Missile Defense: Asset or Liability for Regional and International Stability

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Missile Defense Conference Summary

Introduction

The role of missile defense is a subject of contentious debate, at a time of growing concern over the spread of ballistic missiles and the prospect of rogue regimes acquiring nuclear weapons. In opening the conference, **Amos Yadlin** addressed a number of central themes which were discussed at the Conference: deterrence and ballistic missile defense (BMD) are two strands of today's security approaches. Are these two elements contradictory, or can they complement each other? As defense budgets are slashed globally, are highly expensive BMD systems remotely practical? Furthermore, if there is no such thing as a hermetic defense, do BMD systems have any value in addressing a non-conventional threat? Yadlin addressed these questions, and also discussed the advantages of BMD in terms of preventing damage, providing decision-makers with more time and flexibility and denying benefits to an adversary. These and other themes were discussed at length during the conference.

The Future of Missile Defense: A NATO Perspective

The proliferation of ballistic missiles in the hands of rogue regimes is one of the great challenges facing decision makers in the 21st century. In his keynote speech, NATO Deputy Secretary General, **Alexander Vershbow** addressed the role of NATO BMD in deterrence, the nature of the threat facing NATO and also whether there is any possibility of reducing tensions with Russia on the BMD issue.

Vershbow claimed that NATO's BMD capability will disrupt the calculations of adversaries, and make them think twice before attacking the Alliance. Furthermore, the BMD system can

minimize the catastrophic impact of an attack and even prevent it. BMD can complement the "deterrent role of nuclear weapons" but it cannot be a substitute for them.

At the Lisbon Summit in 2010, NATO and Russia agreed to work in cooperation on BMD, but it has been very difficult to put this into practice. NATO has made it clear to the Russians that its interceptors are designed to defend threats from short-, medium- and intermediate-range missiles from outside the Euro-Atlantic area, and will not threaten Moscow's strategic nuclear forces – a point which many Russian experts have accepted. The principal threat to NATO is from countries in the Middle East. However, Russia continues to insist that the United States provide legally binding guarantees that its BMD system will not be directed at Russia. This is a non-starter for the United States, as it would limit the ability of US and NATO BMD systems to meet grave threats. While Vershbow maintained that NATO still seeks the establishment of an integrated missile defense infrastructure that can protect both the Alliance and Russia, he pointed out that Russia was not amenable to compromise at present.

Vershbow also addressed the Russian claim that the recent P5+1 agreement on Iran's nuclear program would signify that a NATO BMD system was no longer necessary. He argued that this claim was not only "premature" but also "misinformed" since the BMD system in Europe is not directed at one particular country and "is not a defense against nuclear weapons but against delivery means…a defense against ballistic systems that could carry nuclear, chemical, biological or conventional warheads." Even if a verifiable agreement with Iran is achieved, the problem of ballistic missile proliferation will remain an acute one. At the same time, if international agreements are reached to reduce the problem of ballistic missile proliferation, the NATO BMD system would adapt accordingly. Vershbow concluded that BMD had the potential to enhance regional stability, and that it could become a "game-changer" in NATO's relations with Russia.

Israel's Missile Defense: Pros and Cons

Israel's Missile Defense: An Asset or a Drawback in a Nonconventional Scenario

Uzi Rubin presented the case for Israel's missile defense system as an asset against conventional and non conventional threats. He claimed that missile defense systems worldwide were established with nuclear threats in mind and now focus increasingly on non conventional threats. In contrast, Israel's missile defense system was established to deal with

non-nuclear threats, and is now focusing increasingly on a prospective nuclear threat. Israel currently faces a very acute threat, with hundreds of Iranian ballistic missiles, hundreds of Syrian ballistic missiles, thousands of Hamas and Islamic Jihad medium and light rockets, and tens of thousands of Syrian and Hezbollah light and heavy rockets. The development of smart missiles has only increased this missile threat.

While Israel currently faces a non-conventional threat, it carries unacceptable strategic implications. In this scenario, Israel's missile defense infrastructure is designed to preserve its ability to wage war while saving lives and protecting property to the greatest extent possible. All four layers of Israel's missile defense must remain in place to deal with nuclear and non-nuclear threats. The two upper layers are intended to deal with the threat from Iran. Israel is deploying Arrow II to deal with the nuclear threat.

Rubin presented three possible strategies for Israel in addressing the nuclear missile threat:

- Deterrence without defense (cold war – no longer applies)
- Defense without deterrence (SDI/ Japan today)
- Defense with deterrence (post cold war model)

The first option, deterrence without defense, cannot apply as it exposes Israel to unacceptable damage from the non-nuclear missile threat. The second option, defense without deterrence, is not viable as a perfectly hermetic defense against missiles does not exist. Reagan wanted to make nuclear weapons obsolete, and mistakenly believed that new technology could bring about a hermetic defense of the US homeland through the Strategic Defense Initiative (SDI).

The third option, defense with deterrence, is the only acceptable one for Israel. Deterrence against nuclear threats is based upon a reliable and survivable retaliatory force. Survivability requires that a sufficient number of retaliatory forces are still operational following a surprise nuclear strike. Thus even a less than perfect missile defense system can ensure that Israel can deter its adversaries. In the absence of directly negotiated, trustworthy and verifiable arms control agreements, Israel's missile defense system is an invaluable national asset against both nuclear and non-nuclear threats.

How Missile Defense Undermines Deterrence: The Israeli Case

Reuven Pedatzur presented the case against Israel's missile defense system. The Israeli defense establishment has already decided to implement a missile defense policy, with a

focus on the Arrow anti-ballistic missile system. The Arrow system was originally developed to meet a conventional threat. However, today, the main justification for the development of the Arrow system is the future threat of Iranian nuclear-capable missiles.

In the debate over missile defense during the 1960s, US Defense Secretary McNamara was influential in arguing against missile defense. He argued that the United States could not provide hermetic protection against Soviet nuclear missiles, and that in the event of a nuclear attack, the price paid would be insufferable. McNamara developed the mutually assured destruction (MAD) strategy: each side was clearly aware that it would be annihilated even if it were to succeed in surprising its rival with a missile attack. This strategy was developed as a form of deterrence against the use of nuclear missiles. Both sides were made aware that the use of nuclear missiles would ensure mutual destruction. Therefore, McNamara called for the abandonment of missile defense systems. This is difficult, since abandoning defensive measures entails adopting a way of thinking which is contrary to the natural human instinct of self-preservation. It took a number of years for McNamara's viewpoint to be accepted. In this way, the concept of MAD was formulated. The ABM Treaty which was signed by both superpowers in 1972 entailed the abandonment of missile defense systems, and was the cornerstone of strategic stability from that time until the end of the cold war.

Although the two situations are very different, the central principles of McNamara's concept can still be applied in the Israel-Iran context. Since a nuclear missile strike on Tel Aviv would be unbearable for Israel, an active defense system such as the Arrow can only be relevant if it provides hermetic protection. It is impossible to guarantee hermetic protection. From the moment an adversary (in this case, Iran) acquires a nuclear capability, every missile launched will have to be regarded as a nuclear missile. Israel must make it clear to the enemy that an intolerable price will be paid for a missile strike. If Israel detects that a ballistic missile has been launched towards it from Iran, it cannot wait for the missile to strike. If the costs of a nuclear attack are raised to an intolerable level, it will be in neither side's interest to launch a war. In order to achieve credible deterrence, Israel needs to develop a second strike capability, and have the ability to absorb a pre-emptive attack by an adversary, and still respond with devastating force.

In such a scenario, the Arrow system would become totally irrelevant. Deterrence will have greater success if the enemy believes that the deterrent party is determined to retaliate. The use of the Arrow system will send the wrong signal to the Iranians who may believe that Israel will wait to determine whether it is a nuclear warhead, before they decide to retaliate.

This will damage Israel's deterrent image. A central component of mutual deterrence would be the abandonment of defensive measures. Binyamin Netanyahu must begin to formulate a new strategic conception, and plan for the day after Iran acquires a nuclear weapon.

Conceptual Approaches: The Defense-Deterrence-Disarmament Triangle

Interactions between Missile Defense, Deterrence, and Disarmament: A Relativist Approach

Paul Schulte argued that BMD reflected the distrust and militarisation in international relations. The challenge of the second nuclear age is to manage an international order where rivalries increasingly take place in a nuclear context and are expressed also through an accumulation of ballistic missiles. In the coming decades, ballistic missiles with the most lethal warheads will be the most effective and easily procured weapons by aggressive revisionist powers. The assumption is that deterrence as a strategic imperative will continue indefinitely. However, waging deterrence is not a simplistic process, and not only requires investment but also well-thought out presentation and advocacy.

Using effective deterrence requires an understanding of an opponent's values and decision-making processes and those of one's own nation. Providing that BMD systems appear to be credible, they may succeed in reassuring public opinion in crises even when their interception rate is low, as was seen in Israel with the Patriots in 1991. Exoatmospheric interception of long-range missiles will be highly vulnerable to counter-measures, but it will be extremely cost-effective if it succeeds in negating a nuclear warhead. On the other hand, the success of Iron Dome indicates that the interception of short-range rockets is technically feasible, but involves an unsatisfactory economic exchange rate.

How much does the survivability of national deterrence against pre-emptive destruction need to rest upon BMD rather than other defensive measures? In general, it will always be likely that the possession of BMD systems will potentially add somewhat to national deterrence. The threat of the use of ballistic missiles can serve as a counter-intervention against states or alliances who might otherwise intervene to restore regional order. Devaluing their threatened use in many scenarios is likely to add to deterrence. However, no government will ever find it easy to expose its population to even a slight risk of WMD attack by active engagement in a discretionary intervention. BMD allows greater patience in crises because it enables countries to mitigate or absorb an enemy attack, and it arguably supports deterrence forces and

strategic assets. Furthermore, from a geopolitical perspective, joint investments in BMD can be a means of remaining close to the United States and its structure of alliances, particularly in the Middle East and East Asia. Nevertheless, the idea of deterring and devaluing the decisions of others to acquire ballistic missiles through BMD is both an attractive but uncertain prospect. The possibility of getting a single warhead through will seem a huge inducement to continue with nuclear weapons if one is considering a nuclear attack on antagonists. For those without a nuclear capability, big numbers will be indispensable to threaten successful prolonged conventional wars, in order to harm an adversary and overcome BMD systems.

It will always be difficult to judge whether BMD decisions will have gone right: like all deterrence-related calculations, they will be conjectural and hard to prove. They do risk generating international expectations that for conventional attacks, at least, deterrence should be exercised with restraint, relying on defense and denial rather than punishment. That may itself be an incentive to some aggressors. The prospective development of BMD systems can also frighten potential adversaries and even the uncommitted through the possibilities of coercion. Trying to diminish the chances of a potential opponent pulling off a preemptive attack will almost always be seen as diminishing their chances of retaliation. It raises the stakes, and presents questions whether states acquiring BMD systems are obliged to accept strategic vulnerability as a condition of stability. The United States was willing to accept this with the Soviet Union and the Russian Federation, but is unwilling to provide any formal permanent acceptance that its homeland will remain vulnerable to Chinese nuclear forces, let alone North Korean. Nowhere else in the world, at least not in the Middle East, is there any acceptance of a national obligation to accept strategic vulnerability which could be negated.

Strategic disparities could be intensified because missile defenses add to capabilities. For the Russians, even the remote possibilities of this kind seem to matter very much, although they are exaggerating for political effect. Many commentators have said these disparities do not matter to the United States which would be profoundly deterred by the possibility of a single nuclear warhead hitting a US city. This may be true of Israel. It raises the Kissinger question: what is strategic superiority and what can you do with it?

Schulte concluded that decisions over BMD are now inescapable except for countries in the safest circumstances. BMD cannot be a panacea, but incremental choices might offer worthwhile advantages. Certainty about the consequences of introducing or not introducing

defensive systems is not going to be attainable, but that is no reason to give up on a debate on planning assumptions.

From Disarmament to Missile Defense: Obama's Nuclear Approach

Emily Landau argued that in spite of President Obama's ambitious disarmament agenda, deterrence and stability have remained at the core of his thinking. The US-Soviet missile defense-deterrence relationship of the cold war years is best captured by the ABM Treaty of 1972 which regulated the missile defense deployments of the two superpowers.. The key terms here are deterrence and stability. The ABM Treaty was grounded in deterrence, but it sought to stabilize the deterrence relationship. By cutting BMD systems, it was believed that stability would be enhanced by halting the never-ending arms race.

When Obama was elected president, nuclear arms control was no longer focused exclusively on the US-Soviet bilateral relationship, but was manifested in his call for a world free of nuclear weapons. This engendered a much broader arms control agenda, encompassing a wider range of objectives, including a much stronger emphasis on non-proliferation, pursued vis-a-vis Iran and North Korea. Although the agenda which he introduced in Prague in 2009 was called a global disarmament agenda, deterrence and stability have remained central. Obama's disarmament agenda reflected new thinking that was first codified in a significant manner in January 2007 by the four former eminent statesmen (Kissinger, Nunn, Shultz and Perry) who called for a world free of nuclear weapons. They argued that nuclear threats had changed, with less of a threat from Russia, and more of a danger that nuclear weapons could fall into the hands of terrorists. The idea was that the US could now afford to reduce its nuclear arsenal, and the terror threat makes it imperative to do so. The notions of strategic stability and deterrence, however, remain a key part of their thinking and that of Obama as well. This was evident in a later article by Kissinger and Scowcroft in April 2012, where they expressed concern that US nuclear reductions might go too far, possibly undermining strategic stability. They maintained that nuclear deterrence remains essential for ensuring strategic stability.

The theme of strategic stability was also prominent in the Nuclear Weapons Employment document released in June 2013 by the US Department of Defense. The notion that nuclear arsenals could be cut by up to a third as Obama himself had advocated on the same day in Berlin, rested on the notion that this could be done while maintaining strategic stability.

However, there are some mixed messages in Obama's approach on the US nuclear arsenal. On the one hand, Obama calls for a world free of nuclear weapons. On the other hand, Obama's policy review has advocated keeping all three elements of the US nuclear triad, and calls for upgrading and modernizing US nuclear warheads.

The debate over BMD in Europe is taking place in an old-new context. On the one hand, the nuclear policy of the Obama Administration shows more elements of continuity than a break with strategic thinking that was characteristic of the cold war years. On the other hand, it is new because the arms control agenda has been broadened. The US also has to maintain stability not only with Russia but also with China. The mix of disarmament and non-proliferation with both global and regional agendas intertwined, and with deterrence and stability still at the forefront, means that BMD plans are taking place in a new and more complex environment. The US claims that BMD in Europe is necessary to confront emerging threats from rogue states: in Europe, this means Iran. Russia's opposition to the BMD system is fuelled by cold war thinking, with the claim that the system weakens Russian deterrence. The result is that the US is continuing with BMD even at the cost of upsetting Russia, even as it plays up possible diplomatic movement regarding Iran's nuclear ambitions.

The employment of BMD in preparation for failure of the diplomatic effort to stop Iran's nuclear aspirations has serious implications for US deterrence vis-à-vis Iran. The continued support for BMD appears to be a more convincing message from the Obama Administration than the guarded optimism regarding Iran. Indeed, continued adherence to BMD actually underscores implicitly the failure of arms control in its non-proliferation manifestation: the inability to make a convincing argument that Iran will be stopped by ongoing diplomatic efforts. In facing a possible nuclear-armed Iran, US BMD is probably being thought of as an additional layer of protection for European allies beyond US extended deterrence. In the context of ongoing efforts to stop Iran (in the nuclear realm) through negotiations, deterrence takes on a somewhat different meaning. That failure is tied up with the inability of the US to convince Iran that there will be serious consequences if Iran goes for nuclear weapons. Nevertheless, one should be careful not to draw conclusions from weak US deterrence in a negotiating situation for its expected strength in a scenario where Iran could contemplate using nuclear weapons. In the latter scenario, it is still probably the case that extended deterrence would be strong backed by BMD. But these are the questions that arise in the current much more complex nuclear arms control environment that the US and other states are grappling with.

What Impact will Missile Defense Have on Extended Deterrence over East Asia?

Bruce Bennett focused on South Korea's strategy of defense in the face of the threat from North Korea. He began by discussing the extent of this threat. It is thought that North Korea possesses some 1000 theater ballistic missiles (TBMs) and considerable numbers of nuclear, chemical and possibly biological weapons. It is likely that North Korea would use relatively few of its ballistic missiles with conventional warheads. They would be mainly armed with WMD.

Were North Korea to target Seoul, for example, using a 10 kiloton Ground Burst nuclear weapon, within the range they have tested, 180,000 people could be killed, with about 160,000 people injured. The economic damage sustained could be anything from $0.2 to $1.5 trillion with one nuclear weapon. Some may believe that Patriot missiles are very expensive at about $5 million each. However, if one can takes into account the massive economic damage (up to $1.5 trillion), the cost is trivial. This should not be about the trade-off between the cost of the missile and the cost of the interceptor. It is about the trade-off between the cost of the interceptor and the damage that will be prevented. In this case, immense damage will be prevented. The danger that a warhead may carry chemical or biological weapons must also be taken into account, but there are a lot of uncertainties here, depending on a number of elements including the atmosphere and wind direction.

South Korea does not rely solely on missile defence. President Park is considering defensive measures such as a "kill chain capacity" and Korean Air and Missile Defense (KAMD). This is no longer purely extended deterrence from the United States. The Koreans have shown that they need many of their own capabilities. They are exploring the possibility of executing counterforce and missile defense without consulting US forces. This is a departure from extended deterrence, and the United States has started to realize that this is really different.

The South Korean 'Kill Chain' involves three elements: intelligence, counterforce and active defense (missile defense). Counterforce includes targeting not just the missiles but the leadership. South Korea will have hundreds of ballistic missiles in place by 2017 covering the whole of North Korea. There are also cruise missiles which can hit underground launchers, as well as fighter aircraft and armed unmanned aerial vehicles (UAVs). In regard to missile defense, the SM3 interceptors and THAAD are the elements that will come directly from the United States. South Korea does not have a medium or upper tier system. It has Patriot

missiles, but their range is limited. South Korea is around five times the size of Israel, so it will need a lot of Patriot batteries to protect the country.

If North Korea has 1000 TBMs with an 80 per cent reliability rate, that means that around 800 can be launched and reach targets. In turn, if South Korea has 600 interceptors with a 70 per cent kill probability, then 380 missiles will reach their target over time. That is an unacceptable outcome if they are carrying WMD. So why does South Korea not purchase [additional] missile defences? The problem is that with the high cost of interceptors ($15-20 billion alone), this is unaffordable. The South Korean military research development and acquisitions budget is $9 billion right now. Instead, a counterforce element has been added. If the counterforce can destroy 600 missiles, and the missile defenses are added to deal with the 320 or so remaining missiles that are launched, the threat is reduced significantly.

However, there are liabilities with this approach. If South Korea relies on retaliation, North Korea may not be deterred in an attempt to conquer the country. The South is hoping to achieve deterrence by making it clear that if North Korea loses in its attempted conquest, the regime will be destroyed. That has always been the South Korean end state which is unacceptable to the North. Nevertheless, timing is everything in this scenario. Were North Korea to disperse its missiles from its underground storage facilities, then the ballistic missiles used to destroy them will not be effective. A very unstable situation could ensue in the event that the South attempts a preemptive strike. South Korea will need to ask itself whether it should risk getting caught in an escalatory spiral, if it pursues the counterforce option. South Korean forces are still under US command. Could this be carried out without US approval?

Missile Defense in Practice: Middle East Perspectives

The Next New Kid on the Block?

Gallia Lindenstrauss presented the Turkish perspective on missile defense. Turkey has historically viewed missile defense as a security priority as a result of three main threats: 1) The threat from Saddam Hussein's Iraq, 2) Syria's stockpile of chemical weapons 3) Iran's nuclear program. The country does not currently have independent missile defense capabilities and depends mainly on NATO. Iraq is no longer a concern for Turkey, while Syria is in the process of eliminating its chemical weapons arsenal. Turkey is today ambiguous over the Iranian nuclear threat.

In 1997, Turkey expressed interest in purchasing Israel's Arrow II, and commenced negotiations to develop a coproduction agreement with Israel. The United States presented objections to this. Later, trilateral negotiations involving Turkey, the United States and Israel did take place, but these talks ultimately failed. Turkey encountered a severe financial crisis, and post-9/11 realities deterred Turkey from cooperating with the US and Israel on this matter, fearing it might also become a target for radical groups. In 2011, Turkey was asked by NATO to host a radar on its territory. Turkey agreed but refused to the naming of Iran as a threat. Turkey was worried that it would be targeted, and was concerned also that the radar would benefit Israel.

In 2007, Turkey posted a tender for an off-the-shelf purchase of a missile defense system. In 2013 the tender was cancelled and reposted as a coproduction tender. China's CPMIEC won the tender after it offered the lowest price ($3.4 billion for a $4 billion tender), promised the earliest delivery (2017) and was generous regarding the extent of coproduction.

It is unclear whether or not the missile defense deal with China will materialize. On the one hand, the deal may go through since the issue of joint production in general has been important for Turkey in recent years – especially, with regard to missile defense. A deal with China could address this. The issue of national pride is also a factor as is China's low price. Finally, Prime Minister Erdogan was personally involved in the tender and may be less likely to change his mind. On the other hand, Turkey may be forced to cancel the Chinese missile defense deal because Turkey will face challenges integrating the Chinese and NATO systems, since they are not interoperable. This will not only require a larger budget, but is also strongly opposed by US and NATO officials. Furthermore, the Turkish military prefers the Patriot System. The understanding with CPMIEC might have been used to pressure the European and American companies. One final point is that coproduction slows down the procurement process. The decision that is made may ultimately tell us a lot about Turkey's international orientation.

Gulf Perspectives on Missile Defense

Yoel Guzanky addressed four elements of BMD in the Persian Gulf: 1) the threat posed by Iran, 2) the strategic vulnerability of the Gulf Cooperation Council (GCC) to asymmetric warfare, 3) the progress made so far in BMD in the Gulf, 4) the goals of the United States in the near and more distant future, and 5) the main challenges that lies ahead.

Iran's main military threat to the GCC states is its superiority in surface-to-surface missiles and additional maritime asymmetric capabilities. Iran has the largest arsenal of surface-to-surface missile in the Middle East, with more than 1000 missiles ranging between 150-2000 kilometers, threatening mainly the GCC states. Iran is working to improve their accuracy and destructive force. Iran has threatened to fire at American bases as well as strategic facilities such as water desalination installations, oil refineries, and power stations. A missile attack on oil refining and production facilities along the Gulf's western shore could have a more serious impact on the global economy than an Iranian attempt to block the Strait of Hormuz.

The status of BMD in the Gulf has changed in recent years. Between 1991 and 2006, the GCC states have pursued Patriot Advanced Capability (PAC-2) batteries which have limited surface-to-surface interception capabilities. Since 2006, the GCC States have increased their interest in BMD with Saudi Arabia, Kuwait, the UAE, and Qatar pursuing an upgrade to the more apt PAC-3 configurations. Guzansky noted that CENTCOM also has deployed Patriot PAC-3 batteries in Bahrain, Qatar, UAE and Kuwait, and has stationed warships equipped with the AEGIS system in the Gulf. Qatar and the UAE have requested the THAAD system, and Saudi Arabia is also considering the procurement of THAAD and SM3 interceptors on Aegis ships. Between 2011 and 2012, collective defense spending by the six monarchies grew by 20 percent. Moreover, between 2008 and 2011, the monarchies spent more than $75 billion on defense.

The United States has long sought an integrated BMD system in the Gulf, but the rivalries between the states have undermined this aspiration. Guzansky outlined five US goals and objectives: First, it wishes to defend US forces deployed in the Gulf. Second, it wants to protect oil infrastructure and strategic installations. Third, the United States wants to signal its commitment to defend the six monarchies. Fourth, although not an official goal, the United States seeks to help deter and possibly contain a nuclear Iran. Finally, the United States wants to improve cooperation between the GCC states.

The rivalry among GCC states is one of the main challenges to BMD in the Gulf. There is a view that Saudi Arabia will have less of an incentive to acquire a nuclear capability because of BMD. Guzanky discounts this view. Iran's nuclear posture and the relationship between Riyadh and Washington will have a stronger influence on such a decision.

BMD acquisition in the Gulf takes place on a bilateral country-by-country basis. An effective missile shield in the Gulf will require the states to share information, put aside rivalries and coordinate arsenals.

Although some claim that BMD might be a disincentive for Saudi Arabia to acquire nuclear weapons in the future, Guzansky believes the situation is more complex. He argues that proliferation decisions like this depend more on the broader geopolitical context, on Iran's future nuclear posture and on the relationship between Riyadh and Washington. An effective shield would require the GCC states to share information and coordinate their individual arsenals.

There is a view that a stronger Iranian threat will lead to greater Gulf cooperation. Guzanky concludes that the opposite is the case: certain countries may decide to move closer to Iran and bandwagon out of fear. Cooperation will therefore be even harder.

Missile Defense: Stabilizing Force or Barrier to Cooperation in NATO-Russia Relations?

What Will an Iran Deal mean for NATO-Russia Relations?

Azriel Bermant examined the issue of the tensions between NATO and Russia over BMD against the backdrop of the recent P5+1 interim agreement with Iran over its nuclear program. Since the United States has maintained that its European Phased Adaptive Approach (EPAA) BMD system is designed to defend Europe from Middle East threats, with an emphasis on the Iranian threat, Russia has claimed that there is no longer any justification for the BMD system if Iran were to agree to dismantle its nuclear program. If the Iranian threat recedes, is there a justification for a very costly and divisive BMD system?

The idea behind the EPAA is to bind US security to that of the West, and to provide firm security guarantees against a threat from the Middle East. Teheran possesses missiles which could reach targets in Southeast and even Central Europe. Nevertheless, Russia has expressed its consistent opposition to the NATO BMD system, claiming that it is a threat to its strategic nuclear forces. Moscow has also dismissed US reassurances that the BMD system is designed to counter an Iranian threat.

Some of Moscow’s anger over the BMD system is related to the legacy of NATO’s expansion eastwards. The BMD facilities in Central and East European countries require the

presence of US forces on the ground: in this way, the United States is strengthening its military commitments to key countries in Russia's 'near abroad'.

In his conclusion, Bermant maintained that in spite of the agreement with Iran, there would probably not be any impact on future NATO BMD deployments in 2015 and 2018. NATO-Russia tensions will remain for some time to come. Iran's nuclear infrastructure would have to be dismantled completely before countries such as Bulgaria and Romania could feel safe. Iran could also renege on an agreement, and break out to obtain a nuclear capability. Unless Iran's nuclear program is dismantled and the weaponization issue is addressed, an agreement is likely to bring only a temporary respite. Eastern and Central European countries would be opposed to BMD concessions, as concerns rise in countries such as Poland and the Baltic states over Russian intentions. They would like US forces to remain in the area. Moreover, the United States is seeking to increase its credibility among its European allies, including former Warsaw Pact countries. It would be problematic for the United States to withdraw its BMD commitments now.

Russian Countermeasures against New Missile Technologies

Igor Sutyagin argued that Russia does have major concerns over the Iranian and North Korean missile threat, although many of its practical steps are taken to negate American and Israeli systems. Russia has deployed a new generation of radars around its territory, as the existing framework of early warning radars is obsolete. The new generation of radars are also more affordable. Russia has nine early warning radar sites, a number of which are intended to provide protection from Iran and North Korea.

Half of the Russian TBMD units are concentrated near Iran. It is important to draw distinctions between Russia's interests and the Kremlin's interests. In this case, Russia and the Kremlin perceive threats in absolutely different ways. Russian military planning signifies that Moscow is concerned about developments in Iran and North Korea. The capital city of Kaluga, for example, is currently within reach of Iranian missiles: just 200 km from Moscow. Thus, Russian military concerns over the Iranian threat contradict the official propaganda of the Kremlin which claims that Iranian and North Korean missiles do not present a danger and cannot justify global missile defense systems.

Russia has developed countermeasures to negate American and Western systems. American systems such as PGS/ArcLight provide the benchmark against which Russian systems are developed. The Rubezh/Avangard missile systems, for example, have been developed to deal with the United States and not Iran. Russia does not need an ICBM which is extremely mobile for Iran.

Russia also has concerns over Israeli BMD systems, such as 'David's Sling'. It has developed the'Iskander-M' which is a highly maneuverable and agile missile possessing the potential to negate 'David's Sling'. The 'Iskander-K' can carry cruise and ballistic missiles, and has been developed to disrupt interception attempts. It is probably the only short-range tactical ballistic missile which carries its own penetration aid system. It carries an explosive electro-magnetic pulse (EMP) device. It can effectively blind anything within a range of 400 meters. The system has been named 'Atropus' (inevitability) by the Russians. The employment of this device will inevitably lead to disruption of missile interceptions. Russian designers have also developed the 'Yakhont' which is part of the Bastion coastal missile defense system, and has been deployed in Syria. The 'Yakhont' has the capability to attack ground targets with a range of 300 kilometers from launch.

Sutyagin expressed considerable pessimism regarding the prospects for NATO-Russian BMD cooperation. Regardless of Russian concerns over the Iranian and North Korean threats, its practical steps are focused on negating American, Israeli and western systems. Cooperation cannot take place if one is focused on negating one's partner's systems.

Sutyagin concluded by challenging Landau's claim that Russian objections towards NATO missile defense are fuelled by cold war motives. Indeed, he stated that the opposite is the case: The Russian attitude is fuelled by an understanding of post cold war realities, including the awareness that Russia is losing its international influence. Effectively, the Kremlin believes that the only way to address this situation is to preserve a cold war-style environment. The Kremlin has three tools to restore its international influence: oil and gas supplies, the UN Security Council veto and its strategic nuclear potential. Russian oil and gas supplies could be undermined by the Americans with their shale revolution. The Russian veto at the UN was challenged by the US and the UK over Libya. Thus, the Kremlin perceives that the only tool left in their possession is their strategic nuclear potential. This is why the Kremlin politicians would like to maintain a cold war environment, and why there is little prospect of cooperation between NATO and Russia.

A Central European Perspective on the NATO BMD System

Petr Chalupecky presented a unique personal perspective on the Czech Republic's participation in negotiations over the NATO BMD system, and also provided his assessment on the future prospects for NATO BMD. The Bush Administration decided to deploy a radar in the Czech Republic and ground-based interceptors in Poland which would serve as a countermeasure to the nuclear and ballistic missile threat facing Europe and the United States, while complementing the two missile defense sites in the United States. The Czech government was enthusiastic about the deployment, since they acknowledged the existence of a credible threat which justified their participation in the BMD system. Secondly, there were technological incentives, since the Czech Republic was eager to obtain access to BMD knowhow and high technologies. Thirdly, there were political advantages in a stronger bilateral relationship with the United States and benefits from the presence of a major ally on its territory. Furthermore, the Czech Republic saw an opportunity to strengthen NATO's capabilities, and believed this would enhance cooperation among Alliance members.

Russia was a difficult partner throughout negotiations over the NATO BMD system. The Czech side was already familiar with the Russian claim that the BMD system would disrupt the strategic balance and threaten the Russian nuclear arsenal. However, it became clear to the Czechs that the genuine Russian motivation for disrupting the BMD components in Europe was strictly related to geopolitical calculations. Thus, Russian officials stated that they would not object to BMD assets being placed in Turkey, but deployments in Central Europe would be a problem. Chalupecky concurred with Landau that this was an example of Russian cold war attitudes.

After the Obama election victory, the Czechs sought to convince the United States to continue with the arrangement. However, it was difficult to obtain solid approval from the Czech Parliament, and the Americans sensed that the Czechs would not be able to deliver a guarantee of support for the system. In turn, the Czechs were uncertain of the US support for the arrangement. The European Phased Adaptive Approach (EPAA) BMD system was finally announced on 17 September 2009. The United States maintained that the new system would provide a more flexible response to the threats. Secondly, they acknowledged that the ICBM threat was not imminent, but that there were short-, medium- and intermediate-range missile threats. These were the most pressing problems, and the GBI systems were not the best way to counter them. Thus, the United States opted for the SM-3 type interceptors which were present on Aegis ships and could be easily consolidated, and were much cheaper than the

GBI versions. However, the Central Europeans sensed that the Americans had gone ahead with a new system in order to improve relations with the Russians.

Thus, NATO swiftly integrated the EPAA with the 'old' NATO BMD system: the Active Layered Theater Ballistic Missile Defense (ALTBMD). The Czech Republic is no longer actively involved in deliberations over NATO BMD. However, it remains a strong supporter of the deployment of the BMD assets in Central Europe. It does not matter much to Prague that they are not going to be deployed in the Czech Republic: it is very important that the assets are in Poland and Romania. The BMD assets in central Europe are important for cohesion and East-West solidarity among allies within NATO.

Chalupecky claimed that the Russian goal remains to gain maximum control over NATO BMD or to cancel the project altogether. While he believes that there is some scope for cooperation with Russia, for example, in sharing early warning systems, the Russians do not view this as a priority. Chalupecky claimed that there was excessive optimism at the 2010 NATO Lisbon Summit regarding the possibilities of NATO cooperation with Russia. When Russia's Defense Minister Shoigu recently announced that Moscow was taking a break from negotiations with NATO, and that it would commence bilateral negotiations with the United States, this came as no surprise. Chalupecky noted that when there is a strategic problem, the Russians always go to Washington rather than Brussels.

The Central Europeans believe that it is essential that the third phase of the EPAA is completed. Since the fourth phase of the EPAA has already been cancelled, a failure to complete the third phase would send another bad signal regarding the US commitment to Central Europe – especially, with all the talk of the US rebalancing and the declining American presence in Europe. This debate is being fuelled by the assertion that the US and NATO might reassess their MD plans if the threat environment changes. This is something the Russians are building upon when talking about the potential cancellation of the third phase, and it is unclear what the US will do. The Poles and other Central European allies are very nervous that the third BMD deployment in 2018 will not take place. Since the United States has to work with the Russians over Syria, Iran and arms reductions, it is possible that the third phase of the EPAA will fall victim to a round of rapprochement between the powers. Central Europeans would not like to see that happen.

Bermant, Sutyagin and Chalupecky were all pessimistic regarding the future prospects for cooperation between NATO and Russia over BMD.

Missile Defense: An Israeli Perspective

In his keynote address, **Yaakov Amidror** focused on the important role of missile defense in defending Israel from attacks carried out by terrorist organizations based in Gaza and Lebanon. At present, around 150,000 rockets and missiles are threatening Israel (this doesn't include the Iranian missile threat). Echoing points made earlier by Yadlin, Rubin and Bennett, he argued that while the price of interceptor missiles might be steep, this should be weighed against the amount of damage caused by a missile or rocket. Israel has faced missile threats before but the intensity of today's threat is unprecedented, and the country has to be ready to deal with it. Amidror listed the three components of Israel's approach in defending the country from missile attacks: (1) prevention, (2) active defense, and (3) passive defense.

First, Israel should invest its resources in preventing attacks before they are carried out. This should be done by establishing an air-operated system that will target and prevent launchers from launching rockets. This will be difficult and will pose a great challenge to the intelligence branch because of the range of the missiles. This system will require extensive surveillance abilities on the border with Lebanon in order to identify, locate, and target launchers. It will need to provide a real-time solution to the difficulty of identifying those carrying out the attacks.

Aside from carrying out aerial attacks on the launchers, the IDF should be prepared to have boots on the ground in order to tackle launchers inside southern Lebanon. A moral dilemma exists in targeting rocket launchers as they tend to be based in civilian areas. Does Israel take action against the launchers and risk considerable civilian casualties, or should it exercise restraint and face the danger of rockets over Tel Aviv? Amidror urged the international community to take immediate action against the placement of launchers in urban areas which endanger human life.

In regard to active defense, Israel will have 3.5 layers of interceptors: Arrow III, Arrow II (half layer), David's Sling, and Iron Dome. The development of these active defense systems is one of the best examples of the fruitful cooperation between the United States and Israel, both in terms of development capabilities and funding. This has been the case with the Arrow system and David's Sling (joint ventures). Iron Dome is an Israeli system, but the United States is assisting with the funding of future systems. Looking forward, it will become necessary to develop an integrated system ("a system of systems") that will cover the whole of Israel, and activate the different systems in the most efficient and cost-effective way. The

question is, how does Israel prioritize the location of its missile defense systems? Does it prioritize the allocation of defense systems in civilian areas or in military installations? It cannot defend all locations at the same time. Israel has to prioritize in such a way that it can win the war without risking the lives of its civilians.

Amidror outlined his vision for Israel's passive defense. He maintained that every apartment in Israel should have a shelter, rather than one per building. Israel needs to decide which facilities are sensitive enough to be defended separately, and which need to be reinforced to survive an attack if active defense fails. Amidror concluded that Israel needs to establish a new command and control system as soon as possible. This will allow the military to win the war, and enable other domestic institutions to secure the protection of the home front.