GLOBAL BALLISTIC MISSILE DEFENCE:
A SOLUTION TO THE NATIONAL MISSILE DEFENCE CONTROVERSY

by Lieutenant-Colonel Mario Lagrange

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INTRODUCTION

The proposed deployment of a National Missile Defense (NMD) by the United States (US) has generated criticism from governments and organizations around the world. The US feels compelled to deploy NMD in order to defend its population against the ever-increasing threat of ballistic missile attack, due to the proliferation of missile technology, notably to countries such as North Korea, Iran and Iraq. At the centre of this controversy lies the 1972 Anti-Ballistic Missile (ABM) Treaty, which limits the scope of any Ballistic Missile Defense (BMD) system. Russia has stated that the US NMD proposal would not only violate the ABM Treaty but also start a new nuclear arms race. Although Canada has not taken a formal position with respect to the US NMD proposal, this may be an opportune time for Canada to propose a global approach to ballistic missile defence. GBMD will be described as a solution that may be agreeable to both the US and Russia, and one that will provide the safeguard needed to counter the Intercontinental Ballistic Missile (ICBM) threat while alleviating the fear of a new nuclear arms race. Finally, leveraging on the good relationship that Canada has with several nations involved in the BMD debate, this paper will argue that Canada is well placed to champion this GBMD initiative.

BALLISTIC MISSILE THREAT

The assumption at the end of the Cold War was that the threat from nuclear attack would disappear along with the Berlin Wall. Unfortunately, this has proven far from true. The current and imminent threat from ballistic missiles configured with weapons of mass destruction (WMD) is greater today than ever. The ballistic missile capabilities from “states of concern”, which include North Korea, Iran and Iraq, have greatly amplified the customary threat from China and Russia.

Following an assessment of the existing ballistic missile threat, this paper will briefly review the issues and controversy surrounding NMD. This will lead to a proposed global approach versus a national or continental system for ballistic missile defence. GBMD will be described as a solution that may be agreeable to both the US and Russia, and one that will provide the safeguard needed to counter the Intercontinental Ballistic Missile (ICBM) threat while alleviating the fear of a new nuclear arms race. Finally, leveraging on the good relationship that Canada has with several nations involved in the BMD debate, this paper will argue that Canada is well placed to champion this GBMD initiative.
large strategic nuclear arsenal comparable to that of the US. Official numbers of strategic nuclear warheads reported in January 2000 were 6,472 for Russia and 7,763 for the US.\(^1\) Maintaining a large nuclear arsenal, associated ballistic missiles, and supporting infrastructure has been problematic for Russia in view of its recent economic difficulties. This was corroborated by President Vladimir Putin who recently announced that Russia needs to reduce its strategic nuclear arsenal to as low as 1,500 warheads.\(^2\) Although the total number of nuclear warheads has been on a constant decline, Russia’s strategic nuclear arsenal remains a very significant military capability.

The most troubling issue for Russia is not its large inventory of strategic nuclear arsenal, but rather the deterioration of the infrastructure supporting this capability. The questionable reliability of the Russian early warning system has increased the number of false alarms, which, combined with the hair-trigger alert status of many strategic ballistic missiles, could result in an unwarranted retaliatory launch. “For example, in 1995 Moscow mistook the launch of a Norwegian two-stage geophysical research rocket near the Russian border for a potentially threatening missile launch.”\(^3\) This false alarm was recognized only minutes after a countdown had been initiated that would have launched a retaliatory strike. While both the US and Russia have allegedly put in place effective means of preventing such eventualities, the threat of nuclear ballistic missile retaliation, triggered by a false alarm or an unauthorized launch, remains a distinct threat to global security.

The threat from China, while not as massive as that of Russia, remains very real from a geopolitical point of view. Beijing’s determination to become the dominant power in East Asia makes its twenty or so strategic ICBMs a definite threat to global security.\(^4\) Although China currently has a “no first use” policy, their ICBMs represent a strong reminder to other nations that China will ensure its internal security through nuclear defence if necessary. China’s ongoing military modernization programme, based on Russian arms sales, is further straining its relationship with Taiwan.\(^5\) The latter has been pursuing discussion with Washington to acquire and deploy a Theater Missile Defense (TMD) capability. Should the tension between China and Taiwan result in a military conflict, China may use its strategic ICBM to deter any third-party intervention in an “internal security matter”. Hence, the strategic ballistic missile capability of China must be considered in the global ballistic missile threat.

Neighbours of China, India and Pakistan have both intermediate-range ballistic missiles and nuclear weapons.\(^6\) India has been developing Surya, an ICBM believed to be capable of delivering a nuclear device over a distance of 12,000 km. Relations between India and Pakistan are extremely volatile and could result in armed conflict between two nuclear-capable states. If such an exchange were to occur, the potential use of nuclear weapons would pose a definite threat to regional stability and threaten global security.

North Korea receives massive technological assistance from China. Unlike China, North Korea has declared a “military first” policy and “believes that a strong military, capable of projecting power in the region, is an essential element of national Power.”\(^7\) In 1994, the US came close to launching air strikes against North Korea for its refusal to stop a civilian nuclear reactor programme, which was believed to be a cover-up for development of a weapons-grade plutonium manufacturing facility.\(^8\) An agreement reached between Pyongyang and Washington compensated North Korea in return for abandoning its nuclear missile programme. President George W. Bush stated in March 2001 that “[p]art of the problem in dealing
with North Korea […] is that there’s not very much transparency. When you make an agreement with a country that is secretive, how are you aware as to whether or not they are keeping the terms of the agreement?”

Two weeks following the President’s comments, North Korean state-operated radio reported that America’s attempts to scrap the 1994 agreement would amount to “a declaration of war.” This is not the first time that North Korea has been suspected of breaking its pledge not to develop nuclear weapons. In 1999, American intelligence reported that North Korea was building a secret nuclear weapon plant. All attempts by the US to inspect the site have been denied. It is possible, therefore, that North Korea may already have the capability to threaten the US or any of its allies with WMD. To better assess the ballistic missile threat against the US, a special commission was formed.

The Rumsfeld commission reported in July 1998 that “[c]oncentrated efforts by a number of overtly or potentially hostile nations to acquire ballistic missiles with biological or nuclear payloads pose a growing threat to the United States…[North Korea, Iran and Iraq] would be able to inflict major destruction in the US within about five years of a decision to acquire such capability (10 years in the case of Iraq).” These predictions were quickly corroborated by North Korea’s unexpected testing of a three-stage rocket on 31 August 1998, which overflew Japan, causing debris to land near the coast of Alaska over 4,000 km away. Theoretically this Taepo Dong 1 “space launch vehicle” could be converted into an ICBM capable of delivering a small biological or chemical warhead as far as North America. North Korea is also developing its Taepo Dong 2 rocket that could potentially deliver a nuclear payload to the US. This unexpected launch reinforced the premise that North Korea will soon be able to directly threaten other states, including the US, with ICBMs or at the very least use them as a form of coercive diplomacy. Kim Jong II reported to visiting South Korean media executives in August 2000 that “[t]he smaller a nation is, one should strongly keep its pride and confront the powerful big nations.” So far North Korea has shown that it is determined to gain regional and worldwide prestige through the continuous development of its long-range ballistic missile and WMD capabilities.

Kim Jong II also confirmed that North Korea was selling missiles to Syria and Iran. In addition, North Korea has provided ballistic missile technology to Libya, Pakistan and Egypt. Similarly, Russian entities have continued supplying missile technology to China, India, Iran, and Libya throughout last year while Chinese firms have provided assistance and missile technology to Iran, Libya, North Korea and most of all to Pakistan. This proliferation of missile and nuclear technology makes it very difficult to predict when and where the next missile launch will occur and whether it is a test or a bona fide strike.

The biggest advantage gained by any nation acquiring a ballistic missile combined with WMD lies with its inherent deterrent capability. It is more likely that ballistic missiles will be used as weapons of coercive diplomacy rather than actual weapons of war. “A rogue state with an ICBM could hamstring American foreign policy options by effectively holding American cities hostage.” Hence, the threat of using ICBM with WMD could deter anyone from taking action against a bellicose state, even in the face of atrocities such as ethnic cleansing, like that which occurred in Kosovo. The threat of potential ballistic missile attack from “states of concern” warrants a defence other than retaliation in kind. The US has responded by developing its NMD.

**NMD AND CONTROVERSY**
Protection against ballistic missile attack is not new. First talks of missile defence were held during WW II as a means of defeating German V-2 rockets. In fact, Russia still has a BMD system positioned around Moscow. The US had a similar system, *Safe-gaurd*, protecting its ICBM silos located near Grand Forks, North Dakota. However, the system was decommissioned shortly after it became operational because it was believed to be ineffective in countering a massive nuclear strike.\(^20\) It is important to note that these two systems were designed and positioned to protect a small area as permitted by the 1972 Anti-Ballistic Missile (ABM) Treaty.

The ABM Treaty is at the heart of the controversy surrounding the proposed deployment of the US NMD. The treaty, signed in 1972, was the result of Strategic Armament Limitation Treaty (SALT) negotiations between the USSR and the US. Canada, like many other non-signatory states, considers the ABM Treaty to be the cornerstone of the strategic arms limitation.\(^21\) The idea that limiting the scope of any BMD system would stop the arms race was considered by many to be circumspect. “In the years after the ABM Treaty, the United States doubled and the Soviets quadrupled strategic offensive weapons.”\(^22\) Ambassador Smith further believes that “the Strategic Defense Initiative (SDI) was probably the greatest U.S. stimulus to the implosion of the USSR.”\(^23\) The ABM Treaty was not responsible for the reduction in nuclear warheads since the end of the Cold War. These reductions were indeed the result of the Strategic Arms Reduction Treaty (START) negotiations.\(^24\) The intent behind the ABM Treaty was to reassure Russia and the US that a strategic nuclear attack, from either party, would inflict significant damage regardless of whether it were a first or retaliatory strike. Therefore, the ABM Treaty will be safeguarded as long as the number of strategic ballistic missiles can overwhelm the defensive capacity of a BMD system.

Ironically, it is the undermining of the Mutually Assured Destruction (MAD) concept that is the underlying reason used by many states to oppose the US proposed NMD. It is believed that an NMD would preclude an effective retaliatory strike against the US should it decide to launch a strategic nuclear strike first. While this argument has some validity, the US proposal for NMD elaborated by the former Clinton administration is for the deployment of 100 interceptors located in Alaska.\(^25\) This small number of interceptors alone would not be sufficient to preclude a Russian retaliatory strike from inflicting considerable damage to the US.\(^26\) Thus, from a strictly technical point of view the threat to the ABM Treaty argument has little value when considering the magnitude of the Russian strategic capability.

On the other hand, considering the twenty strategic nuclear ballistic missiles of China, an NMD with only 100 interceptors would be effective in nullifying the entire strategic nuclear strike capability of China.\(^27\) Even though the ABM Treaty is solely between the USSR and the US, China has benefited from the ABM Treaty, by allowing it to hold a few US cities hostage with only a handful of ICBMs, a powerful and inexpensive strategic deterrence. However, invoking the ABM Treaty to argue in favour of China would be unfair since Beijing is not bound by any restrictions when it comes to BMD.

Although 100 interceptors is within the limitations contained in the ABM Treaty, it is the national coverage aspect of this proposed system that is contrary to Articles I and III of the Treaty.\(^28\) A demarcation agreement was signed on 27 September 1994 making Theater Missile Defense (TMD) acceptable under the ABM Treaty.\(^29\) The Bush administration will undoubtedly attempt to persuade
the Russian leadership that a more robust missile defence is warranted as a result of the proliferation of ballistic missiles and WMD, and another demarcation agreement for limited NMD systems needs to be negotiated. If this fails, the US could legally withdraw from the ABM Treaty with a six-month notice allowed by article XV of the Treaty. While this unilateral withdrawal would not be welcome by many countries, including some of the closest allies of the US, such action would be completely legal.

It is believed that some 20 countries have developed the capability to deliver WMD using ballistic missiles. The global threat of a ballistic missile attack is greater now than ever before. In response to this, many countries are developing or acquiring BMD capability. Israel, which in 1991 had suffered 39 hits from Iraqi SCUD ballistic missiles, announced on 14 March 2000 that it has an operational mobile BMD system. “By deploying the ARROW system, Israel has become the first country in the world to field a two-tier National Missile Defence (NMD) network.” Because it possesses a robust NMD, Israel’s political leaders now have an option other than launching a pre-emptive strike against a perceived ballistic missile threat or retaliating with a devastating counter-strike, thereby providing a measure of stability in the Middle East. Similarly, knowing that Israel can effectively protect itself against ballistic missile attacks will likely prevent other countries in the region from launching such attacks to begin with. The deployment by Israel of an NMD system indicates that national protection against ballistic missile threat is warranted and is not unique to the US.

Like Israel, India is also acquiring a limited BMD. In October 2000, India signed an agreement with Russia for the procurement of 150 Antey-2500 ABM launchers. These ABM batteries will join four Green Pine active phased-array early warning radars built by Israel Aircraft Industry. This quasi-national BMD network is expected to be operational by 2003. It will provide most of the protection India needs to counter the threat of nuclear ballistic missile attacks from Pakistan or China. It is worth noting that Russia did not oppose the deployment of India’s quasi-national BMD. On the contrary, it was more than happy to sign a very lucrative deal with India.

For many countries, such as Israel and India, the threat of ballistic missile attack is considered serious enough to warrant deploying their own BMD or NMD. The US-proposed NMD, with a limited number of interceptor missiles, has raised criticism from around the world. Russia and China have especially been critical of the US proposal while invoking non-compliance with the 1972 ABM Treaty from which the US could legally withdraw or better yet, convince Russia to modify the Treaty. With individual countries acquiring and deploying their own national BMDs, it would be appropriate to consider a global solution to the problem.

GLOBAL BALLISTIC MISSILE DEFENCE (GBMD)

A global defence has been suggested before. In 1992 Presidents Bush and Yeltsin signed a joint statement stating that Russia and the US “should work together with allies …to develop the concept of the GPS [Global Protection System].” This joint statement emphasized the collaboration in developing a BMD against limited ballistic missile attack. Russia and the US discussed “how to proceed, including the possibility of agreeing to fundamental changes in the ABM Treaty.” Unfortunately, in 1993 President Clinton terminated the dialogue along with many promising NMD programmes. In June 2000, Presidents Clinton and Putin signed a landmark agreement supporting the establishment of a Russia–US Joint Data Exchange Centre to be
located in Moscow. “A US–Russian centre aimed at ex-changing data from ballistic missile early warn-ing systems could herald a new era in co-oper-ation between the former Cold War adversaries … If agreement is reached, the centre could be used as an international centre for global mon-itoring of missile and space vehicle launches, functioning under the aegis of one of the au-thoritative international organisations.”

The establishment of this Joint Data Exchange Centre could be an important step towards a GBMD system.

During his visit to Moscow in Febru-
ary 2001, NATO’s secretary-general Robertson received an official proposal for a joint Euro-
pean–Russian BMD from Russia’s Defence Minister Igor Sergeyev. The BMD system, nicknamed Europro, is based on the Russian mobile Antey S-300V BMD, similar to that being acquired by India. This is considered by some to be Russia’s rebuttal to the US NMD proposal. This proposal indicates that Russia has finally acknowledged that the threat of a ballistic missile attack from a “state of concern” is legitimate. President Putin also suggested the possibility of including European states as partners in the newly established Russian–US Joint Data Exchange Centre. These recent developments indicate that Russia is re-
ceptive to possible cooperation on GBMD.

Conceptually, GBMD would strive to provide global protection against a limited number of ICBMs regardless of where they originate. Technically there are various options that could be considered for GBMD. A system comprising Ground Based Interceptors (GBIs), similar to that proposed under the US NMD programme, could be positioned strate-
geically around the world. However, the “hit-
to-kill” technology has had mixed reviews re-
cently and is a very expensive system. Intercept-
ing warheads during their re-entry phase not only is difficult, but can be fooled by counter-measures. Intercepting an ICBM dur-
ing its boost phase is a much more practical approach. This would require the deploy-
ment of Boost Phase Interceptors (BPI) in proximity to every state having a ballistic mis-
sile capability. The chance of successful inter-
ception with BPI is better than with a point de-
fence, thereby reducing the actual number of missiles required for similar probability of in-
tercept. There is also less chance of counter-
measures being effective against a BPI. A major problem with a BPI system would be the difficulty of providing true global protection, especially against possible launches from large countries such as China, Russia and the US. Deployment would be possible only if these nations allowed BPI to be located within striking distance of ICBM silos, an option that is highly unlikely.

An alternative could be to locate a limited number of interceptor missiles in orbit. A space-based system consisting of 24 satel-
lites could cover the entire planet and 12 satel-
lites could negate 94% of all missile threats. Similarly, advances in laser technology will allow energy beam weapons to be placed into orbit and provide near-instantaneous destruc-
tion of any ballistic missiles travelling through space. The USAF is sponsoring a Space-Based Laser (SBL) development programme that is expected to conduct on-orbit demonstrations by 2012. The USAF is also developing an Airborne Laser (ABL) system capable of tar-
geting ballistic missiles from a modified Boe-
ing 747 aircraft. The first prototype is current-
ly being modified and a live missile intercept demonstration is planned for 2003. Operational ABL and SBL systems could become the backbone of a universal GBMD protecting all nations against the threat of ballistic mis-
siles, perhaps even rendering these offensive weapons totally ineffective and obsolete.

The reality is that space-based energy beam weapons are not readily available to counter the eminent threat of ballistic missile
attack from “states of concern”. However, recent developments made in BMD systems, such as the US PATRIOT PAC-3, the Russian Antey-2500 and the Israeli ARROW, to name a few, suggest that ground-based BMD technology is available. Furthermore, these developed point defence systems are relatively inexpensive compared to more sophisticated interceptors proposed under the US NMD programme. The cost of each ARROW battery is around US$170 million while the total developmental cost is estimated at US$2.2 billion. On the other hand, the US NMD programme is estimated to cost US$20 billion to deploy. Therefore, using proven technology, the deployment of a limited number of interceptor missiles at strategic land or sea locations would be affordable and could become the initial step of a very effective GBMD. While it may not be feasible, for the time being, to counter the threat from every state possessing ballistic missiles, it may be possible to at least counter the imminent threat from “states of concern” such as North Korea, Iran and Iraq.

Regardless of the type of system being deployed, a GBMD necessitates a global approach to Command and Control (C²). The C² concept proposed by this author is an international organization, under the umbrella of the United Nations (UN), that would be responsible for C² and the manning of all GBMD assets and facilities. This organization could have its C² centre located in a neutral country or designated area, at sea or perhaps on the International Space Station. Members from various states with a strong allegiance to global defence would man this centre. Strict and well-defined rules of engagement (ROE) would provide clear directives to initiate an intercept. The C² centre would become the focal point where all missile testing and rocket launches would be registered in advance to avoid false alarms and accidental intercepts. Areas of space operations, where satellite and manned spacecraft are normally launched, should be declared as ballistic missile-free zones. This would ensure the safety of space exploration vehicles against potential GBMD system malfunction and accidental intercepts. A well-defined C² structure with robust ROE is essential to the success of GBMD.

The greatest advantage of GBMD is the global deterrence benefit that would result from it. There would be little incentive for a state to develop or acquire ballistic missiles if, when launched, they would likely be intercepted and destroyed over their homeland. One could argue that a state could acquire so many ballistic missiles that it could overwhelm even the most effective GBMD. While this may be true, the cost of acquiring such a large arsenal of ballistic missiles would likely be prohibitive. Therefore, the deployment of a GBMD could very well be the catalyst that slows down and eventually stops proliferation of ballistic missiles.

While a GBMD concept is not new, current technologies in BPI and point defence allow for the immediate deployment of a limited GBMD that could handle the imminent threat created by the proliferation of ballistic missiles and WMD in “states of concern”. Furthermore, the technological advances in energy beam weapons will likely play a major part in future missile defence. There is no doubt that the establishment of and agreement on an international C² structure would have its own challenges. However, the potential deterrence to ICBM proliferation offered by an effective GBMD makes it an extremely worthwhile cause for Canada to support.

**CANADA’S ROLE**

The geographical position of Canada is such that any ICBM coming from Russia, China, or many of the “states of concern” are likely to overfly Canadian territory en route to the US. While ICBMs’ targeting precision
has greatly improved since they were first deployed some 50 years ago, the possibility of a malfunction causing a missile to deviate from its trajectory or land short of its intended target is still a possibility. Furthermore, most of Canada’s population is located close to the Canada/US border. Therefore, only a slight malfunction would be required to alter the ballistic trajectory of an ICBM aimed at the US ICBM silos near Grand Forks, North Dakota, causing it to land in Winnipeg about 200 km north. The lack of precision of SCUD attacks launched by Iraq during the Gulf War further emphasizes the shortfall of older technology. It is this same technology that is likely to be the type acquired by those “states of concern”. Similarly, the desire to target a missile at the US may create a strong incentive for the missile developers to overestimate the range capability of their missiles. As pointed out by Mr. Bon: “Even if North Korea develops ICBMs, we have not said that they would develop accurate ICBMs. In fact, that may be the greatest threat to Canada: that when they aim at Colorado Springs, they’ll hit Toronto.”

Therefore, while Canada is not likely to be deliberately targeted by a “state of concern”, the potential of an ICBM aimed at the US to fall short of its intended target is a definite concern for Canada’s security.

NMD is a natural expansion of NORAD. NORAD is already providing many functions required by NMD such as missile launch warning and tracking. It is expected that NMD C-2 will be collocated with NORAD in Colorado Springs. NORAD has been history’s longest defence collaboration of two nations, with Canadian and US personnel sharing the responsibility for the defence of North America since 1958. Canada has benefited tremendously from the NORAD collaboration. With interceptor missiles located in Alaska, NMD would easily protect both the US and Canada at no extra cost. It is only a question of time before Washington invites Ottawa to participate in a joint NMD programme for the continued collaborative defence of North America. “Defence cooperation between Canada and the United States remains central to our security, and ultimately perhaps to our sovereignty.”

Canada’s refusal to participate would lead to a reduction in NORAD and undermine the strategic defence partnership with the US.

From a political perspective, the most important strategic decision that Ottawa will have to make within the next few months is whether or not it will participate in the US NMD project. So far the US has not formally asked for Canadian participation; therefore, Ottawa has been able to remain uncommitted regarding NMD. Once the Bush Administration decides on an NMD concept, it will undoubtedly seek the political support of its close allies, Canada included. The answer that Ottawa provides regarding Canada’s endorsement of and participation in NMD will greatly influence Canada’s future political relationship with the US.

The US “is prepared to assist friends and allies threatened by missile attack to deploy such defenses.” Russia has also proposed a BMD to be shared with European friends. Both sides are willing to share their technology. Collective approach to BMD is technically feasible and may be the only way to achieve quasi-international endorsement. “The worst nightmare for Canada is a deployed NMD system that the Russians argue is non-compliant [with the ABM Treaty]. Canada would be faced with the choice of either having its policy held hostage by Moscow, or rejecting its longstanding support of the ABM Treaty in favour of its strategic relationship with Washington.” Promoting Russian and US cooperation on a global solution may be the only way to safeguard the 1972 ABM Treaty, and it is in Can-
ada’s international interest to become actively involved in this issue.

Regardless of Canada’s decision, the US does not need access to Canada’s northern land mass to position infrastructures supporting NMD such as was the case for the north warning system. Although Canada’s opposition to NMD would not jeopardize the deployment of NMD, its endorsement is politically very important to the US. Consequently, Canada is well positioned to facilitate negotiations between the US and the rest of the world and should welcome this opportunity to promote a global approach to BMD.

Ottawa’s diplomatic relationship with Washington is seen by many governments as a way to influence the US leadership in their decision on NMD. Russian President Vladimir Putin, during his visit to Ottawa in December 2000, pressed Prime Minister Jean Chrétien to mediate between Russia and the United States over the US NMD proposal. Although not committing himself for or against NMD, Mr. Chrétien indicated that it was too soon to discuss the issue. Similarly, China’s chief nuclear negotiator visited Ottawa in February 2001 in an attempt to persuade Canada to speak against NMD. France and other European countries also believe Canada could use its political and military relationship with the US to influence the Bush Administration. By leveraging on good relationships with most major powers and its privileged political position with the US, Canada could facilitate dialogue and mediate an acceptable solution to the NMD conundrum while perhaps preserving the intent of the 1972 ABM Treaty.

Canada is in an ideal position to influence the shape of the next NMD proposal; however, a proactive approach is essential. The pause in NMD developments resulting from change-over of the US administration is the perfect opportunity for Ottawa to official-ly declare that it will support a global approach to BMD and is willing to contribute financially and technologically to developing and deploying a GBMD. As one of the G-8 nations, Canada has an obligation to assume a responsible position in these negotiations by championing an international forum to resolve the NMD controversy. This action would reinforce Canada’s ongoing commitment to global security and world peace.

CONCLUSION

The global threat from ballistic missiles and WMD is greater today than ever before. While the large strategic arsenals of Russia and the US remain impressive, it is the fear of an accidental launch that is worrisome. The proliferation of ballistic missiles and WMD to “states of concern” has greatly contributed to the decrease in global security. Leading the pack is North Korea with its “military first” policy and deceptive leadership. The potential for coercive diplomacy from countries having acquired ballistic missiles configured with WMD has compelled several countries to deploy their own BMD system. The US has responded to the threat by proposing an NMD system. While the US-proposed NMD does not comply with the ABM Treaty, departure from this Treaty has been successfully negotiated in the past. Failing a positive outcome to such negotiations, the US might legitimately withdraw from the ABM Treaty, spawning fears of a new strategic arms race.

A global threat requires a global approach. With today’s technology it is possible to deploy a limited GBMD as the initial phase of a more comprehensive system that could eventually rely on space-based and laser technologies. The deployment of GBMD, possessing a centralized C2 structure under the umbrella of an international body and having well-defined ROE requiring global concurrence, could trigger a reduction in ballistic missile proliferation and eventually render such missiles
Canada is implicitly involved in NMD simply by being a neighbour to the US. Most ICBMs aimed at the US would overfly Canada, thus jeopardizing the basic tenet of national security. Many nations, including Russia and China, believe that the diplomatic relationship between Ottawa and Washington will allow Canada to influence the shape of the next NMD proposal. Canada should embrace this opportunity and propose Global Ballistic Missile Defence as a viable solution to the controversy surrounding the US-proposed NMD. GBMD is a worthy cause to defend through negotiations and diplomacy. Canada may even be able to safeguard the intent of the 1972 ABM Treaty. Canada is well positioned to take the lead and facilitate discussions between the US and the rest of the world to finally resolve this issue. In doing so Canada will assume its responsibility as one of the G-8 nations and continue to positively influence global security.

NOTES

1This number does not include the 2,000 to 3,000 tactical nuclear warheads believed to still be in each of these two countries. Source: Duncan Lennox, “Global Strategic Balance”, Jane’s Intelligence Review, January 2001, p 52.

2These 1500 warheads suggested by Putin is even fewer than the 2000–2500 warheads projected under the Strategic Arms Reduction Treaty (START) III yet to be negotiated. Source: David J. Smith, “Beyond the Cold War: The Geopolitical and Military Aspects of National Missile Defense”, Sea Power, November 2000, p 44.


4China has developed the Dong Feng-5 (DF-5), an ICBM capable of delivering a nuclear payload at a range of 13,000 km. China has deployed its mobile DF-31 ICBM capable of carrying three 90-kiloton multiple independent-targeted re-entry vehicles (MIRVs) over 8,000 km. China is also working on a new road-mobile DF-41 ICBM with a range of 12,000 km. Source: Ed Blanche, “NMD: an international concern”, Jane’s Intelligence Review, May 2000, p 46.


6The Indian Agni-II and the Pakistani Ghauri-II are both capable of carrying a 1,000-kg payload over 2,500 km. Source: Jing-dong Yuan, “The MTCR and Missile Proliferation: Moving Toward the Next Phase”, Canada Department of Foreign Affairs and International Trade, May 2000, Table 1.

7Tenet, p 7.


11Lockwood, “North Korea….”


13Smith, “Beyond the Cold War…”, p 43.

14Tenet, p 2.


16Ibid., p A01.

17Yuan, “The MTCR…”, Table 1.


19Paul Heinbecker (Assistant Deputy Minister, Global Security Policy, Department of Foreign Affairs and International Trade Canada), Presentation to Standing Committee on National Defence and Veterans Affairs, Ottawa, 23 March 2000, p 2.


21Heinbecker, p 4.

22Smith, “Beyond the Cold War…”, p 42.

23Ibid., p 43.
24 Under START I, both Russia and US agreed to reduce their total number of strategic nuclear warheads to 6,000 each, not counting tactical nuclear warheads. Under START II this will be further reduced to 3,500 warheads on each side. It is believed that START III negotiations will strive to bring the number of strategic nuclear weapons well below 2,500 warheads and also include some limitations on theatre and tactical nuclear missiles.

25 The current Bush administration is rethinking the concept it wants to adopt for NMD. Mr. Bush has said that his Administration will consider using space-based weaponry in developing an NMD. Nevertheless, this paper will assume that NMD will resemble that of the previous Clinton administration with 100 interceptors (missiles) located in Alaska and protecting the entire US. Source: Walter Pincus, “From Missile Defense to a Space Arms Race?”, Washington Post, 30 December 2000, p A02.


27 Ibid., p 82.

28 Article I, Paragraph 2 of the 1972 ABM Treaty specifies that “Each Party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such defense, and not to deploy ABM systems for defense of an individual region except as provided for in Article III of this Treaty.” Furthermore, Article III, which was amended by the 1974 Protocol, allows each party to deploy one single ABM site either centred on the national capital or around an area containing ICBM silo launchers. This article stipulates that the site must be “within one ABM system deployment area having a radius of one hundred and fifty kilometers…no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch site.” Source: Treaty Between the US and the USSR on the Limitation of Anti-Ballistic Missile Systems, signed at Moscow May 26, 1972, <http://www.acq.osd.mil/acic/treaties/abm/abm.htm>.

29 A demarcation agreement making the US Army Theater High-Altitude Area Defense (THAAD) System, the US Navy Theater-Wide Ballistic Missile Defense Program, and the Russian S-300V system acceptable under the 1972 ABM Treaty, was reached on 27 September 1997 between Russia, Belarus, Ukraine, Kazakhstan and the US. Source: Agreement On Confidence-Building Measures Related to Systems to Counter Ballistic Missiles Other Than Strategic Ballistic Missiles, Signed at New York, 26 September 1997.

30 Article XV, Paragraph 2 of the 1972 ABM Treaty states that: “Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from the Treaty.” Source: Treaty Between the US and the USSR on the Limitation of Anti-Ballistic Missile Systems, signed at Moscow, May 26, 1972.


33 Ibid., p 30.

34 The Antey-2500 system is capable of engaging intermediate-range ballistic missiles launched from a distance of 2,500 km. The Green Pine radar system is capable of long-range autonomous early warning detection, acquisition and tracking of ballistic missiles and has been operational in Israel since 1995. The Antey-2500 batteries will be linked with the Green Pine radar to form a fully integrated automated air defence system. Source: Prasun K. Sengupta, “India Firms Up Contracts for National BMD Network”, Asian Defence Journal, November 2000, p 32.


37 Throughout its first term, the Clinton administration believed that there would be no ballistic missile threat to the US for at least 10 to 15 years. Source: Smith, “Beyond the Cold War…”, p 43.


43 Ibid.

44 The ABL system is believed to be capable of targeting ballistic or cruise missiles at distances in excess of 300 km. Source: Sandra I. Erwin, “Air Force Mulls Expanding Role for Missile-Killer Laser”, National Defense, July 2000, p 32.


50 Bon, Presentation to Standing Committee….


