. 16f.

<sup>23.</sup> Mark Fitzpatrick, 'A Prudent Decision on Missile Defence,' *Survival* vol. 51, no. 6, December 2009-January 2010, pp. 5-12.

against their neighbors. The alliance might want to respond to such action, because it feels responsible for maintaining international order. Moreover, NATO might be mandated by the UN Security Council for military operations in the Middle East. But if the aggressor possessed nuclear weapons, NATO might be deterred from intervention. To be sure, a first use of nuclear weapons against NATO would be without doubt responded to with a devastating counter-attack. But NATO could never be sure whether its deterrence would work.

This scenario suggests that a fundamental change is taking place in terms of the circumstances, under which deterrence needs to work. In the past, during the Cold War period, the main idea of deterrence was not to use military force in a relatively stable situation between East and West, at least in Europe. In the future, in a hypothetical world with more nuclear powers equipped with long-range ballistic missiles, those countries that feel responsible to protect international order will need to decide whether to use their forces in a contingency that might result in severe damage caused by the use of nuclear weapons by the aggressor. Deliberately accepting one's own vulnerability, as was the case during the Cold War, does not seem the appropriate strategic approach in such a context. Instead, effective damage limitation options would be a useful tool. Moreover, even limited missile defenses would have an impact on an aggressor's calculations.<sup>24</sup>

Missile defenses, moreover, will have an alliance dimension. Although NATO's strategic concept agreed upon in Lisbon avoids a link between the establishment of missile defenses and nuclear disarmament, a step-by-step build-up of defenses could replace in many ways the importance that nuclear-sharing has for NATO today. A NATO effort to establish missile defenses would keep the US committed to European defense. Allies could find new opportunities to actively participate in NATO force planning through arrangements similar to the Nuclear Planning Group. Finally, missile defenses would have a non-proliferation impact on allies.<sup>25</sup>

<sup>24.</sup> Anthony Seaboyer and Oliver Thränert, 'What Missile Proliferation Means for Europe,' *Survival*, vol. 48, no. 2, Summer 2006, pp. 85-96.

<sup>25.</sup> Oliver Thränert, 'NATO, Missile Defence and Extended Deterrence,' Survival, vol.

## PROSPECTS FOR NATO-RUSSIA MISSILE DEFENSE COOPERATION

Deterrence by punishment and deterrence by denial have never been an either-or. But in the years to come, NATO can be expected to increasingly shift from the former to the latter. This process will certainly take time. Elements of punishment will however not entirely go away because, as long as nuclear weapons exist, the alliance will maintain nuclear options. Moreover, more effective conventional strike options will gain prominence. But taking all this into consideration, missile defenses will become more important, while offensive capabilities will become less significant.

NATO's missile defense activities must be accompanied by efforts to cooperate in this field with Moscow. As has been rightly observed, without such an offer for dialogue and cooperation, missile defenses could severely damage NATO-Russian relations. NATO's invitation to Russia to cooperate in missile defenses extended at the Lisbon summit and Russia's agreement to discuss the issue are the first steps in the right direction. Whether NATO-Russia cooperation would work in practice, though, remains to be seen.

At first glance, the prospects seem relatively positive. Both sides perceive current trends in missile proliferation as increasingly threatening their interests. For the Obama administration and NATO alike, missile defense cooperation with Russia is attractive for several reasons. For one, the US and NATO missile defense plans are not directed against Russia, as has been reiterated by the US Nuclear Posture Review of 2010. Second, missile defense cooperation would help to enhance NATO-Russia relations in general and align Moscow in an effort to confront proliferators, most notably Iran. Third, western governments are aware that without NATO-Russia cooperation, missile defenses would stand in the way of further nuclear reductions.

<sup>51,</sup> no. 6, December 2009/January 2010, pp. 63-76.

<sup>26.</sup> Sam Nunn, Igor Ivanov and Wolfgang Ischinger, "All Together Now: Missile Defense", *New York Times*, 21 July 2010.

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From Moscow's perspective, the picture looks different. After the Bush administration's withdrawal from the Anti-Ballistic Missile (ABM) Treaty in June 2002, Russia was suspicious that the Bush administration's missile defense plans aimed to undermine Russia's nuclear second strike capability. While such fears could be diminished with the Obama administration's new missile defense approach, they still persist, particularly within the Russian military. Some in Moscow might still hope that public resistance in European NATO countries as well as budgetary constraints will compel the alliance to reduce or even abandon its missile defense plans. Such an outcome might be preferred by Russian military planners, with Russian-NATO missile defense cooperation being only the second-best solution. In addition, Russians are aware that their own defense projects in many ways are not comparable with US efforts. Any US-Russian cooperation would thus uncomfortably reflect the imbalance between the two Cold War antagonists. Moreover, Moscow recognizes that any NATO-Russia missile defense cooperation might negatively impact its relations with China. In any event, Russia's main interest is to reduce the unpredictability of US and NATO missile defense efforts. To that end, Moscow aims at integrating early warning and defense systems. Exchange of data only would not be enough for Russia. This has been made clear by President Medvedev at the Lisbon summit of November 2010.

In practical terms, already in 1998 the United States and Russia signed a common statement on the establishment of a Joint Data Exchange Center (JDEC) in Moscow, the purpose of which would be the prevention of accidental nuclear war through the exchange of information from each country's early warning system. The JDEC could also be used for the data exchange of missile launches by third countries. Regrettably, though, the planned JDEC has not been opened yet. Since President Obama took office, discussions about activating the JDEC have been revived. In June 2010, the US and Russia released a joint statement, renewing their commitment to exchanging data on ballistic missile launches with the ultimate goal of creating an international system to monitor, and exchange data on, the launches of ballistic missiles and space launch vehicles. On the NATO-Russia level, in 2002 a working group on theatre missile defense was established within the framework

of the NATO-Russia Council. This group conducted several simulation exercises aimed at enhanced NATO-Russian interoperation ability. After the Russian-Georgian war of 2008, these activities became the victim of the temporary suspension of the NATO-Russia Council meetings.

Many hurdles remain. Not only are technologies complex and cost-expensive, there are also difficult command-and-control issues. For instance, Russia would like to control the use of any asset it may make available to a common architecture, but NATO commanders have no intention to make the use of the missile defense system dependent on Russian authorization. The main problem, therefore, remains the lack of confidence between the parties. As long as more trust is not built, both sides would hesitate to reveal their vulnerabilities in the framework of enhanced missile defense cooperation. Moreover, as far as NATO is concerned, many still fear that information about western missile defense capabilities – and hence its deficiencies – could end up in Tehran or Beijing.<sup>27</sup>

As has been proposed by the Obama administration, a dialogue with Russia should be intensified to consider topics such as research or simulations and exercises with the aim of gradually developing elements of a joint missile defense architecture. In the longer term, consultations with China should also begin, since from Beijing's perspective, US-Russian missile defense cooperation would be a nightmare, given China's still limited offensive nuclear capabilities. But if it turns out that Russia is unwilling to cooperate with NATO in terms of missile defenses – a possibility that cannot be ruled out giving current Russian hesitations – NATO might conclude that it needs to meet new strategic requirements on its own.

#### CONCLUSION

Significant changes in NATO's nuclear posture as well as its missile defense policy will not occur over night. But slowly and steadily missile de-

<sup>27.</sup> Richard Weitz, "Illusive Visions and Practical Realities: Russia, NATO and Missile Defence", *Survival* vol. 52, no. 4, August-September 2010, pp. 99-120; Nikolai Sokov, "Missile Defence: Towards Practical Cooperation with Russia", *Survival* vol. 52, no. 4, August-September 2010, pp. 121-130.

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fenses will become more important for the alliance defense posture, while at the same time the significance of US nuclear forces stationed in Europe will diminish. Still, NATO will remain to be a nuclear alliance, but deterrence by denial will gain importance over deterrence by punishment. This process can be expected to be accelerated in case Iran becomes a nuclear power and the alliance's extended deterrence focus shifts from Russia to the Middle East. In case NATO were not confronted with a nuclear Iran, missile defenses would be developed at slower pace, given defense budget constraints.

In any event, NATO would better talk to Russia both about the future of nuclear arms in Europe and the prospects of cooperation in the sphere of missile defenses. But if Moscow is uninterested in close cooperation with NATO, the alliance would need to meet its strategic requirements alone.

In the coming years NATO should develop a missile defense posture in coordination with the Obama administration's missile defense plans; further reduce the salience of nuclear weapons; establish a dialogue with Russia about transparency and confidence-building regarding non-strategic nuclear weapons with a view to integrating this weapon category into the overall arms control agenda; and engage Russia in missile defense cooperation projects.