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## A Strategic Framework for Missile Defence

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# **A Strategic Framework for Missile Defence**

*Ron Huisken*

## **Introduction<sup>1</sup>**

The Cold War ended abruptly and emphatically in December 1991 with the break up of the Soviet Union. It was also an ending that was totally unscripted. The world moved on amid widespread relief and euphoria but an equal measure of confusion and trepidation. The nature of the challenges to security and an orderly international system evolved more quickly than did the broad policy prescriptions, processes and techniques that became entrenched during the Cold War. Most particularly, the broad set of factors that had inhibited proliferation with such considerable success during the Cold War came unstuck. A key element in this regard has been the lack of focus and loss of momentum in the US-Russian effort to deal with the arsenals of nuclear weapons. Further, the new configuration of a single, unassailable superpower appears to have encouraged a more casual attitude to proliferation on the part of several key second-tier states.

The first decade of the new era has seen a lot of ground lost on the non-proliferation front. India became an overt nuclear weapon state in 1968, with Pakistan following suit more or less immediately. More surreptitiously, interest in acquiring chemical and biological weapons appears to have intensified, in defiance of the conventions banning their manufacture, possession and use. Similarly, the considerable number of states interested in ballistic missiles seemed to find it easier than in the past to accelerate their programs through acquiring technology from abroad.

The Bush administration now believes that this decade of confusion and neglect has resulted in a looming security crisis for the United States that mandates a radical response. This response has four main elements: an urgent and comprehensive missile defence development program to address the possibility that some unpredictable states might be able to threaten the US or its forces abroad with ballistic missiles and weapons of mass destruction; stepping out of the ABM treaty; unilateral cuts in US nuclear forces; and managing future developments in strategic offensive and defensive systems informally rather than through treaties.

This would represent a watershed in the approach to issues that will determine the general tenor of global strategic relationships over the coming decades. How far and how fast the administration proceeds with this prescription is difficult to judge. Deploying limited ballistic missile defences certainly has majority support but on such issues as how urgently and at what cost, as well as on the other aspects of the administration's policy, one can confidently anticipate intense Congressional debates. On the other hand, the countries whose interests are likely to be most directly affected are not in a particularly strong position to influence the US debate.

Australia has a significant interest in how these issues are managed. A United States that is strong and confident about its ability to play the major role in maintaining global and regional security is certainly important to us. We also have a keen interest in avoiding an enduring adversarial element being built into US relations with Russia and China, not least because we and other US allies may find it difficult to avoid being drawn into such a development. And we have a strong interest in restoring the integrity of the non-proliferation regime through, *inter alia*, continued reductions in the nuclear arsenals and reaffirming the importance of the relevant multilateral treaties. We should therefore be making the fullest use of the opportunities available to influence the development of US policies to our advantage.

## **The Bush Administration and Missile Defence**

It is now beyond dispute that the Bush administration will not be diverted from its determination to dethrone the ABM treaty and proceed with the development and deployment of missile defences. Since assuming office, Bush and his advisers have effectively restored the impression, first generated by North Korea's missile launch in August 1998, that missile defence was a question of when, not if.

Building on the broad but strong commitment to missile defence during the election campaign, several key developments have marked this road since January 2001. The administration, for example, simply ignored the developments on the Korean peninsula suggesting that the seemingly most imminent of the missile threats from a minor state might be manageable in other ways. The message here was that the threat was wider and inevitable. Later, the administration dropped the distinction between national and theatre missile defence (NMD and TMD respectively) in favour of what is now called Global Missile Defence. The principal motive appears to have been presentational, to soften the impression that the US was interested only in the defence of its own interests, an impression that was handicapping efforts to attract the support of allies. At the same time, however, it conveyed the message that the agreement negotiated by the Clinton administration on which TMD systems could be accommodated within the ABM treaty was irrelevant.

A third development was Bush's landmark speech on 1 May, which, among other things, made clear that, in contrast to its predecessor, the administration was determined to move beyond the ABM treaty, not amend it. Finally, two days before the scheduled third test of the hit-to-kill technology on 14 July 2001, the administration announced plans to develop new facilities in Alaska. The primary purpose of these new facilities would be to support the

development and testing of missile defences but they would also serve as an initial deployment site if a threat materialised more quickly than anticipated. The announcement appears to have been accelerated to precede the third test so as to reinforce the view that the administration's commitment was absolute and not dependent on the success or failure of a particular test of a particular technology. Even more important, however, was the acknowledgment that building these facilities could, under some legal interpretations, breach the terms of the ABM treaty, and do so within a matter of months.

The administration has made clear that the United States will not wilfully breach the terms of the ABM treaty. It has also made clear that only two alternatives exist. First, when US lawyers determine that the missile defence development program will breach the terms of the treaty, the US will give the necessary six months notice of its intention to withdraw from the treaty. Second, before this happens, the United States and Russia can agree on a 'new framework' for their nuclear weapon relationship and, in that context, both declare the ABM treaty to be defunct.

## Consultations on a New Strategic Framework

This is the background against which Bush and Putin, meeting in the margins of the G8 summit in Genoa on 23 July, issued the following statement:

We agreed that major changes in the world require concrete discussions of both offensive and defensive systems. We already have some strong and tangible points of agreement. We will shortly begin intensive consultations on the interrelated subjects of offensive and defensive systems.

Officials on both sides stressed the term 'consultations' but had different reasons for doing so. On the Russian side, it was a concession to contemplate looking beyond the ABM treaty but a gain to secure linkage with offensive nuclear forces. The term 'consultations' connotes exploratory discussions rather than a commitment to cut a deal. On the US side, a feature of the new ideology in Washington is a strong aversion to being constrained by formal agreements. The US is seeking some form of declaration or understanding short of a treaty. US officials also stressed that the issues of offence and defence were 'interrelated' rather than linked or interdependent. President Bush made this amply clear by stating in Genoa that 'time is of the essence ...if we can't reach agreement we're going to implement. Make no mistake about it...'.<sup>2</sup>

The US has clearly endeavoured to put the maximum pressure on Russia to agree quickly—within months—to jointly step out of the ABM treaty. The US prefers this approach to unilateral withdrawal from the treaty but has tried to suggest that this is only a modest preference, not an issue that gives Russia much leverage in the consultations. Stacking the deck a little further is the fact that the US review of its nuclear force requirements will not be completed until the end of the year. This means the US will be constrained in what it can offer on the offensive forces, the topic of primary interest to Russia.

The US, clearly, holds most of the cards and is playing hardball. These are not in themselves grounds for criticism. After all, the US has not got itself into this position through unfair

means. But it does mean that the US bears even more responsibility than usual for charting a course that offers the best prospect of maintaining stable relationships among the major powers over the longer term.

## **Designing a New Strategic Framework**

The posture of Mutual Assured Destruction (MAD)—maintaining massive nuclear arsenals and suggesting that one just might use them—had a single redeeming feature: it helped get us through the Cold War by terrorising the superpowers into avoiding at all costs any direct clash between their armed forces so as to help minimise the risk of escalation to nuclear war.

The Cold War is over and Russia and the United States are no longer enemies. These two core statements from President Bush's marketing strategy for missile defence are true and important. The message they are intended to convey is that MAD has no place in contemporary US/Russian relations and that assessing missile defence in the context of the ABM treaty—that is, in the context of MAD and a nuclear arms race—is outdated. President Bush has further indicated (in his speech on 1 May 2001) that the US will reinforce its view that the Cold War is over through unilateral changes to the size, structure, and character of its nuclear forces.

To this point, the reasoning is defensible, even promising. Beyond this, however, the picture becomes distinctly murky. The principal reason for this, in my view, is that the US has not been prepared to characterise even in conceptual terms what needs to happen to offensive nuclear force postures to provide a stabilising fit with missile defences. This missing link has allowed Russia and China to form perceptions of US strategic objectives that militate strongly against a cooperative transition from MAD. And the prospect of renewed strategic nuclear competition, however muted in the near term by Russian and Chinese economic and technological limitations, is also at the heart of the enduring reservations in allied capitals.

The United States has front-loaded its vision of the new strategic framework. It has declared that it must urgently free itself of the ABM treaty to cope with the proliferation to unpredictable minor states of both WMD and long-range missile technology. This perceived urgency has also rationalised a sharply intensified R&D program on missile defence that traverses all the options—theatre and strategic; land, sea, air, and, more distantly, space basing; and boost-phase, mid-course as well as terminal engagement.

The Bush administration has, like its predecessor, insisted that the missile defence capability it seeks will not challenge Russia's nuclear deterrent. On paper, Russia still maintains some 6600 strategic nuclear warheads, close to the ceiling set in the START 2 agreement (which has not yet entered into force). The agreed negotiating target for a START 3 agreement is 2000-2500. Russia has since proposed reducing this target to 1500 which is also the force level that the US estimates Russia will be forced down to over the next decade or so for economic reasons.

Secretary of State, Colin Powell, on his first visit to China on 29-30 July 2001, is reported to have told his hosts that US missile defences would not threaten their nuclear deterrent.<sup>3</sup> This is the first time that this argument has been extended to China. It is a somewhat heroic argument given that China has barely 20 warheads capable of reaching some part of the US. Powell was presumably relying on US intelligence estimates that China intends to increase this number. Even so, the very elastic scope of US missile defence plans would leave China concerned about its nuclear deterrent.

Even under Clinton, Russia was sceptical. The Clinton administration offered the considerable assurance of retaining the ABM treaty but expanding the scope within the treaty to accommodate defences. On the other hand, even the Clinton administration protected the possibility of successive amendments to the ABM treaty should developments in the threat require this. Moreover, Russia would have been fully aware of the growing strength of the pro-defence community in Washington and the real prospect of a Republican victory in the 2000 elections. In any event, when Vladimir Putin succeeded Yeltsin as President early in 1999, and certainly encouraged by the almost universal lack of support for NMD among US allies, Russia indicated that it had no interest in amending the ABM treaty.

Russia's confidence in US expressions of its intent to deploy very limited missile defences can only have plummeted since the Bush administration came to office. Russia and the US may no longer be enemies—certainly not the deep, pervasive enmity that characterised the Cold War—but Russia will still be powerfully attached to protecting a countervailing nuclear deterrent. Precisely the same can be said of China.

The inescapable fact is that so long as any major nuclear power attaches significant political importance to the capacity to make large and explicit nuclear threats, the introduction of defences will impart upward pressure to the offensive nuclear arsenals. The fact that the US, now and for the foreseeable future, is effectively alone in having the economic capacity and technological potential to acquire non-nuclear missile defences compounds the challenge of identifying a reassuring transition from MAD.<sup>4</sup> The US must accept that Russia and China in particular harbour genuine (and, indeed, well founded) concerns that it is seeking to extend its clear dominance in conventional military power to include the arenas of missile defence, offensive nuclear forces, and space. If such concerns become entrenched, the prospect of a more cooperative approach to the management and containment of the threat from WMD will essentially vanish.

The transition from MAD to a new strategic framework therefore has two central elements. First, the US should be prepared to select a missile defence architecture that in nature and/or scale focuses as exclusively as possible on the potential threat from maverick minor states. The US must also be prepared to accept disciplines on its freedom to thicken or diversify these defences. Second, the US should use its influence and, together with Russia, lead by example, to encourage negotiations among all five recognised nuclear weapon states on adopting nuclear force postures that also reflect emphatically that the Cold War is over.

## Missile Defence Architecture

The Bush administration has displayed little interest in managing international perceptions of its missile defence program. The tension between its declared objective of acquiring a limited missile defence capability and the breadth of the R&D program is now acute. The budget request for next year (fiscal 2002) has been increased by more than 50 percent to US\$8.3 billion. This budget will support some nine missile defence options: the ground-based NMD interceptor; the airborne laser; a new boost phase interceptor; two space-based options initially explored under the SDI program—a laser and the 'Brilliant Pebbles' kinetic kill interceptor; the Navy Theatre Wide and THAAD TMD systems; and the PAC-3 and Navy Area Wide terminal defence systems.<sup>5</sup>

Abandoning the distinction between national or strategic and theatre missile defence, although apparently done for essentially presentational purposes, is also consistent with the administration's philosophy that efforts to address security concerns should not be artificially constrained. It therefore intends to explore the option of extending the capability of the Navy Theatre Wide system to include engaging intercontinental-range missiles.<sup>6</sup> Testing a TMD system against such missiles would be precluded under the 1997 ABM treaty demarcation agreement.

It is still the case that there is a significant difference between NMD and TMD in terms of technical sophistication and capability. More particularly, the political message sent by TMD can be targeted more selectively at prospective proliferators. In contrast, the political signal from NMD is likely to be received as clearly by Russia and China as it is by prospective proliferators. In other words, addressing the potential new threat with NMD increases the risk of enlarging the existing nuclear threat.

If the new strategic framework is to be stable and durable, the US must pay close attention to Russian and Chinese perceptions as it develops limited defences against a potential missile threat from minor states. To expect these major players to rely on US rhetoric would be disingenuous, even though the Cold War is over. The transition to a new strategic framework would therefore be facilitated by a missile-defence architecture that focused on TMD systems with NMD capabilities deferred or at least very strictly limited. As the number of TMD interceptors could be quite high, it will be important to restrict the development and testing regime for these systems so that they do not acquire demonstrated capabilities against long-range missiles.<sup>7</sup> This is essentially the approach pursued by the Clinton administration and one that could be accommodated within an amended ABM treaty.

While all of the more capable missile defence systems present formidable challenges from the standpoint of political management, there are at least significant variations in the degree of difficulty that can be taken advantage of. There is one system, however, that should be seen as so disruptive of the present underpinnings of strategic stability as to make sensible management quite impossible. This is the option, first explored in the context of SDI in the 1980s, of basing a missile intercept capability in space.



A space-based missile intercept capability was central to SDI because the intent, at least in Ronald Reagan's vision, was to make ballistic missiles 'impotent and obsolete' and transform the basis of deterrence from offence to defence. Intercepting missiles from space is, in principle, the most efficient and effective way to proceed. Missiles can be engaged regardless of range and launch point and before the payload can disperse into warheads and decoys, in essence, a global boost-phase intercept capability. This characteristic alone would inescapably be perceived as a quest for absolute strategic dominance. In addition, a space-based missile intercept capability would necessarily be highly automated and capable of reacting very quickly. Moreover, it would hold at risk not just ballistic missiles but everything that any state launched into space. In short, deploying missile defences in space will preclude any form of cooperative transition away from MAD

The Bush administration should recognise that the tension between securing cooperation from Russia and China on limited missile defences and weaponising space is particularly acute and destructive. The United States is in any case overwhelmingly dominant in space. Its space assets are central to the decisive lead it currently enjoys in all dimensions of conventional warfare. The United States should certainly be alert to attempts to degrade this capability. At the same time, however, it is difficult to see that it is in US interests to initiate the era of having to be prepared to use force to get into and to stay in space.

## Will Missile Defences Work?

It is sometimes pointed out that effective missile defences may still elude the United States. Even in controlled tests against a single, cooperative target the results are pretty slim. Respected expert opinion suggests that confidence in the ability to destroy even a small number of uncooperative targets simultaneously may never be high. To paraphrase French President Chirac, the sword will always stay ahead of the shield.<sup>8</sup>

Defense Secretary Rumsfeld has made it clear that this line of argument will not divert the US program, even if it is true of the systems initially deployed. He has stated that even a partial capability will cause maverick states to think twice and make the effort worthwhile.<sup>9</sup>

More broadly, however, the strategic consequences of missile defence will be largely shaped long before we learn how effective these systems can be. The US is convinced the threat from minor states with long-range missiles and WMD will materialise in 5-10 years and is therefore preparing a technological counter with some urgency. In the same way, the states who feel that their interests could be damaged by US missile defences will be determining their responses now on the assumption that they will be effective. Similarly, whatever political messages are received—whether intended or not—about underlying US attitudes and objectives will also be entrenched well before missile defences are actually deployed.

The shape of the US missile defence program, and the degree of confidence that it will retain that shape, is therefore very important regardless of how successful it turns out to be. That shape will determine which countries set out to frustrate it, and the importance and urgency they attach to doing so.

As noted above, if missile defences are seen as challenging recognised nuclear deterrent relationships they will put upward pressure on the offensive forces. This consequence of missile defence is called 'arms race instability'. Defences can also be a source of what is called 'crisis instability', that is a capability that heightens concerns about escalation to the nuclear level and makes sober management of a crisis more difficult. Crisis instability arises when a state is clearly committed to missile defences that manifestly cannot be relied upon to defeat a full-scale attack. In this circumstance, potential opponents are likely to give more serious consideration to the possibility that the state with defences intends to strike first at the offensive forces so as to reduce the size of the counterstrike to a level its defences can cope with.

These are illustrative of the concepts and habits of thought that characterised management of the strategic nuclear balance during the Cold War. Avoiding a revival in their currency is clearly not only desirable but must surely be a necessary feature of any new strategic framework.

The post-Cold War era has produced many ironies. Not the least of these has been the US message to Russia that, by having a larger strategic nuclear force than it thinks it can afford and keeping much of that force on alert, it could easily overwhelm American missile defences.<sup>10</sup> Moreover, this line of argument puts a lot of weight on the integrity of Russia's early-warning and command and control apparatus. All the indications are that this apparatus has become extremely fragile and that, as the principal target, it is overwhelmingly in the US interest that Russia move away from a high-alert, launch-on-warning nuclear posture.<sup>11</sup>

## **Offensive Nuclear Forces**

As we have seen, the US recognises that further reductions in the offensive nuclear forces are a necessary part of the transition to a new strategic framework. On 1 May 2001, President Bush said:

This new Framework must encourage still further cuts in nuclear weapons. Nuclear weapons still have a vital role to play in our security and that of our allies. We can, and will, change the size, the composition, the character of our nuclear forces in a way that reflects the reality that the Cold War is over.<sup>12</sup>

Specifying changes to the size, composition and character of the nuclear forces suggests the US is prepared to consider a far-reaching transformation of its posture. The proposition that nuclear weapons still have a vital role in US and allied security cuts the other way.

The Clinton administration reviewed the guidelines underpinning the size and structure of the nuclear forces in 1997 just before Clinton and Yeltsin agreed that a START 3 agreement would aim to set limits between 2000-2500. These guidelines—issued in November 1997 as Presidential Decision Directive 60 or PDD-60—are among the most sensitive documents generated by the US government. As total secrecy rather defeats the objective of deterrence, there is an interest in putting broad characterisations and/or hints about its contents on the

public record. On the other hand, speculation, leaks, and hints from multiple official sources can make the public record difficult to read.

The major change in PDD-60 was to abandon the requirement set out in 1981 to be able to conduct, and to prevail, even in a prolonged or protracted nuclear war.<sup>13</sup> This change was the key to allowing the US to go below the 3500 ceiling on strategic weapons set out in START 2.

On the other hand, it was speculated that the new guidelines put China back into the targeting plan after an absence of about 20 years.<sup>14</sup> Of even greater interest in the present context is the view that the new guidelines permitted nuclear strikes in retaliation for the use of chemical or biological weapons, weapons that the US has undertaken, under the relevant international conventions, not to use or to possess.<sup>15</sup>

Particularly since the Gulf War of 1991, the US has wrestled with the option of making explicit the threat of nuclear retaliation to the use of chemical or biological weapons. This option is significantly curtailed under the prevailing (1995) Negative Security Assurance provided by the United States in the context of the NPT. Specifically:

The US will not use nuclear weapons against any non-nuclear-weapons states party to the treaty on the Non-Proliferation of Nuclear Weapons except in the case of an invasion or any other attack on the United States, its territories, its armed forces, or other troops, or on a state toward which it has a security commitment carried out or sustained by such a non-nuclear-weapon state in association or alliance with a nuclear-weapon state.<sup>16</sup>

Press reporting suggested that PDD-60 for the first time allowed, but did not require, nuclear retaliation in response to the use of chemical/biological weapons.<sup>17</sup> Robert Bell, then the senior director for defence policy and arms control and principal administration spokesman on these issues, insisted that PDD-60 re-affirmed the 1995 statement and did not sanction some new expansion in the role of nuclear weapons.<sup>18</sup> Equally, however, Bell skilfully protected the ambiguity in the US position. For example, referring generally to recent statements by senior officials, Bell observed that any nation that used weapons of mass destruction against the United States may forfeit the protection offered by the NSA.<sup>19</sup> Furthermore, with respect to the exceptions set out in the NSA, Bell pointed out that it protected the option of first use of nuclear weapons, not only retaliation for the use of nuclear or other weapons of mass destruction.<sup>20</sup>

Threats from chemical and biological weapons are not the only context in which the use of nuclear weapons is envisaged other than in retaliation for the use of nuclear weapons by others. Specifically, NATO's declaratory policy has always stressed that while the alliance would not be the first to use force (i.e. start a war), it reserved the right to be the first to use nuclear weapons to defeat aggression with conventional forces. The US has so far resisted proposals to revise this posture to reflect the end of the Cold War.

All things considered, while the US has scaled back the total number of targets, it continues to apply Cold War thinking and analytical techniques to translate 'deterrence' into specific weapons assigned to specific military, political and industrial targets. In Congressional testimony in May 2000, for example, the Pentagon's most senior officials made clear that

strategic nuclear forces in the 2000-2500 range were the minimum necessary to carry out the missions assigned to these forces under the prevailing guidelines endorsed by the President.<sup>21</sup> This may even be cutting things rather fine if, as has been suggested, the core list of nuclear targets has actually grown since 1995 from 2500 to 3000.<sup>22</sup>

What might we expect from the nuclear posture review the Bush administration now has underway? Specifically, will it challenge entrenched thinking on the role of nuclear weapons and the force posture needed to fulfil that role? Although one can expect formidable pressures to the contrary, there are grounds for cautious optimism.

A good indication of the difficulties involved is provided by a recent study completed by the National Institute for Public Policy, a conservative think-tank located just outside Washington.<sup>23</sup> The study was prepared by a particularly eminent group, many with extensive experience in government. In overall tone, and particularly in the stance it takes on formal arms control agreements, the study could almost be described as policy brief endorsed by the Bush administration.<sup>24</sup>

The study set out five purposes for US nuclear weapons:<sup>25</sup>

- Deter escalation by regional powers to the use of WMD, when the US is defeating those powers in the conduct of a conventional war in defence of US allies and security partners.
- Deter regional powers or an emerging global power from WMD or massive conventional aggression against the US or its allies.
- Prevent catastrophic US and allied wartime losses in a conventional war.
- Provide unique targeting capabilities in support of possible US deterrence and wartime goals.
- Enhance US influence in a crisis.

This list assigns an important role to nuclear weapons in a variety of circumstances. If it were to be endorsed, it would encourage the maintenance of a significant nuclear arsenal capable of sending clear messages of capability and the will to use it in these broadly characterised situations. It may not seem an extreme list in the sense that it echoes many of the themes apparently endorsed in the prevailing official doctrine, but in crucial respects it is broader than official doctrine.

The first point declares in an explicit and unqualified manner that the use of chemical or biological weapons would attract a nuclear response. The third point—using nuclear weapons in a conflict between conventional forces—generalises what to date has been explicitly associated only with NATO and the European theatre. The fourth point refers in particular to high-value targets like WMD capabilities that are buried too deep underground for conventional weapons to be effective.<sup>26</sup> The final point embraces the theme that size probably matters; that is, a substantial nuclear force might dissuade prospective new

entrants to the club while a clear preponderance over challengers might have an intimidating effect additional to the specific capabilities of the arsenal.<sup>27</sup>

The main point to be drawn from this brief discussion is the force of the arguments that will be made in Washington that the US must continue to capitalise on the deterrent effect of nuclear weapons. The United States, with its global interests and responsibilities, naturally attaches the highest value to deterring events that it expects it would have to respond to. In its internal debates, the burden of proof will rest with those who want to argue that, over time, US interests will not be well served by continued reliance on nuclear weapons to deter a range of contingencies. The other side has the easier task: we have the capability and it might be helpful.

There is, of course, an entirely different school of thought. This school takes as its starting point phrases like Ronald Reagan's 'a nuclear war cannot be won and must never be fought'. This school is reflected in the countless statements and resolutions made over the past 50 years to the effect that while war may be a permanent feature of international affairs, we do want to rule out certain ways of making war. Nuclear weapons have always been at the top of the list of instruments to be ruled out. And in the 1968 Nuclear Non-Proliferation Treaty (NPT) we sought to make this intention legally binding. Article VI of the NPT obligates all parties to work toward '...the cessation of the nuclear arms race at an early date and to nuclear disarmament...'

The NPT is the most widely adhered to arms control treaty that we have. The treaty codified the simple truth that preventing nuclear proliferation would be a complete fantasy unless those who happened to have the bomb when the treaty was concluded promised to give it up as soon as possible.

The ABM treaty is also central to this school of thought. Historical accounts of how the treaty emerged suggest it was far more the result of political horse-trading than recording in treaty form some common philosophy on nuclear weapons. The durability of the treaty, however, and the high value that non-parties also so clearly attached to it indicates that it says something about nuclear weapons that a lot of people regard as profoundly important. Quite clearly, that 'something' is the view that nuclear weapons require that traditional military reasoning be suspended and that these weapons should be approached with an unqualified commitment to deterrence, to avoiding their use. To consider active defences against nuclear weapons was and, indeed, is seen as a major step in the direction of blending these weapons with the other instruments of military power and eroding that sense of uniqueness.

The United States is currently determined to move beyond the ABM treaty to a new security framework with, at least initially, limited missile defences. This package may lean toward robust and diversified nuclear forces to affect deterrence across a range of contingencies, and a missile defence program that sends an ambiguous message to the other major powers. In this event, it could be many years, even decades, before this development is fully accommodated and strategic relationships among the major powers reach a new equilibrium. During this time, the authority of the international non-proliferation regime will be undermined by the importance attached to nuclear weapons, by the perceived necessity for missile

defence, by the loss of the ABM treaty, and by weakened incentives among the major powers to cooperate in this field.

This may be the last opportunity for a long time for the nuclear weapon states to consider collectively a decisive lowering of the salience of nuclear weapons and long-range missiles in their national security postures.

We substantially missed the opportunity provided by the end of the Cold War to deal decisively with its staggering legacy of nuclear weapons.<sup>28</sup> The absolute number of nuclear weapons withdrawn from operational service has been large but the process lost momentum because it lacked an agreed and compelling focus. Missile defence could become the catalyst for a new paradigm on nuclear weapons among the great powers that manifestly embraces the objective of eliminating all weapons of mass destruction and puts in place mechanisms to ensure that this objective is given serious and sustained attention.

## **A Low Salience Nuclear Force Posture**

The extent to which a state relies on nuclear weapons to protect and advance its security interests will be reflected in the size, composition and character of its nuclear force. President Bush has declared that the United States will unilaterally change each of these aspects of its nuclear force to reinforce its contention that the Cold War is over and that missile defence is not a new round of strategic nuclear competition.

The basic indicators of the size of a nuclear force are the numbers of warheads and delivery vehicles. Composition would refer to the distribution of warheads over the various types of delivery vehicles—land and sea-based ballistic missiles, cruise missiles and bombers. Character is somewhat more nebulous but would refer to alert status, target lists, the relative weight of the faster, more accurate systems in the total force and so on.

As to **size**, the numbers under consideration appear to fall in the range 1000-2500 warheads. The upper figure is that agreed between Clinton and Yeltsin as the target for a START 3 agreement. The lower number is now being bandied about informally but sufficiently frequently in Washington to suggest that it has some official credibility. One thousand warheads seems remarkably low, but only when measured against the Cold War arsenals. What if consideration were given to working up from zero rather than cutting down from the present levels, and to posing as the core question: what nuclear threats could plausibly or purposefully be acted upon?

These questions are closely related to the issue of what nuclear weapons should be asked to deter. It is almost axiomatic that the role of nuclear weapons in international affairs will vary directly with the range of contingencies they are expected to deter or help to deter.

The threat to use nuclear weapons to defeat aggression with conventional forces most starkly discounts the unique character of these weapons and keeps them at the cutting edge of international affairs. This is also perhaps the most damaging qualification of a negative

security assurance provided to help discourage the proliferation of nuclear weapons. Similar considerations apply to a nuclear response to the use of chemical or biological weapons, although the fact that these are also weapons of mass destruction, and that treaties exist banning their possession and use, represent an important qualitative difference.<sup>29</sup>

The more purposes nuclear weapons are considered to serve, the more conditional and difficult will be any process of control and reduction. The instinctive attraction to applying the deterrent effect of nuclear weapons as widely as possible has to be weighed against the likelihood of implementing such threats and the consequences of doing so, as well as the corrosive effect this kind of nuclear posture has on non-proliferation norms. The strong and so far absolute reluctance to use nuclear weapons in the post war period suggests that it is fanciful to postulate their use in any circumstances except in retaliation for the use of nuclear weapons by another state. One has to wonder whether postulating the threat of first use of nuclear weapons in a non-nuclear conflict adds anything to the fact that a nuclear weapon state has the capability to do so and may ignore the NSA it offered in peacetime. Similarly, maintaining a large and diversified nuclear arsenal to convey threats one has no intention of implementing diverts resources away from military capabilities that are unquestionably useable.

The strongest outcome from the standpoint of building a new strategic framework, including revitalising the non-proliferation regime, would be for the US to adopt an unqualified posture of no first use of nuclear weapons. It seems likely, however, that there will be very strong pressures to broaden this to the proposition that the United States will not be the first to use weapons of mass destruction.<sup>30</sup> Still, detaching nuclear weapons from conflicts with conventional weapons will be an important step forward. Even this move may be strongly contested if the views in the US study quoted above are in any sense representative.

In terms of **composition**, nuclear forces that are very small by historical standards could raise contentious questions about the triad of delivery vehicles—ICBMs, SLBMs, and bombers. This diversity of launch platforms contributed importantly to the security or survivability of the nuclear force during the Cold War. Retaining this diversity as warhead numbers fall would significantly reduce the scope for major cost savings but the assurance it provides may still be regarded as important. It would be important to bear in mind, however, that the new strategic framework would cast efficiency or cost-effectiveness in a new light. Specifically, one would think in terms of investing in a markedly more benign nuclear environment rather than focus on the most cost-effective way of holding an array of targets at risk with nuclear weapons.

As to **character**, one key to a low salience nuclear posture is to not have weapons on a high alert. Nuclear weapons should be secure but slow to take offence, and as far as possible detached from the tensions of everyday affairs.

A second key has to do with targeting.<sup>31</sup> The American approach (as usual, it's the only one we know much about) is to rigorously quantify the political guidance on what is expected of the nuclear force. It is doubtful that anyone was fooled that such a process was more science than art. But it at least ensured that the process was not entirely arbitrary and provided a

measure of accountability and control. It remains old (i.e. Cold War) thinking, however. And it seems to impart a pronounced upward bias to the nuclear force. Russia, for example, is no longer an enemy but a prospective strategic partner, and is pretty much crippled as a global power. Yet the United States continues to target 2260 nuclear weapons at 'vital' Russian targets—nuclear weapon sites, conventional weapon sites, defence industries, and leadership targets.<sup>32</sup>

An approach more consistent with the thrust of the new strategic framework, and with the quality of political relationships that must accompany such a framework, would be to acknowledge that the overall size of a nuclear force should be a political decision. And the central consideration in this political decision, for the time being at least, would be to roughly match the largest of the forces that the other nuclear powers insisted on retaining. Such a force would not be pre-targeted. Instead, it could be communicated that nuclear response options would be developed if and when required.

This recommendation, in turn, has a major consequence. The United States and Russia could move more or less directly to nuclear force levels in the hundreds of weapons. This should then attract the involvement of China, France and the UK in the further development of a regime for weapons of mass destruction and defences against them that supports and consolidates the new strategic framework. These states are all parties to the conventions banning biological and chemical weapons, and to the NPT, which commits them to work toward nuclear disarmament. Being explicitly required to share responsibility for this endeavour may not make understanding and agreement easier but it would ensure outcomes that are more durable. Among other things, we could expect in these circumstances to see a significantly stronger collective interest in inhibiting the proliferation of weapons of mass destruction and long-range delivery vehicles.<sup>33</sup>

The development and implementation of a new strategic framework could in this way become an important axis of cooperation in relations among these core states. They all have a global perspective and a strong interest in a stable world order. They all share an interest in a regime for strategic weaponry that protects their respective vital interests (including minimising the risk of being attacked by accident or in an unauthorised manner) but which also strengthens the non-proliferation regime.

The difficulty of reaching workable understandings within this group should not be underestimated. But the stakes are high and the opportunity to try can be brought within reach.

## **Conclusions**

A comprehensive and holistic re-examination of how to manage the issue of weapons of mass destruction over the coming decades is overdue. The Bush administration is to be commended for recognising that missile defence cannot sensibly be pursued in isolation from this broader issue. That said, there are several aspects of the approach currently being pursued in Washington that diminish the likelihood of outcomes consistent with declared



Australian interests regarding the management of existing nuclear arsenals, the proliferation of weapons of mass destruction and long-range missiles, and the deployment of weapons in space.

Accordingly, Australia should use whatever influence it can muster to encourage the Bush administration to change its approach in the following ways. First, to strive to keep the missile defence development program proportionate to and focused on the potential threat from maverick states. This means, in particular, eliminating the option of deploying missile defences in space. Second, to give top priority to leading the nuclear weapon states toward small, low-salience nuclear forces that signal clearly an interest in exploring the possibility of the complete elimination of weapons of mass production. Thirdly, to recognise that codifying the new arrangements in treaty form is likely to be essential to building the necessary confidence in the durability of the arrangements. The adversarial nature of arms control negotiations during the Cold War should certainly remain a thing of the past. The end of the Cold War has not, however, made weapons of mass destruction less different or special.

## Notes

- 1 In an earlier analysis of the revival of interest in missile defences during the 1990s, I concluded that we should be thinking much harder about the circumstances that would need to be created to allow missile defences to be a positive development. This referred particularly to the future regime for offensive nuclear forces. This paper attempts to develop this conclusion. See my 'ABM vs BMD: The Issue of Ballistic Missile Defence', WP No. 357, *Strategic & Defence Studies Centre*, May 2001.
- 2 Quoted in BBC News Online, 'Missile Defence Optimism Fades', 23 July 2001.
- 3 'US, China Set for More Talks', *Washington Post*, 29 July 2001.
- 4 A discussion that the author found particularly valuable in preparing this paper was Michael Krepon, 'Moving Away from MAD', *Survival*, vol. 43, no. 2, Summer 2001.
- 5 'Rumsfeld Goes Full-Bore For Ballistic Missile Defense', *Aviation Week & Space Technology*, 2 July 2001, pp. 37–38.
- 6 'Ibid.', p. 38.
- 7 One estimate suggests that current plans could result in at least 1000 missile interceptors capable of engaging long-range missiles. See Michael E. O'Hanlon, 'Double Talk on Missile Defense', *Washington Post*, 31 July 2001.
- 8 Interview with Craig Whitney, *New York Times*, 17 December 1999.
- 9 Secretary of Defense Donald Rumsfeld, interview by Jim Lehrer on PBS NewsHour, 14 February 2001.
- 10 This message is readily discernible in leaked US briefing notes for high-level discussions with Russia in late 1999. See Ambassador John Holum, 'Talking Points', *Bulletin of Atomic Scientists*, 20 January 2000.
- 11 Bruce Blair, 'Impact of NMD on Russia, Nuclear Security', Center for Defense Information, Issue Brief, November 2000.
- 12 Speech at the National Defense University, Fort McNair, Washington, D.C., 1 May 2001.
- 13 'U.S. Updates' Nuclear War Guidelines', *New York Times*, 8 December 1997.
- 14 'Trapped In The Nuclear Math', *New York Times*, 12 June 2000. Given the nature of the thinking that goes into these plans, however, the suggestion that China did not figure in any way in the targeting plans in the 1980s and 1990s seems implausible.
- 15 'US Updates Nuclear War Guidelines', op.cit.
- 16 Department of State, statement by Secretary of State Warren Christopher, 5 April 1995.
- 17 See R. Jeffrey Smith, 'Clinton Directive Changes Strategy on Nuclear Arms', *Washington Post*, 7 December 1997; *New York Times*, editorial, 9 December 1997; Jeff Erlich, 'New US Nuclear Policy Maintains Ambiguity', *Defense News*, 5-11 January 1998.
- 18 Quoted in 'Clinton Issues New Guidelines On US Nuclear Weapons Doctrine', *Arms Control Today*, November/December 1997, p. 23. See also, 'New US Nuclear Policy Maintains Ambiguity', op.cit.
- 19 'Clinton Directive Changes Strategy On Nuclear Arms', op.cit.

- 20 'Clinton Issues New Guidelines On US Nuclear Weapons Doctrine', op.cit.
- 21 'Hearings on U.S. Strategic Nuclear Force Requirements in the DoD Strategic Integrated Operational Plan', Senate Armed Services Committee, 23 May 2000.
- 22 'Trapped in The Nuclear Math', op.cit.
- 23 'Rationale and Requirements for US Nuclear Forces and Arms Control', *National Institute for Public Policy*, Volume 1, Executive Report, January 2001.
- 24 One 'senior administration official' reportedly described this report as a 'broad road map' on nuclear policy. See Keith Payne, 'Drop Cold War Nuclear Policy', *Defense News*, 19 March 2001.
- 25 'Rationale and Requirements for US Nuclear Forces and Arms Control', op.cit, p. 4.
- 26 There have been some indications of US interest in developing a nuclear warhead that would penetrate deeply into the earth before detonating. See 'US Rethink Could Spark "mini-nukes"', *Jane's Defence Weekly*, 23 May 2001, and Walter Pincus, 'Senate Bill Requires Study of New Nuclear Weapon', *Washington Post*, 12 June 2000.
- 27 'Rationale and Requirements for US Nuclear Forces and Arms Control' op.cit., p .9.
- 28 In the mid-1990s, the sense of drift sparked several prominent studies on the importance and feasibility of complete nuclear disarmament. Prominent among these was the Canberra Commission on the Elimination of Nuclear Weapons.
- 29 For an excellent recent discussion on why the US should not use nuclear threats to deter attacks with chemical or biological weapons, see Scott D. Sagan, 'The Commitment Trap: Why the United States Should Not Use Nuclear Threats to Deter Biological and Chemical Weapons Attacks', *International Security*, Spring 2000, pp. 85–115.
- 30 Even some respected US analysts that support a bold approach to reductions in the nuclear force recommend this approach on no first use. See Barry M. Blechman and Leo S. Mackay, Jr., 'Weapons of Mass Destruction: A New Paradigm for a New Century', Occasional Paper No. 40, October 2000, Henry L. Stimson Center, Washington, D.C., pp. 12–13.
- 31 For a comprehensive review that is both readable and detailed, see Matthew G. McKinsie, Thomas B. Cochran, Robert S. Norris and William M. Arkin, 'The US Nuclear War Plan: A Time For Change', Natural Resources Defense Council, June 2001.
- 32 'Senator Confirms Secret U.S. Nuclear Targeting Plans', *Defence Week*, 12 June 2000, p. 1.
- 33 Russia proposed in July this year that the five permanent members of the UN Security Council (and also the five acknowledged nuclear weapon states) set up a standing forum to consider ways to ensure strategic stability, notably deep cuts in nuclear arms and preserving the ABM treaty. See 'Russia Suggests ABM Meetings', *Moscow Times*, 9 July 2001, p. 3. There appears to have been little reaction to this proposal.