# European missile defense: New emphasis, new roles

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Development of effective missile defence systems has been a goal of military planners since the V2 rocket was used against Britain in the closing stages of the Second World War. As the ongoing debate over the US-proposed National Missile Defence (NMD) system demonstrates, the pursuit of apparently defensive systems has the potential to negatively impact international stability. Any attempt to achieve security in isolation, and disrupt the fragile network of multilateral arms control agreements, has the potential to make the world more dangerous rather than less so. As the countries of Europe become increasingly interested in the concept of limited missile defence systems, it is important that they do not lose sight of this principle.

When former US President Bill Clinton announced on 1 September 2000 that the deployment of the proposed NMD system would be delayed, he made reference to the influence European allies had on the decision:

*"[NATO allies] have all made clear that they hope the United States will pursue strategic defence in a way that preserves, not abrogates, the Anti-Ballistic Missile (ABM) treaty. If we decide to proceed with NMD deployment, we must have their support."*[1]

As when President Ronald Reagan proposed his grander Strategic Defence Initiative in the 1980s, Clinton's proposed NMD system, aimed at protecting the continental United States from a so-called limited attack by enemy missiles, elicited strong criticism from Europe. For example, government officials in France and Germany argued that the Clinton plan would destroy the ABM treaty and possibly spark a new arms race.

However, the transatlantic tension on the NMD issue is not based on simple opposition in Europe to the concept of missile defence, but on the scope and strategic implications of what is proposed. While European governments think building a defence to protect the US mainland from missile attack is costly and unnecessary, many in Europe agree there is a need to develop Theatre Missile Defence (TMD) systems.

TMD systems are designed to give protection to forward deployed troops and/or naval fleets against attack from short-, medium- and intermediate-range ballistic missiles.[2] The strategic importance of developing such systems was highlighted during the Persian Gulf War when allied troops came under fire from Scud missiles. Speaking on this issue recently, UK Defence Secretary Geoff Hoon said: "We have always recognised that there is a potential threat to Britain's deployed forces and we would want to investigate and examine it to seek ways of protecting the deployed forces."[3]

In fact, European government officials recently have been more publicly willing to discuss missile threats. This new public stance could be reflective of an increased willingness on the part of European governments to pursue more ambitious TMD systems.

For example, a recent report from the UK Ministry of Defence (MoD) stated: "[A]t current rates of progress, it seems likely that, well before 2030, one or more of these [proliferating] states will have ballistic missiles capable of reaching the UK carrying chemical or biological payloads and, potentially, nuclear weapons."[4] Also, the German intelligence agency, Bundesnachrichtendienst, recently released a report alleging that Iraq has been systematically cheating international controls to build up an arsenal of chemical weapons and a missile system capable of hitting targets in Europe.[5]

TMD technology is more suited to tackling the kind of threats a European missile defence network would need to overcome. Whilst a US NMD system would be required to intercept large, long-range, 'strategic' missiles, Europe is more likely to face an attack by shorter range missiles since the nations of Europe are much closer to the so-called 'states of concern' cited by NMD advocates in the United States as those with potential threat missiles.

## TMD an increasing focus

TMD systems have been receiving funding on both sides of the Atlantic for some time.

Examples of systems under development in the United States include the Navy Area Defence, the Navy Theatre Wide Defence, and the Army's Patriot Advanced Capability-3 (PAC-3) and Theatre High Altitude Air Defence (THAAD). Navy Area and PAC-3 are so-called lower-tier TMD systems, designed to counter shorter-range ballistic missiles, such as Scuds, and are based on interceptors that destroy their targets at relatively low altitudes. Navy Theatre Wide and THAAD are 'upper-tier' TMD systems, designed to intercept medium- and intermediate-range missiles at high altitudes both within and outside the Earth's atmosphere.

Most of the major countries in Europe, including France, Germany, Italy and the United Kingdom, currently are engaged in developing some kind of TMD capability, though the systems are generally of a more limited capability than those being researched by the Pentagon.

However, Europe's development of TMD systems may have new political importance to the international debate about US NMD plans as the Bush team pursues its larger missile defence vision.

Pending an overarching review of defence systems this spring, the new administration has yet to set out its official missile defence deployment plan. It seems likely that the proposal will involve integration of some of the TMD systems under development as a first step towards a 'layered' missile defence that will attack offensive missiles in their ascent, during flight, and in their descent. In a recent interview, Paul Wolfowitz, US deputy secretary of defence, stated:

*"The best thing is to attack a missile several different ways so that at each point in its flight you are maximising the probability of success. Moreover, that way, if you have a problem with one system, another system may work better."*[6]

In particular, the US Navy argues that the sea-based TMD systems under service development might be modified to intercept strategic-range missiles shortly after take off, or in the so-called boost phase. This possible use of TMD systems as a US NMD component is significant for Europe, as it raises the potential for future European involvement in the US strategic network. This obviously would have serious political ramifications.

If any European government were to develop an interest in using its nascent TMD technology to help the United States develop a NMD system, it would undoubtedly receive the support of the Bush administration. The new administration has made repeated references to expanding its proposed missile defence shield beyond US borders to protect 'friends and allies'. At a recent press conference, Colin Powell, US secretary of state, stated:

*"Our policy is to deploy effective missile defences that are capable of defending not only the United States, but also friends and allies and deployed forces overseas, and to do it based on the best available options at the earliest possible date."*[7]

Also worth mentioning is Russia's proposal for a European Ballistic Missile Defence (BMD) system presented to NATO Secretary-General Lord Robertson on 20 February 2001. Though almost universally dismissed as lacking in detail and an attempt to derail US NMD plans, the fact that Russia is willing to cooperate on some kind of Europe-wide defence against intermediate-range and tactical missiles is significant. It removes what would be a major barrier to the creation of such a system.[8]

However, an important implication of Europe's pursuit of TMD systems is the extent to which it undermines European ability to continue to argue effectively against US missile defence plans. Despite seemingly renewed European interest in theatre missile defence, most European governments remain wary, if not outright opposed, to the US concept of a strategic missile shield. In particular, European leaders continue to caution the United States against unilateral abrogation of the ABM treaty, and against undermining the international web of arms control and non-proliferation regimes that have successfully kept

a lid on nuclear proliferation and use for the past 50 years.

In fact, the Bush administration already has discovered the political utility of blurring the lines between TMD and NMD. When discussing missile defence systems, the Bush administration no longer makes any distinction between concepts for national and theatre defences. Donald Rumsfeld, US defence secretary, stated recently:

*"I have gotten to the point where I now am sufficiently into this subject where I've concluded that 'national' and 'theatre' are words that aren't useful. At least for me they're not, in how to think about it, for this reason: What's 'national' depends on where you live, and what's 'theatre' depends on where you live."*[9]

If Washington is convincing in its assertion that all missile defences are one and the same, it could be hard for European governments that are actively pursuing TMD systems of their own to argue against the US 'national' missile defence plans.

Air Force Gen. Joseph Ralston, commander-in-chief of US European Command, inadvertently highlighted this problem recently. Ralston argued that NATO allies are no longer worried about a missile defence system, and are accepting the growing need to defend against cruise missiles, theatre ballistic missiles and strategic missile threats. He maintained that if the United States could come up with a plan to work with the Russians on the ABM treaty issues, and avoid a unilateral withdrawal, European concerns about missile defence will disappear.[10]

## Different concerns, same solution

The missile defence programmes of Europe and the United States are motivated by vastly different strategic concerns. While the Bush administration is determined to push ahead with an ambitious 'layered' system, capable of protecting the US mainland from strategic missile attack, Europe is primarily concerned with protecting forward-deployed forces and naval fleets from cruise missile and short-range ballistic missile attack.

However, the Bush administration has worked to blur the distinction between these two goals, a move which could leave Europe unable to produce effective arguments against Washington's plans – despite the potentially damaging effects on international strategic stability. In addition, the kind of technology under consideration by the Bush administration to achieve a multifaceted missile defence network could, at first, be of a similar nature to that currently under development in Europe. This initial similarity could pave the way for the pursuit of the 'global' missile defence that Bush's advisors long have described as their eventual goal.

With the active encouragement of a resurgent European missile industry, missile defences are increasingly being seen as an acceptable means of improving security on both sides of the Atlantic. The long-term effects of this shift are hard to quantify, but if it bolsters the US drive for a layered NMD system, and diverts attention and resources away from attempting to eliminate the threat via arms control and effective multilateral agreements, they may well be negative.

Several key countries in Europe have committed serious political and financial resources to developing TMD systems. The commitment shown by these states reinforces the impression that missile defence is increasingly viewed by the Western allies as a viable and acceptable means of countering ballistic missile threats.

**United Kingdom**

The UK MoD is currently sponsoring a three-year Technology Readiness and Risk Assessment Programme by the Defence Evaluation and Research Agency and four British defence contractors, due to be completed this summer. The programme aims to monitor "developments in the risk posed by ballistic missiles and in the technology to counter them."[11]

The United Kingdom is working with Italy and France to develop the Principal Anti Air Missile System (PAAMS). In August 1999, the three countries signed a contract for £1.3 billion ($1.8 billion) to provide for the development of the system.[12] PAAMS uses Aster missiles, being developed by Aerospatiale Matra Missiles – a subsidiary of the European Aerospace, Defence and Space Co. (EADS) – and is designed to provide "area defence, consort protection, and self defence" against attack from aircraft and low-flying cruise missiles.[13] More than the French and Italian versions, the UK variant of PAAMS is designed to defend a group of ships in convoy, thus will form the main battle system of the Royal Navy's new Type-45 Frigate. The first of a projected 12 Type-45 Frigates is due to enter service in 2007. According to informed sources, the total cost of the programme will be £8 billion ($11.5 billion) while the cost of installing PAAMS in all 12 frigates is estimated at £2.8 billion ($4 billion).

The UK variant of PAAMS is primarily designed to protect against attack from aircraft and low-flying cruise missiles. There presently exists no official requirement for the system to be used against ballistic missiles. However, informed sources indicate that there is no reason why studies could not take place in the future to facilitate such an upgrade. The Sampson Multi-Function Radar, which is being included in only the UK variant of PAAMS, has been successfully tested against high speed targets of ballistic trajectory. In addition, while the first three frigates will use the French-made SYLVER vertical launch system in their PAAMS systems, the UK government retains the option of switching to Lockheed Martin Corp.'s Mk-41 for subsequent orders.[14] The Mk-41 is the launch system for Raytheon Co.'s Standard Missile-2,the basis for the US Navy's Theatre Wide concept. As it stands, the United Kingdom is committed only to acquiring a limited anti-missile system, but is keeping its options open.

**France and Italy**

In addition to their own variants of the PAAMS system, France and Italy are collaborating on at least two other anti-missile systems: the Surface-to-Air Anti-Missile system (SAAM) and the Sol-Air Moyenne Portee (SAMP/T, also known as SAAM AD). Like PAAMS, SAAM and SAMP/T are based on the Aster family of missiles, and are designed to defend against cruise missile and aircraft attack. However, SAMP/T has the capability to be more effective against ballistic missile attack.

SAAM is a sea-based system, and acts as a defence against cruise missile and aircraft attack. The French variant of SAAM is already in use on the Charles de Gaulle aircraft carrier, and the Italian version, which employs a different radar, is due to complete its testing in 2003.

SAMP/T is a land-based system, designed to be capable of intercepting cruise missiles. However, an upgraded version of SAMP/T, the SAMP/T Block 1, is currently being developed. If deployed, this upgrade would give the system the ability to intercept ballistic missiles with a range of up to 600km. Italy and France have placed an order for the development of this capability and the initial service deployment is expected by 2006.

Italy also is collaborating with the United States and Germany on the Medium Extended Air Defence System (MEADS). France previously was involved in the project but withdrew in early 1995. Based on Lockheed Martin's PAC-3 missile, MEADS will be a ground-based system, designed to target short-range ballistic and cruise missiles. In May, the three countries involved will probably undertake a jointly funded, £174 million ($250 million), three-year study, to better define the scope and capability of MEADS.[15] The eventual system could cost as much as £1.7 billion ($2.5 billion) and is provisionally slated for deployment in 2012.[16]

In addition, Italy, along with Germany and the Netherlands, has been participating in a series of consultations with the United States to establish collaborative approaches to the research, development and procurement of ship-based tactical ballistic missile defence

systems. The fifth meeting took place in April 2001 in Ulm, Germany and brought together representatives from the governments, armed forces and industry of the United States, Germany, Italy and the Netherlands, as well as observers from Australia, Canada and Spain.[17] It is unclear what concrete results have emerged from these consultations, but after the March 2000 meeting in the United States, Italy was reported to be interested in Raytheon's Standard Missile-2.[18]

**Germany and the Netherlands**

Reports last year indicated that Germany was considering pulling out of the MEADS programme over questions of cost, and access to sensitive US technology. It now appears that such doubts have been overcome and the German Parliament will likely give its approval in May 2001 to the country's participation in the three-year scope and capability study.[19]

In addition, the German and Dutch navies have just completed a three-year feasibility study exploring the possibility of adding a Maritime Tactical Ballistic Missile Defence capability to their new air defence and command frigates. The likely system will use Raytheon's Standard Missile-2 missile but will have a European combat system and radar.[20]

Along with the Greek military, the Germans and the Dutch already have acquired a number of Patriot batteries and are planning to buy PAC-3 enhancements. This acquisition will give both countries some measure of TMD lower-tier capability.[21]

## NATO initiatives

The most ambitious European anti-missile system currently under consideration is NATO's prospective TMD system, for which the alliance is currently considering bids for study work. NATO labelled anti-missile systems as the "Number one new equipment priority" as far back as 1993.[22] More recently, NATO's new strategic concept from 1999 stated: "The alliance's defence posture against the risks and potential threats of the proliferation of NBC weapons and their means of delivery must continue to be improved, including through work on missile defences."[23]

Reflecting this fact, NATO has set about developing its own missile defence capability. The deadline for applications for a pair of £9.4 million ($13.5 million) feasibility studies to design a future TMD system for NATO was 15 January 2001. The final selections will be made in June, after which the two winners will be given 18 months to design a system. Though the initial contracts are small, the project is expected to develop and expand, and the eventual system is likely to have both an upper and lower-tier capability. In reflection of the potential size of the project, all of the main US and European defence contractors have been involved in the early bidding, grouping themselves into four transatlantic consortia. If NATO does eventually develop a workable upper-tier TMD capability, the alliance will be providing itself with the ability to protect not just forward-deployed troops, but also border areas and even cities from medium-range ballistic missile attack.[24]

## Influence of European defence industry

One of the factors influencing Europe's interest in TMD systems is an increasingly resurgent domestic missile industry. The European missile industry is now able to compete globally in a market niche in the past the reserve of the larger US firms, such as Raytheon and Lockheed Martin. In 2000, six European countries chose Matra BAe Dynamics' Meteor air-to-air missile over an upgraded version of Raytheon's Advanced Medium-Range Air-to-Air Missile for equipping their new Eurofighter aircraft.[25] A recent Wall Street Journal article argued that UK Prime Minister Tony Blair's May 2000 decision

to favour the Meteor over the Raytheon missile signalled that the "ground rules had changed":

*"Europe had gotten serious about building and buying the same military hardware. And politicians like Mr. Blair were no longer afraid to strain transatlantic defence ties in the process."*[26]

The next few weeks will see the emergence of a powerful new, pan-European missile house. Provisionally called MBDA, the new missile group will combine the operations of Matra BAe Dynamics, EADS-Aerospatiale Matra Missiles and the missile activities of Alenia Marconi Systems. An informed source indicated that a final announcement on the formation of the group was expected by the end of April.

These same companies are also eager to win contracts to develop anti-missile systems and the majority of the European anti-missile systems involve domestic contractors. PAAMS, SAMP/T and SAAM are all being developed and marketed by EUROSAM. Founded in 1989 and funded in equal part by the Italian and French governments, EUROSAM's direct shareholders are EADS, Paris-based Thales, and Alenia Marconi Systems in Italy. Matra BAe Dynamics is involved in the PAAMS programme.[27] The group's aim is to "design, develop and manufacture the most modern air-defence systems in the world, in a range of versions optimised for naval, ground-launched or anti-tactical ballistic missile missions."[28] After sales to Italy, France and the United Kingdom, the group gained its first non-European customer when the Royal Saudi Arabian Navy chose EUROSAM to provide it with a naval air-defence system.

At present, European companies have had little success in winning more than minor contracts for the various missile defence programmes ongoing in the United States, but they are keen for a slice of what could be very large pie. When asked recently if Matra BAe Dynamics expected to get any work from the planned US NMD system, François Desprairies, the company's director of business development, strategy and planning, said, "we certainly would expect to be involved in it." Matra BAe Dynamics Chairman Mike Rouse added that involving the company in the US NMD program "would help Washington sell the concept to Europe, while enabling us to sell some of our systems and capabilities into the program."[29]

The question of European companies wanting an equal share of the contracts on offer also can be seen as influencing decision making at the government level. German Chancellor Gerhard Schroeder recently softened his public objections to US missile defence plans, citing an unwillingness to lose out economically. On 27 February 2001, Schroeder was reported as saying: "[A] very important point for us is that we are not excluded from this technology and the knowledge of the technology."[30]

## Conclusion

With the serious endeavours of several European states, and the Bush administration's own strong efforts, missile defence programmes remain a top talking point among the allies. Of serious concern is the possibility that European countries will be unable to maintain a strong opposition to US NMD plans if they continue to invest heavily in TMD capabilities of their own. Also of concern is the possibility that Europe's nascent TMD systems will be drawn into an overarching 'global' missile defence system being considered by the Bush administration. In the absence of in-depth public debate, the possibility exists of a gradual slide towards increased European acceptance of missile defence systems as a legitimate means of resolving real or supposed security threats. This slide would undoubtedly be supported by an ambitious European defence industry and a US administration eager to fend off the opposition to its own NMD plans. The danger comes when this endeavour is pursued at the expense of multilateral arms control, the only true guarantor of international security.

## Endnotes

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