Rejoinder

European missile defense

A business case for transatlantic burden sharing

Jeroen de Jonge

James Fergusson’s in-depth analysis of the NATO Ballistic Missile Defense (BMD) developments over the last decade touches on a delicate political issue: the effectiveness of the defense of Europe hinges on the availability of voluntary national contributions, or “commitments” as Fergusson rightly names them. In his article, he points at the relevance of existing lower-tier capabilities like Patriot as a stepping stone for engagement in the upper tier. He also indicates that a naval upper-tier capability is at the grasp of European allies, building on existing capabilities like the SMART-L equipped frigates. Missing in his mainly technocratic approach are four important elements, which this article will address, while arguing for a business case for transatlantic burden sharing.

Perceptions

The first issue is the common European perception of the missile threat to European NATO territory, population centers and forces, or rather the lack of that perception. The 2011 National Intelligence Estimate indicated Tehran is not on a nuclear threshold yet, but is slowly but gradually progressing towards being a nuclear capable nation. In his 2012 Congressional study Stephen Hildreth re-emphasized Tehran’s intentions with regard to its nuclear ambitions and missile launch program.1 He posits that Iran depends, or depended, primarily on foreign technology transfers for its short-range and medium-range missile systems, the main source being the Democratic People’s Republic of Korea, or North Korea. Engineers and scientists from both countries observe each other’s missile launches and hence derive invaluable knowledge, even (or particularly) when things go wrong. Export control measures such as the Missile Technology Control Regime (MTCR) may have slowed down Iran’s progress, but one should not underestimate the diligence of Iranian engineers.

In terms of security, the proliferation of ballistic missile technology is relevant not only for the United States, but for Europe as well — the underlying question for European NATO nations should not be if, but when Iran will be capable of developing an Intermediate Range Ballistic Missile. Even more important than capability, however, is the question of intent. For its regional ambitions, a 2,000-kilometer missile would put most of Tehran’s perceived enemies within range. There is no rational argument for Iran to develop a longer range Intercontinental Ballistic Missile (ICBM) without the concurrent ambition of delivering a nuclear payload. No matter how appeasing Tehran may seem now, Europe has too many energy and security interests in the region for the coming decades to not have a hedging strategy against that contingency.
The U.S. ‘pivot’ calls for burden sharing 2.0

The second element is the implication of Washington’s pivot to Asia for NATO BMD. Some interpret the cancellation of Phase Four of the European Phased Adaptive Approach (EPAA) as a sign of flexibility toward Russia, but the fact of the matter is that this realignment will bolster homeland defense: more Ground-Based Interceptors in Greely (Alaska), a feasibility study on an East Coast Site similar to the one in Alaska — this should scare the Russians rather than appease them. But cancellation of Phase Four also has the potential to undermine transatlantic solidarity, if no additional BMD cooperation mechanisms are put in place. U.S. Secretary of Defense Chuck Hagel diligently proclaimed America’s “ironclad commitment to NATO missile defense,” but with the growing military commitment to the Pacific Rim in times of fiscal austerity, even the United States will have to set its priorities.

This creates an opening for European member states to take on more responsibility for the protection of the European NATO territory, populations and forces. The operation in Libya has mercilessly shown that without U.S. support, Europe is far from capable of securing its own southern perimeter. The same is true for NATO’s Interim BMD Capability declared in Chicago (2012): currently Europe’s only hard defense against a ballistic missile threat is provided by one Aegis cruiser in the Mediterranean and one very vulnerable TPY-2 radar in Turkey. The important but temporary Patriot operation in Southern Turkey is politically relevant, but the defended area remains small compared to the size of the European continent. Only five years ago, former NATO Secretary General Jaap De Hoop Scheffer posited his holistic perspective on burden sharing in three interconnected areas: defense transformation, coalition operations and the wider context of the international community’s efforts. The most widely accepted equitable instrument for burden sharing is common funding: sharing the cost of defense capabilities, in particular when those capabilities are considered beneficial to the indivisible security of all NATO states. Applying this mechanism to NATO BMD, NATO’s industrial advisory group (NIAG) proposed a NATO pool of interceptors, interchangeable between sea-based and land-based launch platforms, for the protection of the alliance’s European territory. Efforts to turn this proposal into policy were quickly gunned down: at the eve of the Chicago Summit, France specifically stated that common funding in the context of NATO BMD is strictly limited to the command and control backbone.

But this position can no longer be sustained. Some members of the U.S. Congress are already arguing that in times of financial trouble homeland defense should prevail over the protection of Europe, especially if the Europeans do not pick up their share of the NATO BMD tab. I agree with Peter Doran’s March 2013 analysis² that this apathy would only accelerate Europe’s free-fall from the U.S. strategic priorities list, competing as it is with interests in South-East Asia or Africa. Taking Doran’s policy recommendations one step further, I argue that the answer to this dilemma is relatively simple, if both sides of the Atlantic would engage in a truly cooperative transatlantic BMD development. Two countries that the American administration should pay particular attention to in this endeavor are the Netherlands and Poland.
The Netherlands’ role in European BMD

The third element that is undervalued in Fergusson’s analysis is the potential role of the Netherlands in Europe’s BMD. The 2010 missile defense policy of the Dutch government has a clear focus of “constructive criticism” to actively help overcome the incompatibility and subsequent lack of interoperability between the current U.S. EPAA and the nascent NATO command and control system (C2). Burden sharing presupposes a high level of interoperability: the seamless integration of command, control, weapons and sensor systems. Against this backdrop, the Netherlands plays a leading role in the development, conditioning and deployment of the NATO BMD system, for three reasons.

First, the Netherlands has cutting edge operational expertise, made possible by the exchange of knowledge between the allied forces that use the Patriot close-in missile defense system during exercises and operations. This knowledge buildup started in the early 1990s, when the Netherlands deployed its Air Force Patriot missile batteries in Israel against the threat of the Iraqi Scud-B in the First Gulf War. The operational lessons learned with Patriot in combat situations and the subsequent exercises have given the Netherlands invaluable know-how, which was shared with other Patriot user countries, notably Germany and the United States. It enabled the establishment of Joint Project Optic Windmill as the only experimentation and exercise series that addresses true joint and integrated air and missile defense. Today, the same three countries are defending the southern part of Turkey against the air threat emerging from the Syrian civil war, but with a wider mandate they could also defend NATO’s perimeter against ballistic missiles.

Second, TNO, Netherlands’ Research and Development Institute continuously supplements this knowledge with technology research projects aimed at developing advanced simulation software. This software has already been successfully implemented in NATO’s BMD program, which is responsible for delivering the NATO C2 backbone by the end of this decade. Thus, the Netherlands is in an excellent knowledge position to help advance the NATO BMD “system of systems” into an operationally meaningful one.

Third, the Netherlands holds a leading position in missile defense radar industrial technological innovation. Already in December 2006, the RNLN frigate Tromp, equipped with a Thales SMART-L, detected and tracked an incoming ballistic target missile off Hawaii — something that the U.S. Navy assumed was impossible with a rotating radar. By 2018, the SMART-L Early Warning Capability (EWC) will be implemented on four Dutch Air Defense and Command frigates. Early next decade, Germany will probably implement the same technology on their F-124 frigates. These high-tech frigates will be capable of detecting and tracking ballistic missiles aimed at European NATO territory at 1,000 kilometers, while at the same time maintaining an ability to defend naval forces against regular air threats. The naval forces of Denmark, Great Britain, Italy and France have similar, if not identical radars, which if modified would further contribute to this nascent capability. A stunning total of 20 ships, augmented by land based systems such as the French early warning satellites and radars, are potentially available to provide Patriot and SAMP-T missile systems with crucial early warning against incoming missiles, substantially expanding the defended area they can protect against ballistic missiles. Three of these frigates, evenly spaced in international waters, could effectively detect any ballistic missile launched against European NATO
territory and “cue” this high-fidelity information to the U.S. Navy Aegis BMD shooter platforms already stationed in the Mediterranean.

The Polish options

The fourth element that should not be overlooked is the role of Poland, for three reasons. First, the Polish burgeoning economy, oblivious to any fiscal or banking crisis, is the positive “outlier” in the European Union (EU) and Warsaw is starting to realize that. It is truly refreshing to attend conferences in Warsaw: there is no defiance, no negativism and a growing self-conscious ambition to contribute to regional stability. Poland has some serious money burning the pockets of the defense planners. The associated risk for Poland is “pushing too hard”, without properly analyzing its operational requirements against realistic scenarios.

Second, Poland’s strategic position has convinced the political leaders they must rely on a strong defense to withstand the pressure from Russia. Contrary to most countries in old Europe, Poland enjoys broad popular support for a missile defense system that would be able to deter the Russian Iskander missiles stationed in Kaliningrad. However, whether such a system could be part of NATO BMD while being operationally ready on national territory remains to be seen — the narrative for Poland should be that replacing its legacy air defense systems with a modern lower-tier expeditionary air and missile defense capability substantially augments NATO BMD.

Third, Warsaw is looking for partners in Europe, in Israel and in the U.S. Poland has a large indigenous defense industry and aims to co-develop its lower-tier air and missile defense with its national industry. However, most of the required technology needs to be transferred into Poland from a trusted partner. Now, Poland needs to ask the question: who to be interoperable with? I would argue for a crawl-walk-run approach: you need to be able to crawl before you can walk, and walk before you can run. Applying this to the Polish case I call for assured interoperability: relying on combat-proven interoperable capabilities (crawl), then working with knowledgeable partners to operate them (walk). Polish decision-makers are very keen on growth potential and top-notch technology transfers (run), but it takes a long time to acquire that knowledge background. Germany and the Netherlands should embrace this opportunity and engage Warsaw with concrete political and military cooperation proposals and offering government-to-government technology transfer through IABG and TNO.

A business case for European BMD

Policymakers here are aware of the fact that with its EPAA the U.S. Navy is shouldering the majority of the burden of the defense of Europe. The Netherlands, Germany and Denmark are currently investigating how naval ships could make a contribution to NATO BMD. The Netherlands holds a leading position in European maritime missile defense with its planned capability to detect and track ballistic missiles, while Germany and Denmark are considering the same upgrade to their ships’ radars, if only to remain interoperable. The Lockheed Martin MK41 vertical launch system, currently in use onboard Dutch, Spanish, German (and from 2015 onwards, Danish) naval platforms, has the inherent capability to launch the Raytheon SM-3 interceptor missile that is central to the U.S. EPAA.
Presently, Dutch defense planners have no formal plans to implement an engagement (shooter) capability on their naval frigates, but with U.S. political encouragement they may be convinced of the value of doing so. Integrating the SM-3 on Active Phased Array Radar (APAR) frigates is the most affordable near-term path to create a European upper-tier engagement capability, as validated by a joint Netherlands Ministry of Defense/U.S. Missile Defense Agency study, revealed to the public by Raytheon. Creating a pool of common (i.e. dual-band) interceptors, interoperable with both U.S. Navy Aegis and European BMD frigates would be a feasible, affordable solution to provide an engagement capability to countries such as the Netherlands, Germany and Denmark — and in the future, Spain and Norway. The ultra-modern UK Type-45 frigates could play a very valuable complementary role in the defense against anti-ship ballistic missiles aimed at the European carrier strike fleet.

The U.S. EPAA, supplemented with SM-3 equipped European surface combatants deployed in the northern European latitudes, could provide BMD coverage for all of Europe, while freeing U.S. Aegis assets for other global needs and thereby significantly reducing the operating and maintenance cost on the U.S. side. In addition, there is an important potential European industry benefit in the development, exploitation, logistics, maintenance and deployment of these missile systems, in which European NATO member states could participate. The realization of a SM-3 capable frigate pool would not only strengthen transatlantic relations and structurally enhance the defense capabilities of NATO — it would effectively acquiesce Capitol Hill opponents to U.S. engagement in NATO BMD with the argument of cost reductions through burden sharing.

Europe holds the key to developing an affordable upper tier engagement capability that would considerably reduce the burden on U.S. assets, while significantly increasing NATO’s capacities and restoring the transatlantic bond. In light of the benefits, the United States should offer to facilitate a truly transatlantic project to assist European navies with the integration of SM-3 on their frigates and should encourage the creation of a common SM-3 capable frigate pool in Europe. Together, the United States, Germany and the Netherlands could present this excellent pilot project for smart defense in the context of NATO’s indivisibility of security at the next Council meeting. France, Italy and Germany could follow suit by picking up where the Medium Extended Air Defense System (MEADS) left off and improve the European land based lower-tier capability — an opportunity for Poland and the Netherlands as well. The investment burden should be shared evenly among the European nations that would all be protected by NATO BMD. That would require some stark political choices, but it is definitively worth pursuing.

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