

GCC Missile Defense: Obstacles on the Road to Integration

By Ari Kattan

Executive Summary

The U.S.-led effort to establish a missile defense architecture for the Persian Gulf has been slower and less successful than the United States had hoped, mainly due to an unwillingness and inability to cooperate among the Gulf Security Council nations whose nations the system is designed to defend. Given, *inter alia*, Iran's growing ballistic missile arsenal and unease with the Joint Comprehensive Plan of Action in Gulf Arab capitals, security reassurances to the Gulf monarchies will become simultaneously more important and more difficult to make credible. In this environment, missile defense will be an important, but by no means sufficient, mechanism for assuring the Arab Gulf states. Cooperation on missile defense with the Gulf monarchies should continue, but with a realistic understanding of what is possible given the current chaos and political dynamics of the region.

Introduction

Under President Barack Obama, the United States shifted its missile defense focus from protection of the U.S. homeland to protection of forward-deployed U.S. forces and allies from regional ballistic missile threats.¹ This strategy advocates and requires cooperation from allies; without assistance from regional partners, any ballistic missile defense (BMD) assets deployed to the region will amount to little more than point defense. The expectation that regional allies would move quickly to integrate their various BMD assets, share information, and develop a joint doctrine has not materialized, at least not with the speed that the United States had hoped. Even in Europe, where the missile defense architecture is being set up through NATO, the project has faced problems and limitations. However, the European Phased Adaptive Approach (EPAA), as it is called, now seems on target to meet the conclusion of its third phase, based on Aegis-equipped ships and Aegis Ashore deployments in Romania and Poland, by the end of 2020.

In contrast, the Gulf Cooperation Council (GCC) has been procuring advanced BMD systems and talking about integration of a BMD architecture for the Persian Gulf for years, but little progress has been made towards an architecture capable of deterring or defeating the threat posed by Iran's ballistic missile arsenal.

It is unclear if the Joint Comprehensive Plan of Action (JCPOA),² the agreement signed by the P5+1 and Iran that limits the scope of Iran's nuclear program in exchange for sanctions relief, will have a noticeable effect on the GCC's willingness or ability to take the steps necessary to create an effective BMD architecture. The GCC states—Saudi Arabia, Kuwait, Qatar, Bahrain, the United Arab Emirates, and Oman—have publicly supported the deal but harbor varying degrees of suspicion about the agreement, Iran's intent to abide by it, and what it may mean for regional order.

This paper addresses the following questions: (1) What threats are ballistic missile defense in the Persian Gulf designed to address, and how might these threats change or evolve in the aftermath of the JCPOA; (2) What is currently being done to create a BMD architecture in the Persian Gulf; (3) What obstacles stand in the GCC's way; (4) What lessons can be learned from the

BMD experience in Europe; (5) What role should the United States play in helping the GCC with its missile defense project; and (6) What would happen if the United States cut back on its commitment to provide BMD capabilities to the GCC? The answers to these questions will have implications for the Persian Gulf's security and the relationship between the United States and its Gulf Arab allies.

The Iranian Missile Threat and Regional Dynamics Before and After the JCPOA

Ballistic missiles and rockets have a long history in the Middle East. The GCC states first witnessed their use during the 1980 – 1988 Iran-Iraq War. Both countries fired ballistic missiles at each other's cities, sowing fear and causing panic, especially on the Iranian side.³ Towards the end of the war in 1988, Iraq fired close to 200 ballistic missiles at Iran, killing some 2,000 people.⁴ These devastating strikes contributed to Iran's decision to accept a ceasefire, demonstrating the political utility of ballistic missiles when employed against civilian targets. Iraq again employed ballistic missiles during the Persian Gulf War in 1991 when it launched dozens of Scud missiles at Saudi Arabia and Israel. While Iraq ultimately failed in its attempt to goad Israel into the war and thus fragment the U.S.-led coalition that included Arab enemies of Israel, it came perilously close. Only the reassuring deployment of Patriot missile defenses to Israel, along with strong diplomatic pressure, kept Israel out of the war. The effectiveness of Iraq's missile arsenal did not go unnoticed in GCC capitals.

Iraq's use of ballistic missiles received the lion's share of attention in the Arab Gulf from the 1980s to the early 2000s, but during this time Iran also embarked on a large-scale ballistic missile development program. It first acquired Scud missiles from Libya in 1985, and then began a ballistic missile development program with assistance from North Korea.⁵ Iran now possesses the largest and most active ballistic missile program in the Middle East, with both short- and long-range missiles capable of hitting targets throughout the Gulf and even southern Europe. Exact estimates are not available, but it is believed that Iran possesses over 1,000 missiles with ranges varying from 150 km to 2,000 km.⁶

The effectiveness of short-range rockets and missiles was driven home during the summer of 2006, when Hezbollah, an Iranian proxy organization in Lebanon, fought a month-long war with Israel. Hezbollah fired over 4,000 short-range rockets (roughly 25 km) at Israel's home front throughout the war, and despite the Israeli military's best efforts to stop the barrages, Hezbollah was able to continue firing until a UN-imposed ceasefire was agreed to by both sides. Given the large number of rockets fired, a relatively small number of Israelis were killed—the rockets were unguided and thus unable to strike with any precision—but civilian life in Israel was paralyzed as people had to remain in their homes and bomb shelters for over a month. The inability of the Israel Defense Forces to stop the rocket fire despite its overwhelming superiority vis-à-vis Hezbollah's guerilla army constituted an embarrassment for Israel and allowed Hezbollah to portray itself as the victor.⁷ Because Hezbollah is an organization funded, supplied, and directed by Iran, the Arab Gulf states viewed Hezbollah's effective use of short-range rockets against Israel as a strategy devised by Iran that could one day be employed against them. To counter this threat, the GCC states began to acquire U.S.-made BMD systems, and have continued purchasing them over the last decade.⁸

On the tactical level, these BMD assets are being procured to complicate Iran's decision-making by reducing its confidence in the effectiveness of missile raids against the Arab Gulf. If the GCC's missile defenses are reasonably effective, the narrative of Iran's powerful missile force striking the vulnerable Gulf monarchies would be turned on its head, constituting a propaganda coup for the GCC and an embarrassment for Iran. Instead, the perception would be one of a militarily-inferior Iran attempting to attack the more technologically-advanced GCC and failing. Again, an example of this can be seen by looking to Israel, where its Iron Dome anti-rocket system became a source of pride for Israelis during recent rounds of fighting against Hamas in the Gaza Strip.⁹ The possibility that Iran's missile strategy might not have the intended effect if it were employed can help reduce the coercion value of Iran's arsenal.

With tensions between Iran and Saudi Arabia flaring as of late, the possibility of a military confrontation between the two states cannot be ruled out. In such an event, the GCC's missile defenses might actually be called upon to intercept Iranian missiles targeting their territory. This is a daunting challenge, and from the vantage point of the GCC, it is likely to become more challenging over the coming years because of the concessions made to Iran as part of the JCPOA.

UNSCR 2231 (passed to approve the JCPOA and supersede other resolutions pertaining to Iran sanctions) states that the embargo on ballistic missiles and associated technology to Iran will be removed after eight years, and the embargo on conventional weapons will be lifted after five years.¹⁰ Iranian officials have made statements asserting that its ballistic missile arsenal and development program are not intended to carry weapons of mass destruction and are thus "outside the purview or competence of the Security Council resolution and its annexes."¹¹ Such statements signal that Iran will continue to develop the shorter-range systems that will enable them to conduct Hezbollah-style attacks against the GCC.

With conventional weapons and ballistic missile restrictions lifted in under a decade, Iran is likely to increase not just the quantity but also the quality of its missiles. Reducing the circular error probable (CEP) of its missiles and achieving a precision-strike capability will allow Iran to hold targets in the Arab Gulf at risk with a higher degree of confidence, and will reduce the effectiveness of both active and passive defensive measures.¹² Officials in the GCC also worry that the restrictions that still remain in place post-JCPOA will not be strictly enforced by the P5+1 out of fear that such enforcement may jeopardize Iran's compliance with its nuclear program commitments.

In addition to the military utility of intercepting Iranian missiles, BMD procurement by the GCC is also designed to address a political threat: the perception of American retreat from the region and realignment towards Iran. One cannot understand the missile defense situation in the region post-JCPOA without understanding the unease in Arab Gulf capitals about their security relationship with the United States. When the Gulf monarchies assess the United States' commitment to the region, they see a country exhausted after a decade of war and occupation in Iraq and a country whose ability to intervene in the region is severely limited by domestic anti-war constraints. They also see the United States shifting its focus to the Asia-Pacific region, a policy referred to in the United States as the "pivot to Asia."¹³ The Gulf monarchies see this

loudly proclaimed shift in policy as an American “east of Suez” declaration, making U.S. guarantees to defend their security less credible. Adding to their fears of a wholesale U.S. retreat from the region was the U.S. response to the Arab Spring uprisings in 2011, particularly what the Gulf regimes viewed as the abandonment of Egypt’s president and longtime U.S. ally, Hosni Mubarak. In a region of the world where a ruler’s or a ruling family’s hold on power is the most important security concern, the U.S. response to the Arab Spring created profound distrust and led many to question if the United States could truly be counted on to assist its authoritarian partners if their rule were endangered.

It is within this landscape of mistrust and fear that Iran’s missile arsenal has grown and still grows larger and more sophisticated. Accordingly, BMD systems are procured not just to deter and potentially blunt Iranian missile strikes, but to keep the U.S. military and defense contractors integrated into the region’s security architecture.¹⁴ As the Arab Gulf states detected signs of American realignment away from the region, they also detected the Obama administration’s shift towards regional missile defense and its enthusiasm for missile defense as a substitute for other forms of extended deterrence. Signing on to the Obama administration’s regional BMD aims became a way to keep the military-to-military relationships strong. Purchasing the launchers, interceptors, and radars that comprise these BMD systems also kept U.S. industry focused on the region.¹⁵ The political component to the GCC’s interest in missile defense has always been significant. With the signing of the JCPOA, the GCC’s interest in missile defense is likely to be strengthened on both the military and political front.

Current Status and Future Plans for GCC Missile Defense

All of the GCC states have purchased or will purchase U.S.-made BMD systems (see Table 1). Some states have operated such systems for many years, and are upgrading their systems to better meet current challenges. Others are buying them for the first time. In 2013, the Obama administration allowed the GCC to purchase weapons collectively in a traditional American effort to foster cooperation and interoperability and the same arrangement the United States shares with its NATO allies—but so far they have only purchased weapons individually.¹⁶ The United Arab Emirates operates Patriot PAC-3 batteries and missiles, and Kuwait and Saudi Arabia are upgrading their PAC-2 batteries and interceptors to PAC-3.¹⁷ Qatar has plans to deploy its own PAC-3 batteries as well. PAC-3, the most advanced iteration of the Patriot, is designed to defend small areas from ballistic missile attack with a hit-to-kill interceptor. For defending larger areas, the United Arab Emirates purchased the Terminal High-Altitude Area Defense (THAAD) system, and Oman, Qatar, and Saudi Arabia have all expressed interest in acquiring the system.¹⁸ In addition to the BMD systems deployed by the GCC states, the United States also operates its own missile defenses in the region. The United States has two PAC-3 batteries each in Bahrain, Kuwait, Qatar, and the United Arab Emirates.¹⁹ At sea, the U.S. Navy operates Aegis-equipped destroyers armed with SM-3 interceptors capable of defending against short- and intermediate-range missiles by intercepting them above the atmosphere.²⁰ All of this amounts to a substantial amount of missile defense hardware in the region.

Table 1: Missile Defense Systems in the Persian Gulf²¹

Country	U.S. Deployments in Gulf Countries	Deployed or Awaiting Delivery	In Acquisition or Considering
Saudi Arabia	None	PAC-2 upgrade to PAC-3	THAAD, Aegis Ashore
United Arab Emirates	PAC-3	PAC-3, THAAD	None
Qatar	PAC-3, FBX radar	None	PAC-3, THAAD
Bahrain	PAC-3	None	None
Kuwait	PAC-3	PAC-2 upgrade to PAC-3	None
Oman	None	None	THAAD
Gulf Theater	Aegis SM-3	N/A	N/A

Senior Obama administration officials, including former Secretary of State Hillary Clinton and former Secretary of Defense Chuck Hagel, have pushed for these BMD systems to be integrated together to provide a robust BMD capability in the region. For reasons described below, this has not yet happened. However, in the aftermath of the Iran negotiations, the Obama administration and the Gulf monarchies have issued public statements renewing their commitment to this objective. In a joint statement released by the White House after the U.S.-GCC Summit at Camp David in May of 2015, the parties “committed to develop a region-wide ballistic missile defense capability, including through the development of a ballistic missile early warning system.”²² The United States also agreed to conduct a study of the BMD capabilities in the region and assist with the development of the early warning system. The statement also committed the parties to “undertake a senior leader tabletop exercise to examine improved regional ballistic missile defense cooperation.”²³ It remains to be seen if the JCPOA will lead the GCC states to purchase additional BMD equipment from the United States, or if equipment previously ordered will be expedited.

Obstacles on the Road to Integration

One of the great paradoxes of the Obama administration’s regional BMD strategy is that less threatened regional actors have made greater progress on BMD integration than more threatened regional actors. The EPAA, the regional missile defense architecture being implemented through NATO, is the most advanced regional system despite the fact that Iran does not yet have the ability to strike most of Europe (and the system is not designed for, nor does it have a capability against, Russia’s strategic deterrent).²⁴ In contrast, Iran does have a substantial—and growing—capability to strike at targets in the GCC, yet progress towards integration within the GCC has been far slower and more complicated than in Europe. This can be explained primarily by three factors: a strong disinclination towards cooperation within the GCC; ineffective organizational structures within the GCC militaries; and bureaucratic obstacles that inhibit cooperation between the GCC and the United States.

Disinclination towards Cooperation within the GCC

A full treatment of the history of the GCC, its ruling families, and its political culture is beyond the scope of this paper, and can be found elsewhere,²⁵ but a basic understanding of these issues is key to realizing why the political cooperation necessary for achieving an integrated BMD system is so difficult in the Persian Gulf. The most important facet of the region's security dynamics is the primacy of regime security. While the Arab Gulf monarchies certainly face external conventional threats—of which Iran is first and foremost—their primary security concern is their regimes' ability to stay in power, and often times the biggest threats to regime security in the Persian Gulf are not from adversary nations' military capabilities. Due to a long history of tribal rivalries, border disputes, and divergent security and economic interests, the six members of the GCC view each other with suspicion.²⁶ Fears abound about neighbors interfering in each other's internal affairs, leading to an atmosphere that makes close cooperation difficult. Fear of Saudi dominance among the smaller GCC states also precludes close cooperation—a structural issue given Saudi Arabia's much larger size, population, and global political clout. Attempts at information sharing and integrated command and control have been, and will continue to be, hampered by constant suspicions of Saudi infringement on the sovereignty of the other states, especially in light of King Salman's more activist foreign policy.

Lastly, but no less important, is the chaos and reordering of the Middle East that has been unfolding since the U.S. invasion of Iraq in 2003 and the Arab Spring uprisings that began in 2011. Different GCC states (particularly Qatar) have had and continue to have strong disagreements about how to handle the instability in Egypt and the civil war in Syria. Tensions have gotten so bad at times that three GCC states withdrew their ambassadors from Qatar over anger at Qatar's support for the Muslim Brotherhood and divergent foreign policy.²⁷ Such strong disagreements about pressing regional security issues, coupled with a history of mistrust within the GCC, make cooperation on a project as complicated and compromise-intensive as missile defense an extremely difficult endeavor, even with the threat from Iran looming ever larger.

Organizational Structures of the Arab Gulf Militaries

The GCC's member states are often lumped together when in fact there are many important differences between them. However, they do share certain traits in common, including dynastic rule that relies on oil income for its budgets and to provide largesse to its citizens. Peculiarities in the development of many state and societal institutions have resulted from this form of governance, including the GCC's militaries and security services.²⁸ As stated earlier, the top priority of these governments is regime security and the ruling family's hold on power. Thus, the militaries and security services of these monarchies are designed with “coup-proofing” in mind—the structuring of the armed forces in such a way that prevents their ability to harm or overthrow the regime.²⁹ Some such strategies for achieving this include: deliberately keeping certain units weak and unprofessional; limiting communication between units; creating multiple security and intelligence services to surveil and protect against each other; and placing regime loyalists in leadership roles. In the GCC, military leadership positions are often awarded to balance or reward different factions of the ruling family. This creates parallel military forces with unnecessary redundancy, commanded by (sometimes unqualified) members of the royal family who jealously guard their turf. Such organizational structures may prevent the military from posing an internal threat to the regime and serve as an effective vehicle for patronage, but it

is not conducive to cooperation, either between units in the same military or between the GCC's militaries.

Authoritarian states that face significant external threats, or for whom territorial expansion is integral to the regime, often avoid falling prey to the coup-proofing strategies that result in poor military performance.³⁰ Given the chaotic nature of the Middle East, the Arab Gulf states certainly face external threats, so why haven't they adopted the model of authoritarian regimes with effective militaries? There are two possible reasons for this. First, the tribal and sectarian fault lines that run deep through the region mandate security forces that are inherently more inward-focused than might be necessary in other regions. Second, the Arab Gulf states receive protection from external threats from the United States, which has a decades-long history of providing security for the region.³¹ Of late, the faith of the GCC states in the commitment of the United States to the region is shaky, but these militaries all developed under the protection of the American security umbrella. The legacy effects of this development will be difficult to overcome. Little has been specifically written on how the organizational structures of the Arab Gulf militaries have affected missile defense cooperation, but it is safe to say that it has played a role, perhaps a significant one, in retarding integration and interoperability across the GCC.

Bureaucratic Obstacles between the United States and the GCC

Another, although lesser, factor in the GCC's difficulty in progressing towards an interoperable BMD system is bureaucratic obstacles with the United States. U.S.-GCC relations are close, but suffer symptoms of a patron-client alliance structure—one between a strong democratic state and a series of weak authoritarian ones. The authoritarian and regime security-oriented nature of these monarchies has limited the United States' willingness to sell or transfer certain technologies to these countries for fear that they may be used inappropriately or they will find their way into a third party's hands. This fear is compounded by the fact that many of the non-state actors of great concern to the United States, such as Al Qaeda and the Islamic State, have sympathizers within the GCC's societies and militaries. Many officials in the GCC find the slow and sometimes fickle nature of U.S. equipment and technology transfer that results from these considerations—in addition to the already slow and complex export controls process—insulting and unhelpful towards building effective regional capabilities. This is an issue of contention in U.S.-GCC relations overall that has likely impacted cooperation on present missile defense plans.

Lessons from the EPAA and their Salience in the Gulf

In light of the difficulties facing missile defense in the Persian Gulf, what lessons might be gleaned from the more advanced and robust regional missile defense project in Europe, the EPAA? Obvious differences aside, there are some structural parallels between the strategic picture in Europe and in the Persian Gulf. Both NATO and the GCC are collections of states that fear a regional adversary in close proximity to their borders, and both view missile defense as a political instrument, not just or even primarily as a military instrument. If the development of the EPAA is any indication, there are two main lessons to be learned with implications for the Arab Gulf.

First, while missile defense is a capability of great interest, it is not a substitute for other capabilities that regional allies deem essential to deterrence and their security.³² Many NATO allies are growing increasingly concerned about Russia's behavior given its actions in Ukraine and its more aggressive interference of NATO airspace. Vis-à-vis Russia, the EPAA's value is in the physical presence of U.S. personnel and equipment since the interceptors do not threaten Russia's nuclear deterrent. But they also do not counter the capabilities Russia might bring to bear in any future action—hybrid or otherwise—against a NATO ally. Countries within the NATO alliance, especially those closer to Russia, are seeking more offensive weapons that would actually be capable of complicating a Russian ground invasion of their territory—something missile defense does not do and indeed cannot do in its present configuration. Missile defense is an important political demonstration of commitment, but is insufficient by itself in the face of increasing Russian hostility.

A similar paradigm exists in the Persian Gulf. Missile defenses respond to a more direct and immediate threat in the Persian Gulf than they do in Europe, but they are not a substitute for the greater diplomatic and military role the GCC states wish the United States would play in the region. As Saudi Arabia battles Houthi rebels in Yemen and remains fearful of Iran's control over Shiite militias in Iraq and elsewhere, the Arab Gulf states are most interested in U.S. diplomatic efforts to counter Iran's growing influence, as well as more advanced strike capabilities to enable greater unilateral conventional action. Selling additional BMD assets to the GCC states will not make up for the fact that they perceive U.S. diplomatic pressure on Iran to be diminishing, or the fact that strike capabilities are subject to slow and complex export regulations and concerns about Israel's qualitative military edge.³³

Second, the EPAA project demonstrates how difficult BMD cooperation and integration is, even under more favorable political conditions. Different NATO allies have different perceptions of the threats posed by Russia and Iran, which makes some countries more motivated to contribute to the EPAA than others. On the BMD integration and cooperation front, NATO, despite having a long history of cooperation and higher levels of trust, has still run into difficulties. A Government Accountability Office report from 2014 highlights many of these challenges, including an incident where Patriot batteries deployed to Turkey were unable to be used for weeks due to a lack of prior planning and preparation.³⁴ Uncoordinated practices and procedures, and intelligence-sharing restrictions, created an embarrassing situation between close allies on a project that has been a main focus for the alliance. If NATO's more advanced EPAA is suffering from such cooperation difficulties, it is unlikely that the GCC states will fare better.

The U.S. Role in the Persian Gulf Going Forward

In light of American interests, U.S. BMD objective in the region—encouraging integration and interoperability to create a region-wide missile defense architecture that is greater than the sum of its parts—is the correct objective. But the United States should have no illusions that this will be achieved quickly, or even at all. It is possible that the anxiety in Arab Gulf capitals caused by the JCPOA will result in a renewed and good-faith effort by the GCC states to engage in the information sharing and joint doctrine development that are necessary for BMD interoperability. But it is also possible that continued differences on regional security issues and structural

deficiencies in their militaries will continue to stifle progress toward BMD interoperability, even post-JCPOA. Given this reality, the United States must temper its expectations and focus on two shorter-term objectives that will have quicker returns on both the military and political fronts. The first focus should be a serious push for the information sharing necessary for a region-wide early warning system. This objective was specifically singled out during President Obama's May 2015 summit with GCC leaders. A region-wide early warning capability would consist of the radars and other sensors in other GCC countries (and linked to U.S. assets in the region) talking to each other. It would not involve the sharing of interceptors or a joint doctrine for regional defense. This is a first step towards true regional defense, and should be achievable in a shorter timeframe with a committed U.S. effort. But it would have a meaningful impact on each state's ability to unilaterally defend itself with its own interceptors. Due to the short missile flight times in the region (six minutes or less) and the topography, the earlier an incoming missile can be detected and tracked, the easier it will be to shoot down that missile. If a threat heading for one country is detected first by a radar in another country, it would be extremely valuable if this information could be shared in real time to enable the threatened country to better defend itself.³⁵

The second focus should be improving the United States' own interoperability. Currently, different BMD systems operated by the U.S. military are unable to talk to each other. This makes it difficult to use the best interceptor to defeat the incoming threat. Northrop Grumman is currently working on an Integrated Air and Missile Defense Battle Command System (IBCS) that will enable the sensors associated with different BMD systems to communicate, alerting the warfighter and enabling him or her to select the best interceptor available to engage the incoming missile.³⁶ However, the IBCS is not slated to reach initial operational capacity until 2019.³⁷ Efforts should be made to speed up the development and procurement of this system. Talks should begin now with the GCC states about selling them the system to improve the capabilities of the BMD assets they already (or will soon) operate.

Consequences of a Reduced U.S. Role on Regional Missile Defense

Reducing the U.S. role in assisting the GCC states with missile defense will have strong operational and political consequences. Operationally, the GCC states rely on the United States to sell them BMD equipment and help them operate it. Even under a dramatically reduced presence in the region, it is unlikely that such sales and military-to-military cooperation will cease. However, any BMD integration that may take place within the GCC in the future will rely heavily on U.S. leadership and persistent pressure and involvement. Failing to provide such leadership will result in slower progress towards BMD integration than already exists today.

Even more pronounced would be the political consequences. U.S.-GCC relations are already at a relatively low point—any backtracking on an issue that concerns them, such as missile defense, would be interpreted as a validation of GCC suspicions of American abandonment. This perception has already had an effect on GCC behavior. Saudi Arabia's campaign in Yemen would likely not be taking place were it not for the Kingdom's anger at Washington's thawing relations with Iran and (from its perspective) inaction against Bashar al-Assad in Syria and the Islamic State. BMD cooperation has been one of the few areas where the United States has shown a willingness to increase its involvement in the region. Reducing this role, for whatever

reason, would be catastrophic for U.S.-GCC relations, and could have consequences in the region that do not align with U.S. interests.

Conclusion

The Obama administration's objective of BMD integration in the region is moving slower than expected, and may not be achievable in a reasonable timeframe. The United States should focus on smaller steps—such as an integrated early warning system—that would be valuable but would fall short of true interoperability. The United States must also realize that missile defense will not serve as an effective substitute for other forms of assurance and cooperation that the Arab Gulf states feel is necessary for their security. Missile defense is an important, but by no means sufficient, mechanism of extended deterrence. In the absence of additional forms of security assistance, including the more assertive U.S. leadership role that the GCC states desire from the United States, missile defense will not serve as a credible commitment to the security of the Arab Gulf monarchies. That being said, the goal of a regional missile defense architecture is a worthy one. The United States should continue working towards this goal—albeit with a realistic understanding of what is achievable given the realities of the region.

Timeline

1980 – 1988: Ballistic missiles widely used by Iraq and Iran during their eight-year war. Ballistic missiles used by Iraq against Iran's capital, Tehran, were extremely effective and contributed to Iran's decision to accept a ceasefire.

1981: Saudi Arabia, the United Arab Emirates, Kuwait, Qatar, Bahrain, and Oman form the Gulf Cooperation Council (GCC) to address growing regional instability.

1991: Iraq again uses ballistic missiles, this time against Saudi Arabia and Israel. Little damage was caused, but their use by Saddam Hussein demonstrated the political utility of ballistic missiles.

2006: Hezbollah fires 4,000 rockets into northern Israel, again demonstrating the political value of even short-range and unguided rocket and missile strikes.

2006: The George W. Bush administration launches the Gulf Security Dialogue to strengthen U.S.-GCC defense cooperation. Missile defense is an important item on the agenda.

2010: The U.S. Ballistic Missile Defense Review shifts U.S. policy toward a greater emphasis on regional defense systems, including in the Persian Gulf.

2011: The United Arab Emirates becomes the first foreign customer of the Terminal High-Altitude Area Defense missile defense system.

2012: The Barack Obama administration established the Gulf Strategic Cooperation Forum to enhance security cooperation. Missile defense issues have featured prominently in Strategic Cooperation Forum discussions.

2013: The P5+1 and Iran agree to the Joint Plan of Action, which consisted of a short-term freeze on Iran's nuclear program in exchange for sanctions relief to provide both parties with space to negotiate a final agreement.

2015: The P5+1 sign the Joint Comprehensive Plan of Action, which provides Iran with sanctions relief in exchange for limits on its nuclear program. Iran's ballistic missile program and state sponsorship of terrorism were not dealt with sufficiently according to many of Iran's Arab neighbors.

2016: Iran conducts ballistic missile tests after the conclusion of the Joint Comprehensive Plan of Action, signaling that it will continue to develop and improve upon its ballistic missile arsenal.

¹ For more on the Obama administration's missile defense strategy, see Department of Defense, *Ballistic Missile Defense Review Report*, February 2010,

http://www.defense.gov/bmdr/docs/BMDR%20as%20of%2026JAN10%200630_for%20web.pdf.

² The JCPOA was signed on July 14, 2015. Implementation Day, or the day that the IAEA certified that Iran has complied with the terms of the agreement sufficiently to receive sanctions relief, was January 16, 2016. For more on the JCPOA and the steps taken by Iran to comply with the agreement, see U.S. Department of State, "Joint Comprehensive Plan of Action," <http://www.state.gov/e/eb/tfs/spi/iran/jcpoa/>.

³ F. Gregory Gause, III, *The International Relations of the Persian Gulf*, (Cambridge: Cambridge University Press, 2010), 75-83.

⁴ Dennis M. Gormley, *Missile Contagion: Cruise Missile Proliferation and the Threat to International Security*, (Annapolis: Naval Institute Press, 2008), 17.

⁵ *Ibid.*, 32-33.

⁶ Yoel Guzansky and Yiftah S. Shapir, "Iran Goes Ballistic," *Middle East Quarterly* (Winter 2015), http://www.meforum.org/4911/iran-goes-ballistic#_ftn1.

⁷ Amos Harel and Avi Issacharoff, *34 Days: Israel, Hezbollah, and the War in Lebanon*, (New York: Palgrave Macmillan, 2008), 259.

⁸ Guzansky and Shapir.

⁹ Debra Kamin and Jessica Steinberg, "Tel Avivians show their soaring affection for the Iron Dome," *Times of Israel*, July 25, 2014, <http://www.timesofisrael.com/tel-avivians-show-their-soaring-affection-for-the-iron-dome/>.

¹⁰ Arms Control Association, "Appendix E: Iran's Ballistic Missiles and the Nuclear Deal," August 11, 2015, <https://www.armscontrol.org/reports/Solving-the-Iranian-Nuclear-Puzzle-The-Joint-Comprehensive-Plan-of-Action/2015/08/Appendix-E-Irans-Ballistic-Missiles-and-the-Nuclear-Deal>.

¹¹ *Ibid.*

¹² Shahryar Pasandideh, "Iran's Missile Forces are Increasing in Range, Accuracy and Lethality," *World Politics Review*, October 14, 2015, <http://www.worldpoliticsreview.com/articles/16942/iran-s-missile-forces-are-increasing-in-range-accuracy-and-lethality>.

¹³ The anxiety caused by the Pivot to Asia has been widely discussed. See, for instance, the report authored by Afshon Ostovar, on his PASCC project "Deterrence and the Future of U.S.-GCC Defense Cooperation: A Strategic Dialogue Event," *Center for Naval Analyses*, July 2015, <http://calhoun.nps.edu/handle/10945/45796>.

¹⁴ Richard Weitz, "U.S. Pushes Missile Defense to Reassure Gulf Partners," *World Politics Review*, August 4, 2015, <http://www.worldpoliticsreview.com/articles/16377/u-s-pushes-missile-defense-to-reassure-gulf-partners>.

¹⁵ An example of major defense contractor interest in the Persian Gulf can be seen from Raytheon's vice president of integrated air and missile defense, who stated that "In 2008, when the United Arab Emirates placed an order for a significant number of Patriot fire units, that really kicked off the resurgence of Patriot." Angus Batey, "UAE is Driving Next Generation Patriot," *Aviation Week Network*, November 7, 2015, <http://aviationweek.com/dubai-air-show-2015/uae-driving-next-generation-patriot>.

¹⁶ Weitz.

¹⁷ Michael Elleman and Wafa Alsayed, "Ballistic Missile Defense Cooperation in the Arabian Gulf," in *Regional Missile Defense from a Global Perspective*, ed. Catherine McArdle Kelleher and Peter Dombrowski, (Stanford: Stanford University Press, 2015), 161-167.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ Missile Defense Agency, "Aegis Ballistic Missile Defense," http://www.mda.mil/system/aegis_bmd.html.

²¹ Elleman and Alsayed, 161.

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²³ *Ibid.*

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²⁶ *Ibid.*

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- ²⁷ Angus McDowall and Amina Bakr, “Three Gulf Arab states recall envoys in rift with Qatar,” *Reuters*, March 5, 2014, <http://www.reuters.com/article/2014/03/05/us-gulf-qatar-ambassadors-idUSBREA2413N20140305>.
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