Bush, Missile Defence and the Atlantic Alliance

Philip H. Gordon

Throughout the 2000 presidential campaign, Republican candidate George W. Bush repeatedly made clear his belief that the United States should move rapidly to develop and deploy a defensive system designed to protect the United States from ballistic-missile attack. Without proposing a specific plan of his own, Bush strongly criticised the Clinton administration for what he asserted was an excessively deliberate, limited, and half-hearted approach and promised, if elected, to 'build effective missile defenses, based on the best available options, at the earliest possible date'.[1] Since the election, Bush has called defending 'our people and allies against missiles and terror' one of his three top defence-policy goals, and his senior aides – including Secretary of Defense Donald Rumsfeld and Secretary of State Colin Powell – have asserted their support for development of a national missile defence (NMD).[2] Indeed, the very choice as Pentagon chief of Rumsfeld – whose 1998 report on the growing ballistic missile threat to the United States gave new momentum to the NMD debate – was widely seen as a strong indication that Bush takes the issue seriously and intends to move forward.[3]

The new administration's apparent support for proceeding with NMD has not been greeted with great enthusiasm in Europe, where most governments had greeted Clinton's September 1999 decision to defer an NMD deployment with a huge sigh of relief. For months prior to that decision, Europeans had been concerned that domestic political pressures would force the president to begin deployment, thereby violating the 1972 Anti-Ballistic Missile Treaty and possibly setting off a long chain of other unwelcome consequences: a deterioration of relations with Russia and China; diminished prospects for further arms control and disarmament; an arms race costing billions of dollars without bringing added security; and the undermining of nuclear deterrence. Thus, when Clinton announced his decision not to deploy, Europeans felt as if

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they had narrowly dodged a bullet, and the missile-defence issue fell from the top of the transatlantic agenda almost as quickly as it had risen in the first place. With Bush now in the White House, it looks as if the issue is going to rise again.

Clinton's deferral of deployment was the only responsible decision to make at the time, after two of the first three tests of Clinton's planned system had failed. It took the issue out of the charged political atmosphere of an election campaign, and bought valuable time for the United States to make sure it is pursuing the right technology, fully test whatever system it does decide to develop, and seek to negotiate revisions to the ABM Treaty with Russia.

The deferral also bought time to pursue serious discussions with the European allies, whose support for any NMD deployment may not be indispensable, but is certainly highly desirable. If the United States and Europe can eventually agree on ballistic missile defences – assuming they prove technologically feasible and cost-effective – a deployment could provide important insurance against a growing threat while strengthening deterrence by making the willingness to use force more credible. Conversely, an American deployment without European support may prove necessary, but it would have real drawbacks. Deploying without allied agreement could diminish the political legitimacy of the programme, deny the United States valuable resources (in particular forward-based radar sites), make it harder to persuade Russia and China to accept the inevitability of NMD, and perhaps most importantly, leave Europe (with its many US citizens and military bases) vulnerable to missile threats and blackmail, thus undercutting the relevance of the protection of the American homeland. All these factors make it imperative for the United States to involve Europeans in its deliberations about missile defence, even without giving Europeans a 'veto' over what is ultimately a national strategic decision.

It is possible, of course, that a series of external geostrategic, political, technological and budgetary factors could conspire to make US missile defence aspirations fade away, as they did on earlier occasions in the 1960s and 1980s. If North Korea disappears, Iran moves down a path toward democratic liberalisation, and Iraq disintegrates or remains 'in a box', it is not impossible to imagine a scenario – especially if the US budgetary picture worsens and NMD technology proves elusive – in which missile defences are put on the back burner, if not shelved altogether. Under these circumstances, US research on missile defence would likely continue, but the deployment of a system would continue to be put off, the current ABM Treaty could remain in force, and Europeans would have little to worry about. A more likely scenario, however – especially now that Bush has been elected – is that the United States will proceed with NMD. While the timing is uncertain, the weapons of mass destruction (WMD) proliferation threat is likely to grow, not to diminish, over the coming years, and American leaders will feel compelled to pursue missile defences to protect the American homeland from WMD threats and blackmail. Despite strong support for the most rapid deployment possible among

conservative Republicans (many of whom will be active voices from within the administration), Bush may defer any deployment decisions during his first year in office simply because – with the failed and delayed testing schedule of the Clinton system – there is no available technology to deploy. By the second year of his term, however, and in particular as the 2002 Congressional elections approach, the pressure to move forward with some type of NMD system will be great. While the deployment of anything but a limited, land-based system is probably years away, given the current state of the technology, the United States under Bush is virtually certain to continue aggressively exploring the possibility of effective missile defence, and it is more likely than not to start taking steps toward a deployment during the next four years.

The time 'bought' by the Clinton deferral – in effect Bush's first year – thus needs to be used wisely, and for a number of different purposes. The new administration needs not only to choose carefully among competing technologies and architectures and to pursue agreement with Russia, but it should involve the European allies early, often and sincerely in its deliberations. Ultimately, if Europe remains unpersuaded that ballistic-missile defences are strategically useful and technologically feasible, the United States may decide that the benefits of deployment will exceed the damage that unilateral deployment would do to the transatlantic relationship. The mutual European and American interest in avoiding such an outcome, however, should be sufficient to inspire both sides to do all they reasonably can to avoid it.

The Latest Missile Defence Debate

US missile defence initiatives, and the transatlantic debates about them, are hardly new. In the 1960s, the United States pursued missile defence programmes (*Sentinel* and *Safeguard*) in the face of European scepticism about their utility and opportunity costs. *Sentinel*, however, was never deployed, and *Safeguard* was limited to a role in protecting ICBM sites, a role permitted by the ABM Treaty. When it, too, was ultimately abandoned because of its technological shortcomings (and lack of real purpose, given the US sea-based deterrent), the missile defence issue effectively disappeared.

In the 1980s the issue arose again with President Ronald Reagan's Strategic Defense Initiative (SDI), which for several years caused a furore in Europe because of European fears about its implications for arms control and a possible East–West arms race. But over time, SDI also faded from the scene, after its technology proved too ambitious and its main target, the Soviet Union, began first to reform and then to disintegrate. In the wake of the Soviet collapse in the early 1990s, the Bush administration launched yet another missile defence initiative, whose name (Global Protection Against Limited Strikes, or GPALS) suggested its very different rationale – protecting against relatively limited attacks (up to about 250 missiles) from whatever source. But the Clinton administration was sceptical about national missile defences and put a far higher priority on theatre missile defence in the aftermath of the *Scud* attacks during the 1991 Gulf War. Facing a dire budgetary situation, Clinton

eliminated the GPALS programme in 1993. For the third time in four decades, strategic missile defence had come and gone as a major issue.

So why did it come back in the late 1990s? Several factors came together all at once. First, the possible missile and WMD threat from potentially hostile states – in this case North Korea, Iran and Iraq – was growing. What at the time of GPALS was still a highly theoretical scenario was now – with the spread of ballistic-missile technology and the risk of nuclear materials or know-how leaking from the former Soviet Union – increasingly real. This more pessimistic threat analysis was consecrated in the July 1998 'Rumsfeld report,' a bipartisan commission sponsored by Congress, which concluded that states like North Korea or Iran could potentially make technological leaps that would enable them, within five years of a decision to do so, to deploy a WMD-armed ballistic missile capable of hitting the United States.[4] Such programmes, the commission suggested, could develop without Washington even being aware of them. As if to prove Rumsfeld's point, just six weeks after publication of the report, North Korea surprised all outside observers and intelligence agencies by testing a three-stage rocket over the Sea of Japan in August 1998. Although the missile test failed, it did demonstrate the validity of the Rumsfeld Commission's point, that the United States might have little warning if a state such as North Korea did make rapid progress toward the development of an ICBM. Stung by criticism for having failed to foresee the North Korean missile test, as it had failed to foresee the Indian and Pakistani nuclear tests the previous year, the US intelligence community soon modified its own assessments on ballistic-missile proliferation, bringing them closer in line with those of the Rumsfeld Commission.[5]

The second factor in putting NMD back on the agenda was the United States' own technological advances. In the decades passed since missile defences were first conceived in the 1950s and 1960s, technologies needed for missile defence greatly improved. Most notable was progress in computers, advanced sensors, and micro-thruster rocket technology that makes it possible for the small-kill vehicles to manoeuvre extremely adroitly in the final minutes and seconds before attempted intercept. By late in the decade, hit-to-kill technology was working reasonably well for the first time ever. Successful tests were conducted for the *Patriot* short-range TMD system, the THAAD advanced TMD system, and – prior to the two failures in 2000 – the Clinton administration's NMD system. Admittedly, not all of these tests were fully realistic; notably, the successful NMD test was lucky in that the kill vehicle first tracked a decoy before finally finding the mock warhead and homing in on it. In addition, even once it is refined, this NMD technology may never be able to distinguish decoys that resemble warheads from the threatening objects themselves. Nonetheless, the progress has been tangible and impressive.

The third factor was the dramatic change in the US budgetary picture. In great contrast to the situation in the late 1980s and early 1990s, when the country was running up large annual budget deficits and building up the most massive debt in world history, the US budgetary situation by the late 1990s was

so rosy that objections on cost grounds also started to lose their force. Even higher-end cost assessments of the Clinton plan were 'only' $6 billion per year, which no longer seemed excessive for a country with a $300bn defence budget and $200bn surpluses. Of course, it is not that simple: the $200bn surpluses are no more than projections – by the same economists who only recently were projecting deficits as far as the eye could see. In the 2000 presidential campaign, moreover, candidates Bush and Gore revealed where the country's political priorities were by promising only about 2% and 4% of the projected surplus, respectively, for defence ($5bn and $9bn a year). And after a decade in which the American armed forces bought only limited supplies of weaponry, simply retaining today's military while buying modern equipment for it at sustainable rates could require a real-dollar increase in the annual defence budget of $30bn to $50bn – not counting the costs of an expanded NMD.[6] But the fact remains that if the United States decides it wants even an ambitious NMD – especially if it is prepared to forego Bush's large proposed tax cuts – it is now in a position to afford it.

Finally, there were the domestic politics. With Republicans in Congress strongly committed to missile defence, and evidence of the threat now growing, the Clinton administration's unwillingness seriously to pursue missile defences risked becoming a political liability in a pre-election period. The American public was not necessarily overwhelmingly in favour of deployment (indeed, polls showed that most Americans thought the country *already* had a missile defence), but many Americans felt passionately about the subject and the Democrats needed to avoid the traditional accusation that they were 'soft on defence'.[7] Not wanting to be caught in a position of appearing to be unwilling to defend the United States in the face of a potentially catastrophic threat, the administration was thus obliged to announce its support at least for the principle of limited missile defences, even while carefully delineating the circumstances under which it would actually deploy: if the threat were real, the cost limited, the technology demonstrably effective and the international implications manageable. The 2000 presidential race – in which Governor Bush and former defence secretary Richard Cheney harshly criticised the Clinton-Gore military legacy – showed that Democrats remained vulnerable on the issue of national defence. Not even Gore's service in Vietnam, his support for the 1991 Gulf War and his 'pro-defence' record as a senator was able to shield him from these attacks and prevent the majority of the 'military vote' from going to the Republicans.

By the summer of 1999, the combined weight of all these factors was such that Congress passed (the Senate vote was 97–3) and Clinton signed the National Missile Defense Act of 1999. The act stated clearly that it was now 'the policy of the United States to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the territory of the United States against limited ballistic missile attack'.[8] Clinton did make clear when he signed the act that its reference to the budgetary authorisation and appropriations process meant that no deployment decision had been

taken, and he again stressed his conditions that NMD be cost-effective and take into account arms control and nuclear nonproliferation objectives. But the act was nonetheless a strong statement of American consensus that NMD should go ahead once it is ready. As several Brookings Institution analysts concluded in their analysis of the programme in early 2000, a US national missile defence deployment seemed to have become a question not of 'whether', but of 'how'.[9]

Europe's Limited Enthusiasm

While very few in Europe outside a small group of officials, experts and politicians have actually given missile defence much thought, it is fair to say that most Europeans are not enthusiastic. Using the criteria established by the Clinton administration for deciding whether to proceed with deployment, most Europeans question the seriousness of the threat, worry about the cost of the programme (especially the opportunity costs in terms of other military and strategic priorities), doubt whether the technology can ever really be made to work, and have deep reservations about the potential international implications of deployment, particularly in terms of its impact on arms control and on relations with Russia and China. They accept that a US national missile defence deployment decision is ultimately an issue for Americans alone to decide, but at the same time hope to be able to persuade them to think carefully about the potential consequences of their actions.[10]

The apparent American determination to proceed with missile defences thus poses a central dilemma for the Europeans: should they acquiesce and support a policy they believe to be counter-productive for the sake of helping to make it work and maintaining transatlantic harmony? Or should they oppose it, thus adding to its potentially negative consequences and undermining allied cooperation in the process? Europeans do not seem yet to have made up their minds on this question. If transatlantic differences on the issue cannot be narrowed, a US move to deployment will force Europeans to make a very uncomfortable choice.

In addition to the substantive differences over the merits of deployment, Europeans have also voiced procedural complaints. As Americans proceeded with their NMD decision-making process in the late 1990s – particularly between summer 1998 and summer 1999 – Europeans felt that they were kept out of the loop. At times, the European allies had the impression that Russians were being briefed more extensively on the US NMD plans than they were. There is certainly some merit to these complaints. It is true that the American NMD debate was driven by largely domestic considerations. American officials were not particularly inclined to ask Europeans what they thought, since they knew the European reactions would be largely negative and that the United States was going to have to proceed in any case. At the same time, not all the blame for the absence of full consultation during 1998–99 lies with the Americans. During this period Europeans were not paying sufficient attention to a debate that was obviously shifting. The United States has a remarkably transparent decision-making process, even on military matters, and it should have been clear to everyone that NMD was on its way.

In any event, by the summer of 1999, a serious transatlantic dialogue on NMD was well underway on both official and unofficial levels. Both at NATO and, more importantly, in bilateral discussions among senior US and European officials, Europeans were able to express their concerns about the international implications of an NMD deployment, and the US administration was able to present a more complete threat assessment and explain the limited nature of its planned response. By no means did these discussions dispel transatlantic disagreement, but there is no doubt that they were constructive. Arguably, the discussions helped Americans develop a greater appreciation of the potential international consequences of an eventual deployment (probably contributing to Clinton's deferral) and disabused at least some Europeans of the notion that NMD was a frivolous undertaking driven by domestic politics alone.

Why Allies Disagree

Why should such close allies disagree so fundamentally in the first place? Whereas other transatlantic strategic debates, such as NATO enlargement or Kosovo, seem to divide Europeans and Americans as much among themselves as with each other, the NMD debate takes place across fairly distinct transatlantic lines.

The first and most fundamental factor seems to be the assessment, or more precisely the interpretation, of the potential threat. It is not so much that Europeans make different assessments about the growing ballistic and WMD capabilities of potentially hostile states, but rather that they question whether those states would ever have the intention of using such capabilities against the West. French Foreign Minister Hubert Védrine, for example, argues that it is 'not very serious' to claim that states like North Korea, Iran, Iraq or Libya could threaten a nuclear superpower like the United States, and calls their threats 'microscopic – or theoretical'.[11] The British House of Commons Foreign Affairs Committee has also argued that the American focus on capability rather than intention 'makes the threat which NMD is intended to counter less credible'.[12] Americans, by contrast, argue that the fact that these countries are devoting such a large share of their scarce resources to ballistic and WMD programmes must be a sign that they have some perceived utility.

These diverging transatlantic threat assessments stem largely from the fact that Europeans are not in the habit of picturing themselves in combat with any of these potential adversaries, whereas Americans are. If a desperate North Korean regime launches an attack on the South, China invades Taiwan, Iran joins an Arab coalition in a war against Israel, or Iraq again invades one of its neighbours, it is the United States that would assume the main risks of mounting a military defence. It is entirely appropriate for US defence planners to take these scenarios seriously. Ten years ago, the United States lost 28 soldiers in Operation *Desert Storm* to a *Scud* missile, and Americans remember well how the allied coalition in that war could have fractured had Israel chosen to retaliate when its territory was attacked by Iraqi *Scuds*. Because they are likely to be the ones doing the fighting (or at least threatening the use of force), Americans thus worry far more than Europeans that without some form of

insurance against a potential adversary's ballistic and nuclear arsenal, the scope for outside military intervention in the region in question is vastly reduced, if not eliminated. Would the allied coalition have proceeded with Operation *Desert Storm* in 1990–91, Americans ask, if Iraq had possessed nuclear missiles capable of hitting Western Europe and the United States? So long as this divergence in attitudes regarding potential war in North-east Asia or the Middle East exists, so will the divergence over the merits of NMD.

A second important factor in the transatlantic NMD divergence results from different European and American attitudes towards arms control, and towards multilateralism in general. European nation-states, overshadowed by the superpowers during the post-war period, developed a strong conviction that their interests were best preserved by the development of rules to govern international behaviour – in the European Union, the United Nations and other multilateral fora. The United States also supports multilateralism where possible, but – as the 'world's sole superpower'– is far more ready to pursue its perceived national interests unilaterally. These diverging attitudes towards the role of multilateralism help explain the contrasting US and European approaches towards NMD: Europeans fear that a US deployment, especially without prior Russian agreement to modify the ABM Treaty, could lead to a new arms race with Russia and China and a further breakdown of global arms control and multilateral cooperation. They point to Washington's refusal to go along with other important international agreements (including the International Criminal Court, the ban on anti-personnel mines, the Comprehensive Nuclear Test Ban Treaty and the Kyoto environmental agreement) as signs of a negative trend already in motion. The United States agrees that it would be better to deploy NMD in the context of an agreement with Russia to revise the ABM Treaty, but is not willing to subordinate a deployment to such an agreement, as many Europeans would wish. For the same reason Washington was willing to bear international criticism for failing to support these other international agreements, it would be willing to do so for NMD should it decide that the national interest requires it.

A third important factor in shaping relative European and American perspectives on NMD arises from their respective strategic cultures and attitudes towards vulnerability. Europeans, all of whose homelands have at one stage or another been invaded, and who have for decades shared a continent with a massive nuclear power to the East, have learned to live with strategic vulnerability in a way that Americans – protected by two oceans and for generations the world's predominant military power – never have. These respective attitudes towards vulnerability directly shape transatlantic attitudes towards the ballistic-missile threat. Europeans accept that the threat exists, but also that (at least in their view) there is not a lot they can do about it. Americans, on the other hand, refuse to resign themselves to inevitable vulnerability, and instead appeal to their historic optimism and faith in technology. Naïvely or not, it is simply impossible – if there is any conceivable alternative – for an American political leader to accept that murderous regimes

in regions of strategic American interest might be in a position to threaten the destruction of American cities without the United States at least seeking to do something about it. Only when the Soviet Union had built up a massive nuclear and ballistic-missile force did the Americans agree to negotiate a bilateral treaty banning missile defences, and even that was resented and opposed by many, particularly on the conservative side of the political spectrum.

The fourth reason for the general transatlantic disagreement about missile defences is budgetary. As explained above, the United States has entered the twenty-first century in the best fiscal conditions for decades: growth is robust, budget surpluses keep getting bigger and public support for defence spending remains strong. Whereas economic growth has also returned to Europe, Europeans nonetheless face a very different picture: necessary fiscal consolidation to make a success of the euro, the looming costs of EU enlargement, and public pressure to cut rather than increase defence budgets. In this context, European leaders know they will be hard-pressed to come up with the money necessary for their European defence initiative agreed at the December 1999 Helsinki summit – a rapid-reaction capability to deploy and sustain at least 60,000 troops – let alone any new missile defence initiatives. European financial constraints are obviously not a direct reason to oppose American NMD plans, but they do limit Europe's openness to the case for missile defence in general.

Finally, beyond these general transatlantic differences, there are factors particular to individual European countries that add to their scepticism about NMD. The United Kingdom and Denmark, for example, are in the awkward positions of being asked to offer part of their territory for forward-based radar sites (at airbases in Fylingdales, England and Thule, Greenland) for a system that would not protect them yet might make them more appealing targets to a potential adversary. And France, which has for decades based its ultimate defence on a national nuclear deterrent, worries that the pursuit of NMD will create a self-fulfilling prophecy: by admitting concerns that traditional deterrence might fail, the US pursuit of NMD will help to ensure that it will fail. Some in France also still worry, as they did during the 1980s 'Star Wars' debate, that the deployment of NMD systems by France's adversaries could undermine the viability of the French deterrent force.[13]

Taken together, these factors constitute a fairly significant transatlantic gap. They do not necessarily mean that this gap cannot be bridged, but there is a lot of work to do on both sides if agreement is to be reached. Much will depend on the kind of missile defence the United States decides to deploy, and how it goes about the politics and diplomacy of deployment.

Bush's Deployment Options and Implications for Europe

Having made national missile defence such a high priority in its campaign and initial policy statements, a Bush administration will want to move as quickly as possible towards deployment. Deploying NMD would not only satisfy the longstanding Republican desire to provide ballistic-missile protection to the United States, but would also be a sign of the new administration's

determination to act decisively in foreign and defence policy – contrasting itself with the dithering and delays of which the Bush campaign accused the Clinton administration.

Several factors, however, mitigate against an early deployment decision. The first and most obvious is that there is currently nothing to deploy. The only system even close to plausible deployment would be the land-based system that Clinton had proposed (and that Bush had criticised), but even that has been plagued by the failure of two of the first three tests, and the slippage of a date for further tests until late spring 2001 at the earliest. During 2000, some outside analysts, including at least one who is now a senior official in the Bush administration, advocated the 'emergency deployment option' of sea-based NMD as at least a stop-gap measure, but it is far from certain that Bush would want to move forward with unproven and untested technology before a major strategic review.[14] If Bush wants to begin deploying the Clinton system in 2001, he would have to make a decision by early spring to authorise initial construction of a sophisticated radar station at Shemya Island in Alaska, so that construction could take place during the very short summer there. Not only would this mean authorising deployment before the next scheduled test of that system, but it would mean doing so without many of the administration's mid-level defence and foreign policy officials (who would be responsible for the details and implementation of the plan) in place, given delays in the appointment and confirmation processes. Bush's lack of a clear mandate to lead the country after the Florida election debacle and the divided Congress (where Democrats and fiscally conservative Republicans may not be willing to provide necessary funding) will also make it difficult for him to move ahead quickly with NMD. As a result, despite the new president's commitment to build NMD, an early deployment decision is not guaranteed. The only thing that is guaranteed is an internal administration debate among those who believe a deployment decision must immediately be taken – if nothing else to demonstrate their determination to proceed with NMD – and those who want to move more cautiously.

Regardless of whether he decides to move forward in 2001 or later, Bush will probably initially pursue a version of the land-based NMD system proposed by the Clinton administration at least as a stop-gap measure, while moving forward with other technologies, such as so-called boost-phase defences, which could be based on land, at sea, or possibly on aircraft. Over the longer term, Bush might envision space-based defences, an integral part of Reagan's Strategic Defense Initiative and supported by at least some serious observers.[15] The space-based alternative seemed to gain plausibility in January 2001 with the publication of a second Rumsfeld report (initiated before his appointment as Secretary of Defense) which called attention to the potential vulnerability of US space-based assets and appealed to US leaders to develop the means to defend them.[16] Because of their enormous cost, technological challenges and certain international opposition, however, space-based missile defences are unlikely to be pursued in the near-term. Thus, for the purposes of

this discussion, it makes most sense to focus on the implications of the two more likely architectures.

The Clinton NMD System The Clinton administration's proposed system would provide coverage of the entire United States from long-range missile attack from Eurasia, but virtually no coverage for any ally (other than those in the western hemisphere). Being a national missile defence, it is strictly forbidden by the 1972 ABM Treaty, regardless of how many interceptor missiles might be deployed, and would therefore require changes to that treaty or US withdrawal from the treaty regime. Because of the risk that the system could be continually expanded to the point where it might threaten even Russia's large nuclear missile force, it might be more difficult to persuade Russia to amend that treaty.

Under the Clinton plans, interceptor missiles would be based at a single site in Alaska by 2006 or so. Existing early-warning radars in the UK, Greenland, Massachusetts, California and Alaska would be upgraded, and a high-precision x-band radar would be built on Shemya Island in Alaska's Aleutian chain. Once an enemy ICBM launch was detected by early-warning satellite and radar, interceptors would be launched. They would eventually release small 'kill vehicles' on trajectories high above the earth's atmosphere where they would then manoeuvre to collide with enemy warheads, destroying them by sheer force of contact. Given likely rates of successful intercepts, the 100-interceptor Clinton system would be capable of intercepting perhaps two dozen warheads launched from North-east Asia. It could intercept only a few warheads from the Middle East, however, because its radar coverage in that direction would be far less comprehensive, and because the Alaska-based interceptor missiles would be a long way away from the trajectories of missiles aimed at East Coast cities from the Middle East. More thorough coverage against Middle Eastern threats would come with the so-called C^2 and C^3 capabilities in ensuing years (with up to 250 interceptors), if indeed those further capabilities were deployed.[17]

The Clinton system has had significant testing and development problems. Notably, both major flight tests in 2000 failed to hit their targets. Those problems are likely to be solved, but serious questions remain about the ability of the system to cope with even relatively simple and light decoys, which would travel at the same speed as warheads in the vacuum of space. If decoys and warheads were all wrapped in radar-reflective balloons, and relatively straightforward steps were taken to keep their temperatures similar, sensor systems using either radar or infrared detection techniques would almost certainly be incapable of distinguishing the real from the fake. A small power like North Korea might not be able to develop even such simple decoys – but then again, it might.

In addition to the Clinton system's technical limitations, it has real drawbacks from a transatlantic perspective. Most importantly, it would provide no protection for European territory. Under such circumstances, an

extremist leader in Iraq or Iran or North Korea could threaten major European cities – or for that matter US military bases in Europe or other sites with large American populations – rather than the United States. That might well prevent the United States from considering a full range of military options in some future war just as surely as if the enemy regime were able to threaten the United States itself. To deal with such a contingency, Europeans could purchase TMD systems, as is already planned, but such systems might not work against relatively long-range missiles, for example those launched from Iran against north-western Europe. Alternatively, Europeans could deploy their own version of a Clinton-style system, involving perhaps two x-band radars and 100 interceptor missiles stationed somewhere in the central region of the continent. But the cost of such a deployment could reach $10bn – not including the costs of the TMD systems that would still be needed to defend countries such as Turkey, Greece and Italy from short-range missiles from the Middle East. Unless European views and threat perceptions change radically in the coming years, such expenditures must be considered highly unlikely.

Boost-Phase Intercept Boost-phase interceptors would be medium-sized, extremely fast-burn rockets that would be fired very quickly after an enemy launch was detected, catching up with the enemy ICBM while it was still in its burn or boost phase either within the atmosphere or just outside it.[18] At that point, the enemy ICBM – because it would be trailed by large, hot plume – would be highly vulnerable and easy to see and hit. It would also not have had the chance to deploy decoys or countermeasures, since they would not yet be up to the speeds needed for intercontinental trajectories. While an advanced enemy could build fast-burn ICBMs to counter such a defence system, these types of ICBMs are much harder to develop than current missiles owned by the likes of North Korea, Iraq and Iran.[19]

Such defence systems could be deployed near the Korean Peninsula, the Middle East and other potential trouble spots, provided appropriate basing on land or at sea was available. Finding basing against North Korean and Iraqi threats would probably be straightforward (ships in the Sea of Japan and a land base in eastern Turkey would presumably be the most natural choices). To cover all possible launches from Iran, two bases would be needed: one north of the country, one south of it. The former could be very difficult to arrange. That might leave as the only practical option airborne boost-phase defences, utilising either interceptor missiles or a laser. They would probably be useful only at a time when the United States had established air superiority in the course of a major crisis or war. However, that is the time when ballistic-missile defence would probably be most important, so this liability may be manageable.

Boost-phase systems appear within technological reach. Land-based and sea-based concepts would require a new interceptor of extremely high speed, but that could be built without radically new types of technologies. Nor would a boost-phase defence require a sophisticated sensor network on a par with what is required for the Clinton administration's programme. In fact, its main

infrared seeker would have such a hot target to home in on that it could use relatively inexpensive, simple, short-wavelength devices rather than the long-wavelength infrared seeker needed on the exo-atmospheric interceptor system (to say nothing of the long-range radars needed by the latter system).[20] Depending on the clarity of the infrared sensor, however, it might need a small radar for final homing to differentiate the missile body from the booster plume.

Even if they are proven to work (which will be known only after further research and testing), boost-phase defences are not without drawbacks. One potential problem is that hitting the rocket rather than the nuclear warhead would not necessarily destroy the latter. The warhead could then continue onward, possibly detonating – and, most likely, scattering radioactive material where it landed. Basing a defence on foreign territory, moreover, especially that of a non-ally, would raise questions about its dependability in wartime, in addition to giving the basing country enormous leverage over the United States. Land-based boost-phase systems would also be difficult, if not impossible, to move if new threats developed. Sea-based boost-phase systems would not be useful against missiles from all potential threats, since not all are near international or friendly waters. And airborne systems would require the prior establishment of air superiority, potentially leaving the US unprotected during the early phase of a conflict.

Yet boost-phase systems also have many potential advantages, not just for the United States but for Europe as well. Most importantly, unlike the Clinton system, effective boost-phase defences would protect Europe as well as the United States, thus avoiding the risk of perceived 'decoupling' or US 'isolationism'. Moreover, because of their limited range, boost-phase defences would not work against missiles launched from the interior of Asia – thus reassuring Russia and China that their nuclear deterrents would not be at risk.[21] This could make it possible to reach agreement with Russia on modifying the ABM Treaty, which should be good news for Europeans because it would avoid the risk of Russian countermeasures or withdrawal from other arms-control arrangements. Indeed, as hinted in the June 2000 meeting between Russian President Vladimir Putin and President Clinton, Russia might itself be interested in participating in a cooperative boost-phase missile defence programme with the United States.[22]

The Way Ahead

Intensive allied discussions of the missile defence issue over the past year have helped to narrow some of the big gaps that have divided the alliance on this issue. As a result of these discussions, Europeans have a better understanding of the reality of the growing ballistic-missile threat (and the options for dealing with it), and Americans have a better appreciation of the need to move deliberately and fully consider the potential international implications of a deployment. As the previous sections make clear, however, the transatlantic gaps remain large. While it is possible that a set of external developments – the emergence of a clear and realistic missile and WMD threat that would

persuade Europeans of the need for active defences, or alternatively very positive developments in Iran, Iraq and North Korea that would persuade Americans that they are not needed – the more likely scenario is that Europeans and Americans continue to disagree on the net assessment of the need for national missile defence over the next several years. In this context, how should they proceed?

Most essential is for all allies – and in particular the Americans – to realise that it is highly desirable, if not imperative, that Americans and Europeans act in concert. At the most basic level, given the current US need for radars in the UK and Greenland, NMD may simply fail to work if the United States does not get cooperation from Europe. This is also true for any eventual boost-phase systems, which would also need Europeans to supply bases, ports, or airfields.

More broadly, the alliance's ability to project military power multilaterally will decline if some of its members are vulnerable to a threat. Even the ability of the United States to project power on its own may be severely curtailed if its treaty allies – whose security it is solemnly bound to defend and on whose territory many Americans live – remain vulnerable to missiles and hence to threats. One of the best arguments for missile defence is that without it the United States might be deterred from confronting a hostile state with WMD and ballistic missiles, thus allowing that state to hold it hostage as it threatened its neighbours or other vital Western interests. But how much use would NMD be to the United States if it left Paris, London, Rome and Berlin – to say nothing of thousands of Americans on Ramstein, Aviano or Incirlik air bases – vulnerable to a WMD threat? If it is deployed at all, NMD should offer, as far as possible, protection to the alliance as a whole. This implies the need for serious pursuit of boost-phase concepts, or consideration of the eventual deployment of land-based interceptors in Europe.

The need for transatlantic cooperation is great not only for technical or deterrence reasons but also for diplomatic ones. If the United States decides to deploy NMD in the face of European opposition, the odds of strong and sustained Russian and Chinese resistance to NMD will only grow, as they seek to isolate the Americans. This could set off a negative cycle in transatlantic relations, where the American public could come to see the European position as an obstacle to its own legitimate right to self-defence. This attitude would poison the atmosphere for security cooperation across the Atlantic, especially in case of a new Gulf War-like crisis in the Middle East. This would not be 'decoupling' in the traditional sense of making the Americans less likely to come to Europe's defence (on the contrary, protection from WMD might actually make the United States more ready to do so), but it would reinforce an already worrying trend towards divergence in US and European attitudes towards the use of force and the right policies to adopt *vis à vis* threatening states. Europe's proclivity to accommodate rather than confront hostile states would rise in the face of a WMD and ballistic-missile threat, especially compared to an America that felt it had at least some degree of protection.

To say that the alliance would be better off if it reached a common position on missile defence is not to say that Europeans should offer unconditional

support for a US NMD deployment, or that there are no circumstances in which the United States should deploy if it fails to get European support. It does, however, suggest the need to place a very high premium on coordination and to argue for Bush to take European views into account. In particular, as he moves forward with NMD, Bush should:

• *make clear that NMD is directed neither at Russia nor China but at much smaller-scale threats, nuclear blackmail, or accidental launch.* An NMD that sought to counter the Russian and Chinese strategic arsenals would be so expensive that it would eat into other critically important defence budget priorities (to say nothing of other national priorities like social security, tax cuts and debt reduction), and even then it would probably not work against the thousands of deliverable nuclear warheads (and decoys) that Russia has or the hundreds that China could easily build. Reassuring these countries that NMD is not directed against them might not be enough to persuade them (or Europeans, for that matter) to drop their opposition to the programme, but failing to make the limited nature of the programme clear will certainly ensure not only Russian and Chinese opposition, but possibly even their active measures to counter it – such as increasing their strategic nuclear forces or making countermeasures available to other states.[23]

• *make good-faith efforts to seek revisions in the ABM Treaty or to replace it with a new treaty with Russia that accommodates NMD.* Europeans are wrong to argue that reaching agreement with Russia on the ABM treaty should be a precondition to moving ahead – this would be tantamount to giving Russia a veto over the NMD deployment decision and effectively accepting that NMD will never be deployed. But genuine US willingness to revise or sign a new treaty with Russia could produce an agreement that would continue to ban strategically significant missile defences – which is the treaty's central tenet and only reason for being – and reassure the Russians that NMD is not directed at them. Although Russia showed little willingness to consider a revised treaty in discussions with the Clinton administration, some experts believe that the Bush team's credibility on the issue may entice the Russians to cooperate, particularly if the ABM revision could be combined with an agreement on reductions in offensive nuclear weapons.[24] In fact, the head of Russia's Strategic Rocket Forces, General Vladimir Yakovlev, has already floated the concept of trading off deeper cuts in nuclear missiles for the deployment of defensive systems.[25]

• *not rush into an NMD deployment before the technology is clearly ready and diplomatic efforts to contain the reactions to it have been exhausted.* Deploying for ideological or political reasons before a workable architecture has been developed could be worse than not deploying at all – incurring large financial and diplomatic costs without adding anything to actual US security (indeed, detracting from it). The main factor driving the perceived need to start building the Alaskan radar site in 2000 or 2001 has been North Korea's potential

capability of posing a threat by 2005 or 2006, not threats from possible adversaries like Iran or Iraq, which are highly unlikely to arise so soon. While the potential North Korean threat is indeed serious, to allow it to force the United States into a premature deployment of a flawed system would be a serious strategic mistake. It would be far better to take an extra year or two to get the system right and perfect the technology – while pursuing diplomacy on the Korean Peninsula – than to start deployment prematurely.

• *make clear the American readiness to help provide missile-defence coverage for Europe, either via US systems or by sharing missile-defence technology with the NATO allies.* Such technology-sharing would, of course, require adaptation of the current ABM Treaty, but that should not in itself be a reason to forego it. Providing coverage for Europe means not only holding out the option of an eventual European deployment of a land-based exo-atmospheric intercept NMD, but also actively pursuing boost-phase technology research and development, possibly together with the Europeans – and indeed the Russians, which has already been discussed. This could be seen as a natural extension of the European allies' current interest in joint TMD programmes, which, after all, have the same purpose as NMD: protecting homelands from new threats. It would be absurd for the United States to develop more extensive missile defence cooperation with Russia than with its closest allies.

In addition to these unilateral American measures, Bush and the European allies should together, and very early on in the new administration, begin extensive consultations on three interrelated sets of issues.[26] These include:

• *the nature and extent of the ballistic missile threat.* A better exchange of intelligence data on the proliferation of WMD capabilities might help convince some Europeans of the seriousness of the growing threat. Even more important are political assessments of the likely intentions of countries like North Korea, Iraq and Iran. Americans will need to demonstrate convincingly that their desire to deploy a national missile defence is not based on an idealistic pursuit of perfect security, but rather on realistic scenarios in which long-range missile and WMD proliferation could be used to blackmail, or even attack, the West. Transatlantic discussions should also address how recent political changes on the Korean Peninsula and in Iran might – or at least in Iran's case might *not* – affect weapons programmes in these countries, as well as how lasting these political changes are likely to be. While the transatlantic differences are considerable, expanding the dialogue among US and European intelligence analysts, government officials and non-governmental experts can contribute to the useful convergence of views that is a prerequisite for transatlantic cooperation.[27]

• *the role defences can play in enhancing deterrence and strengthening arms control.* The presumption in many European capitals that defensive deployments are

antithetical to deterrence needs to be re-examined. Limited defences, in fact, are more likely to enhance than to undermine deterrence – for example, by making it more likely that the United States would come to the aid of a friend or ally under attack. It is perfectly reasonable for Europeans to hope that the United States will ultimately conclude that the arms-control consequences of an NMD deployment would outweigh the benefits, leading them not to deploy. Once the United States does decide to deploy an NMD, however, Europeans would have a strong interest in helping persuade the Russians to agree to a modified ABM Treaty – still ensuring mutual assured destruction and preventing an arms race – rather than seeing the entire regime, and perhaps other arms-control agreements as well, fall apart. Arms-control agreements should be the means to the ends of security and strategic stability, not seen as ends in themselves.

• *the link between missile defence and nonproliferation.* In these discussions, Americans will need to convince Europeans that NMD does not stand for 'no more disarmament'.[28] Both sides agree that the best possible defence is the avoidance of a threat in the first place. Missile defence cannot be a substitute for nonproliferation, as some of its more enthusiastic American proponents seem to think, but neither is nonproliferation a necessarily complete alternative to active defences. Efforts to prevent acquisition and use of mass destruction weapons must be intensified and complemented with vigorous efforts to roll back existing programmes, but limited missile defences can offer some insurance in case these steps fail. The more Europeans can do to help prevent proliferation and eliminate existing WMD and missile programmes in potentially hostile states, the weaker the US case for NMD will be.

None of these proposals are panaceas, and US and European leaders should not underestimate the likelihood that on the subject of NMD – for all the reasons already discussed – they simply will not agree. Nor, however, should they underestimate the potential costs of those disagreements. As the Bush administration grapples with the multifaceted challenges associated with NMD – technology, arms control, relations with Russia and China and domestic politics – cooperation with the European allies must be high on its agenda.

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Notes

1 See, for example, Bush's 23 May 2000 statement at the National Press Club, 'New Leadership on National Security', available at www.georgebush.com. Bush's critique of the Clinton administration was that it 'at first denied the need for a national missile defense system. Then it delayed. Now the approach it proposes is flawed – a system initially based on a single site, when experts say that more is needed.'

2 For Bush's remarks, see 'Comments by Bush and Rumsfeld on Selection for the Secretary of Defense', *New York Times*, 29 December 2000. Rumsfeld made a strong case for the need for NMD in his confirmation hearings, saying that the United States 'must develop the capabilities to defend against missiles, terrorism and newer threats against our space assets and information systems'. See 'Statement of the Honorable Donald H. Rumsfeld, Prepared for the Confirmation Hearing Before the US Senate Committee on Armed Services', 11 January 2001; and 'Rumsfeld urges missile defense system during confirmation hearing', 11 January 2001, www.cnn.com. After his own nomination, Powell described NMD as 'an essential part of our overall strategic force posture' and asserted that 'we're going to go forward'. See 'Remarks at Announcement of Powell's Nomination as Secretary of State', *New York Times*, 17 December 2000.

3 See Steven Lee Myers, 'Bush's Security Team is All for Missile Shield', *New York Times*, 30 December 2000.

4 See the *Report of the Commission to Assess the Ballistic Missile Threat to the United States*, 15 July 1998.

5 See, for example, Robert D. Walpole, *Foreign Missile Developments and the Ballistic Missile Threat to the United States through 2015*, National Intelligence Council, September 1999.

6 See Congressional Budget Office, *Budgeting for Defense: Maintaining Today's Forces* (Washington DC: CBO, September 2000); and Michael O'Hanlon, *Defense Policy Choices for the Bush Administration* (Washington DC: The Brookings Institution, forthcoming).

7 In a May 2000 *New York Times*/CBS News poll, 58% of those Americans asked favoured building a missile defence system, but this figure fell to 48% when respondents were told that the United States had already spent $60bn trying to develop the system, and to 25% when respondents were asked how they would feel if many scientists concluded that the system would be unlikely to work. See 'Building a Missile Defence … and Public Opinion', *The New York Times*, 23 June 2000.

8 See Public Law 106-38, 106th Congress, 22 July 1999.

9 See Ivo H. Daalder, James M. Goldgeier and James M. Lindsay, 'Deploying NMD: Not Whether, But How', *Survival* vol. 42, no. 1 (Spring 2000).

[10] For a good, recent assessment of European attitudes on NMD, see Stephen Cambone, Ivo Daalder, Stephen J. Hadley, and Christopher J. Makins, *European Views of National Missile Defence*, The Atlantic Council of the United States Policy Paper, September 2000.

[11] See 'Entretien du Ministre des Affaires Etrangères M. Hubert Védrine avec la Revue Trimestrielle *Politique Internationale*' (French Foreign Ministry Press Office, November 2000); and Hubert Védrine, *France in an Age of Globalization* (Washington: Brookings Institution Press, forthcoming).

[12] See *Report of the British Foreign Affairs Committee* (London: House of Commons, 25 July 2000).

[13] See, for example, the concern that 'in the near term, NMD could call into question the operational effectiveness of our deterrent' in the report of the National Defence and Armed Forces Commission of the French Parliament, authored by Pierre Lellouche, Guy-Michel Chauveau, and Aloyse Warhouver, *Rapport d'information* no. 2788, p. 259. A French Senate report on NMD did not foresee any direct impact on the French deterrent itself, but did warn that NMD deployments could affect the French concept of deterrence. See Xavier de Villepin, *Les Enjeux de la Défense Nationale Anti-Missiles aux Etats-Unis*, Commission des Affaires étrangères, de la défense et des forces armées', report no. 417 (1999–2000), p. 48.

[14] In summer 2000, for example, Stephen J. Hadley, now Deputy National Security Adviser in the Bush White House, argued that 'A president truly committed to defending the nation against these threats would … develop on a crash basis some interim or even experimental capabilities to defend the United States against ballistic missiles'. Hadley suggested the possibility of adapting *Aegis* cruisers with upgraded Standard Missile interceptors and land- or sea-based radars to at least give the United States a chance of intercepting threatening missiles during an interim period until a more capable NMD system could be deployed. See Stephen J. Hadley, 'A Call to Deploy', *The Washington Quarterly* (Summer 2000), pp. 99–101. The Heritage Foundation, a conservative think-tank in Washington DC, also advocates an accelerated decision to deploy sea-based national missile defences. See *Defending America: A Plan to Meet the Urgent Missile Threat* (Washington DC: The Heritage Foundation, 1999).

[15] See former CIA Director R. James Woolsey, 'The Way to Missile Defence', *National Review*, 19 June 2000.

[16] While stopping short of advocating the militarisation of space, the report called future space conflict a 'virtual certainty' and called on the United States 'to develop the means both to deter and defend against hostile acts in and from space'. See *Report of the Commission to Assess United States National Security, Space Management and Organization*, 11 January 2001.

[17] The C^1 system would cost about $25bn to develop and deploy, and another $600m a year to operate. Costs for the C^3 capability, which would include eight more radars, a constellation of sensor satellites, and an additional base of interceptor missiles in North Dakota, would be roughly twice as much.

[18] See Richard L. Garwin, 'The Wrong Plan', *Bulletin of the Atomic Scientists*, vol. 56, no. 2 (March / April 2000), pp. 36–41); and Garwin, 'A Defence that will not Defend'. Garwin estimates the weight of such a boost-phase interceptor, which need not carry a

heavy payload, at 14 tons; by contrast, existing US ICBMs and SLBMs generally weigh 30–100 tons. Other good discussions of boost-phase defences and their potential advantages can be found in James M. Lindsay and Michael O'Hanlon, *Defending America Against the Ballistic Missile Threat* (Washington DC: Brookings Institution Press, forthcoming); Dean A. Wilkening, *Ballistic-Missile Defence and Strategic Stability*, Adelphi Paper 334 (London: IISS, May 2000); and John Deutch, Harold Brown, and John P. White, 'National Missile Defense: Is There Another Way?', *Foreign Policy*, Summer 2000.

[19] Theodore A. Postol, 'A Russian–US Boost-Phase Defence to Defend Russia and the US from Postulated Rogue-State ICBMs', the Massachusetts Institute of Technology, Cambridge, MA; briefing paper presented at the Carnegie Endowment for International Peace, Washington DC, 12 October 1999.

[20] Theodore Postol, 'Hitting Them Where It Works', *Foreign Policy*, no. 117, Winter 1999–2000, pp. 132–133.

[21] The coverage zone of the boost-phase defence would be about 1,000 kilometres beyond where interceptors were based, since the interceptors would have only two to three minutes to destroy their targets. They might be launched 60–90 seconds after the enemy ICBM was fired, and would accelerate for 70–100 seconds before travelling at roughly 8 to 9 kilometres per second thereafter. See Postol, 'Hitting Them Where It Works,' pp. 132–133.

[22] Alessandra Stanley, 'Putin Goes to Rome to Promote Russian Arms Control Alternative', *New York Times*, 6 June 2000, p. A1.

[23] A classified National Intelligence Estimate in August 2000 warned that an American NMD deployment could prompt China to expand its nuclear arsenal tenfold and lead Russia to place multiple warheads on ballistic missiles that now carry only one. See Steven Lee Myers, 'Study Said to Find US Missile Shield Might Incite China', *New York Times*, 10 August 2000.

[24] See the comments by Carnegie Moscow Center expert Dmitri Trenin cited in Peter Baker and Susan B. Glasser, 'Focus Shifting in US–Russia Relations', *Washington Post*, 15 January 2001.

[25] See Yakovlev's comments that since it would be 'very difficult' to stop the political momentum behind NMD in the United States, Russia should 'trade' an American build-up in defences for deeper offensive cuts. See Patrick E. Tyler, 'With US Missile Defense, Russia Wants Less Offense', *New York Times*, 15 November 2000.

[26] The following develops ideas first put forward in Ivo H. Daalder and Philip H. Gordon, 'There's Time Now for Serious Talking About Missile Defence', *International Herald Tribune*, 7 September 2000.

[27] See the Atlantic Council's report usefully suggesting the initiation of a 'Track 1 ½ process' to bring governmental and non-governmental analysts and opinion leaders together, Cambone, Daalder *et al.*, *European Views*, p. 23.

[28] See George Bunn, 'Does NMD Stand for "No More Disarmament" As Well As "National Missile Defense?"', *Disarmament Diplomacy* no. 42, The Acronym Institute, December 1999; and Camille Grand, 'Missile Defence: The View from the Other Side of the Atlantic', *Arms Control Today*, September 2000, p. 16.