

# Critical Nuclear Choices for the Next Administration

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## Introduction

Nuclear threats did not end with the Cold War. Today's nuclear threats come in all shapes and sizes – from new nuclear states like North Korea, to missile defense and Russia, to the outdated, expensive U.S. arsenal.

The next administration will face many choices on nuclear security issues. Its decisions will have serious implications, not just for the future of the U.S. nuclear arsenal, but for U.S. national security.

This report analyzes some of the critical choices that the next president will face, outlines the policy options, and argues for solutions based on clear, strategic thinking, rather than partisan politics.

The next four years will not be easy. Fortunately, there are solutions to these difficult questions; the key is forging bipartisan support.

Today's nuclear risks affect all of us. The next administration will have to put aside political rhetoric and work to develop policies that effectively address these critical nuclear threats.

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# Preventing a Nuclear Iran

This administration is hardly the first to ask how to deal with the threat posed by Iran's nuclear program, but the stakes are arguably higher now than ever before. The next administration will not find an easy answer to this question.

Some policymakers and pundits imply that the president has only two options on Iran: preventive military action or capitulation - allowing Iran to go nuclear. This is a dangerous oversimplification.

In fact, the president has a wide range of options on Iran: multilateral and bilateral talks; using sanctions as leverage; engaging NATO and regional allies; broadening the scope of nuclear talks; and as a last resort, a military strike on Iran's nuclear facilities. All of these options can be employed by the United States and our international partners using a nuanced Iran policy.

## Iran: the State of Play

The latest report from the International Atomic Energy Agency highlights serious concerns about Iran's nuclear program and lack of cooperation on inspections. The report notes that Iran continues to produce 20% enriched uranium (although its stockpile has actually diminished) and continues to install centrifuges at enrichment facilities (although it continues to struggle with advanced centrifuge technology).<sup>1</sup>

Iran's refusal to address international concerns regarding its past and current nuclear program is concerning. But the more crucial question with regards to U.S. policy is of Iran's intentions. On this question, the U.S. intelligence assessment is clear and consistent: Iran has not yet decided to build a nuclear weapon.<sup>2</sup>



## Sanctions and Negotiations

Economic sanctions against Iran are beginning to bite. Iran is losing about \$5 billion per month due to the oil embargo, and the inflation rate has risen above 20 percent.<sup>3</sup> A new round of sanctions went into effect this summer, and Congress is considering a follow-up round of penalties intended to keep the pressure up.

Sanctions likely played a big role in Iran's decision to resume negotiations with the P5+1 without preconditions. In April 2012 Iran and the P5+1 (the U.S., Russia, China, Germany, France, and the U.K.) resumed negotiations after a hiatus of more than one year. In addition to these high-level political meetings and technical talks between Iran and the EU, the IAEA and Iran met several times in 2012.

While negotiations have not yet led to an agreement on Iran's nuclear program, both sides have indicated that an agreement is still possible. Many experts agree, and have sketched out what a deal might look like. Former Iranian negotiator Houssein Mousavian, for example, argues that a phased approach would be agreeable to both sides.<sup>4</sup> Others have noted that agreeing to initial confidence-building measures, such as Iran's halting 20% uranium enrichment and the West lifting some economic sanctions, could open the door to a comprehensive deal.<sup>5</sup>

## A Nuanced Iran Policy

The debate on Iran policy is often muddled by unclear analysis and political rhetoric. Those who call for abandoning talks and taking military action often understate the risks. Those who would take military action off the table sometimes overstate the surety of diplomacy.

Cutting through the rhetoric, the first point that the next administration must recognize in addressing the Iran nuclear challenge is that all options should be on the table, including military force. We should be under no illusions regarding effort and the costs of military action. It will be difficult, it will take time, but in the end we will succeed. Tehran should understand that the U.S. can and will take the military option if required.

That being said, at this stage, military action would be unwise and potentially detrimental to our strategic aims. While no action should be taken off the table, ending negotiations prematurely and walking into a military conflict with Iran blindly would be a mistake. Understanding the full implications, including costs, lives, regional leverage, and the ability to achieve our real goals, is crucial to developing an effective policy towards Iran.

Clearly, there is still time to resolve the nuclear standoff by non-military means. Sanctions are taking a toll on Iran's economy. As the international consensus builds, Iran is increasingly isolated. Iran's leaders have not yet decided to pursue a nuclear weapons program; the building pressure from the international community may convince them to come clean about their past nuclear work and current program.

Building the international consensus, therefore, is key to resolving the Iran nuclear crisis. The next administration must continue to lead and work within international frameworks to show the Iranian leaders and people that deciding on acquiring a nuclear weapon will have huge risk for Iran, and will not be tolerated by the international community.

Of course, negotiations will not be easy, and they will take time. There will be steps back as well as steps forward; but the international framework represents the most efficient and effective way to achieve our ultimate goal: a non-military solution to the Iran nuclear standoff.

## Conclusion

For the next administration, the policy most likely to lead to a long-term solution is keeping up the economic pressure and continuing to participate in nuclear negotiations. To some extent, the ball is in Tehran's court. Iran's leaders can choose to work with the international community or face increasing isolation.

Cooperation from Iran could take many forms, from working with IAEA inspectors to engaging with the P5+1, from a short-term deal on 20% enriched uranium to a comprehensive, long-term agreement. At the end of the day, the international community will not allow Iran to build a nuclear weapon. Achieving that goal will require strong leadership and clear thinking from the next administration.



# North Korea – Isolation or Engagement?

North Korea's nuclear program has deep roots.<sup>6</sup> So too do U.S. efforts to address that program. Today, the path forward with North Korea is still unclear. Some advocate maintaining the status quo - further isolating the North, maintaining or increasing sanctions, and utilizing food aid as an incentive for North Korean reform and denuclearization. Still, engagement with the North may ultimately prove to be the most prudent option.

## North Korea's Nuclear Program

North Korea tested a nuclear device in 2006 and 2009 and although there has been speculation about a third nuclear test, North Korea's renewed focus on economic growth and cultivating regional partnerships suggest that the North may be reluctant to test.

A recent report noted that, "Beijing has continued to expand aid and trade with North Korea, but has also applied significant diplomatic pressure on Pyongyang not to test."<sup>7</sup> Moreover, Russia who, "recently forgave nearly \$11 billion in North Korean debt, signed a new border treaty, and is still in the game for building a gas pipeline going through the North to South Korea," is also opposed to further testing.<sup>8</sup>

Still, history has shown that the DPRK has a propensity to act in pursuit of its own interests, even if those interests do not align with regional partners.

Additionally the Board of Atomic Scientists has concluded, "Without at least one more successful plutonium test, it is unlikely that Pyongyang could have confidence in a miniaturized plutonium design" capable of being placed on an ICBM.<sup>9</sup>

Thus, while regional concerns may give the North pause, a successful test would demonstrate a credible nuclear capability.



## The Possibility of Future Nuclear Tests

Recent satellite imagery of a test tunnel in Punggye-ri suggests the DPRK may be able to test a nuclear device two weeks after the political decision to do so.<sup>10</sup> It should be emphasized however, that the North remains extremely far from creating smaller nuclear devices,<sup>11</sup> and that the North's missiles have experienced their own technical challenges.<sup>12</sup>

In addition to technical obstacles, an appreciation of the regional climate will also inform the North's decision to pursue an additional nuclear test.

Recently Russia annulled 90% of North Korea's debt, and pledged to invest in energy and infrastructure projects.<sup>13</sup> Moreover, Russia is mulling over the construction of a gas pipeline to South Korea, which would run through the North and provide sorely needed revenue.

Likewise, China has sought to ensure the stability of the North and maintain it as a buffer state against U.S.-

allied South Korea.<sup>14</sup> Toward this end, China has cultivated strong economic ties with the North, with one study characterizing Chinese patronage as “the lifeline that keeps the DPRK alive.”<sup>15</sup>

Still, both states have displayed a willingness through the U.N Security Council to censure the North for its provocative actions. Most recently, the UNSC condemned the DPRK’s failed satellite launch in April of 2012 and called for a tightening of existing economic sanctions.<sup>16</sup>

While a nuclear test remains a possibility however, the North Korean government has issued a statement denying any future plans for a nuclear test.<sup>17</sup>

## How to Proceed Next on North Korea

Thus, considering the complex challenge presented by North Korea, the U.S. will need a carefully calibrated policy; one which maintains Northern denuclearization as its ultimate goal while consistently working toward accomplishing more modest auxiliary goals.

One option is to discount the possibility for engagement with the North; opting instead to maintain or increase sanctions, and utilize food aid as an incentive for North Korean reform and denuclearization-a precursor to any new engagement efforts. However this approach may leave the U.S. in a far more limited and ill informed position for dealing with the DPRK.

The importance of increasing engagement with North Korea must thus be emphasized. Any U.S. engagement however, should attempt to construct confidence building measures while also accounting for the geopolitical realities of the region.

For example, ventures such as the Kaesong Industrial Complex foster increased economic cooperation between North and South Korea and may induce modest economic reforms in the DPRK.<sup>18</sup> Moreover, the U.S. could also work with regional allies to encourage such reforms and exploit opportunities to decrease China’s influence in the North.

Increased non-scientific academic interaction between the DPRK and United States as well as a more flexible policy on citizen exchanges between the two states, specifically among students, may also prove effective in cultivating a modest measure of mutual goodwill.<sup>19</sup>

Ultimately, U.S.-North Korean relations are characterized by mutual mistrust. Thus, modest overtures and confidence building measures are necessary to establish a framework for engagement on more substantive issues as well as a resumption of the moribund Six Party Talks. So long as the U.S. remains distanced from the North, events will continue on their present course and denuclearization will become even more unattainable.



# Missile Defense and Russia

The months leading up to the presidential elections in both the U.S. and Russia produced a downward trend in our relations. Negotiations on future nuclear initiatives ground to a halt. Nevertheless, Russia appears interested in continuing a dialogue with the U.S., assuming progress can be made in resolving the missile defense question.

Achieving a missile defense agreement, therefore, could be the key to breaking the impasse in U.S.-Russian relations. Cooperation on this issue could pave the way for negotiations on the next nuclear treaty, bolster efforts to prevent a nuclear Iran, and lead to collaboration on non-nuclear issues of mutual interest.

The next administration will have to decide whether to continue efforts to secure a missile defense cooperation agreement with Russia, or to eschew negotiation, charting a solitary course on missile defense.

## Background

The technical details of the U.S. plan for a missile defense shield in Europe have changed significantly over time, but the underlying policy issues for the U.S. and Russia remain the same. Russia fears that its nuclear forces are the actual target of European missile defense and has called for the U.S. to enter into a legal agreement guaranteeing that the shield is not directed at Russia.

The U.S. has consistently maintained that a missile defense shield in Europe is a national security priority, necessary to protect the U.S. and allies from Iran and North Korea, and not directed at Russia's nuclear forces. U.S. policymakers remain firm in refusing to enter into a legally binding agreement on missile defense, as such an agreement could endanger U.S. national interests in the future.



## Moving Forward on Missile Defense

The key to breaking the missile defense stalemate, thereby allowing the U.S. and Russia to move forward on other nuclear initiatives, may be securing a political cooperation agreement with Russia.

Negotiations on such an agreement – referred to as the Defense Technical Cooperation Agreement – began in 2004 under the Bush administration.<sup>20</sup> More recently the U.S. proposed a more limited framework, the Ballistic Missile Defense Cooperation Agreement that would include transparency and confidence building measures, missile defense exercises, data sharing, research and development, and technology sharing.<sup>21</sup>

A cooperation deal has proved elusive. But both sides remain officially committed to negotiating such a deal.

The NATO declaration at the Chicago summit stated, “We propose to develop a transparency regime based upon a regular exchange of information about the current respective missile defense capabilities of NATO and Russia. Such concrete missile defence cooperation is the best means to provide Russia with the assurances it

seeks regarding NATO's missile defence plans and capabilities."<sup>22</sup>

The leaders of the United States and Russia reaffirmed that a missile defense cooperation agreement is in both countries' national interests. In a joint statement issued in June, Presidents Obama and Putin said, "Despite differences in assessments, we have agreed to continue a joint search for solutions to challenges in the field of missile defense."<sup>23</sup>

Despite the current stalemate, there are signs of progress. NATO and Russia held theater missile defense exercises in March of this year.<sup>24</sup> In August, as in previous years, the U.S. and Russia carried out a joint counterterrorism exercise – this year, Russian personnel participated in the exercise from within NORAD.

These activities, combined with official statements, hint that while a missile defense agreement remains unlikely in the current political environment, the post-election environment may present an opportunity to continue negotiations.

Some in the U.S. object to the idea of negotiating any kind of missile defense cooperation agreement with Russia, arguing that cooperation on missile defense endangers U.S. freedom to deploy missile defense systems.

However, the downside of failing to reach some nonbinding understanding may cause cooperation with Russia on other critical security issues to suffer. Today the U.S. and Russia must work together to address mutual security threats, particularly the threats posed by nuclear weapons.

A political agreement on missile defense cooperation, as proposed and supported by policymakers on both sides of the aisle, would not endanger U.S. security. In fact, it would make us safer, opening the door to cooperation with Russia on other issues, from Iran to reciprocal nuclear reductions.



# Redefining a Partnership with Pakistan

As long as the United States remains embroiled in a conflict in Afghanistan, strategic necessity will compel Washington to maintain its uneasy alliance with Pakistan. With the impending American withdrawal from Afghanistan however, the next administration will need to redefine America's future relationship with Pakistan beyond the context of counterterrorism. Integral to this calculus will undoubtedly be Pakistan's nuclear arsenal.

Described as “the world's fastest-growing nuclear stockpile,”<sup>25</sup> ensuring the security and integrity of Pakistan's nuclear program will be a paramount objective around which to orient any future U.S. policy towards Pakistan.

## The State of Pakistan's Nuclear Program

Pakistan's civilian nuclear program began in 1954 as part of the Eisenhower Administration's Atoms for Peace initiative. However, following three successive wars with India the Pakistani government moved to establish a nuclear weapons program.<sup>26</sup> Pakistani Prime Minister Zulfikar Ali Bhutto famously declared in 1965 that his people would “eat grass or leaves, even go hungry” to obtain a nuclear weapon.<sup>27</sup>

Today Pakistan's nuclear arsenal is estimated to range between 90 and 110 warheads.<sup>28</sup> This arsenal may soon be augmented following the completion of two additional plutonium reactors and an additional fuel reprocessing center, both of which could provide Pakistan with the ability to create an additional 13-27 warheads annually.<sup>29</sup>

Although an official nuclear strategy has not been produced, Pakistani officials have indicated that a guiding principle is to maintain a credible minimum deterrence, ostensibly against historic adversary India.<sup>30</sup>

The nature of Pakistan's nuclear safeguards also remains opaque. It is believed that some basic permissive action links are employed as a counter-measure against unauthorized use.<sup>31</sup> Moreover, individual nuclear weapons are thought to be stored in component form at separate locations; with the core de-mated from the weapon and delivery vehicle.<sup>32</sup>

Still, according to one U.S. official, “we remain limited in what we actually know” about the Pakistani nuclear arsenal.<sup>33</sup>



## Challenges Presented by Pakistan's Nukes

Since 2001 the United States has furnished Pakistan with approximately \$100 million to increase its nuclear security.<sup>34</sup> Persistent attacks by militant groups on suspected nuclear facilities however, have augmented international anxieties over the vulnerability of the Pakistani nuclear arsenal.

Meanwhile the revelation in 2003 of the network run by Dr. Abdul Qadeer Khan, the head of Pakistan's nuclear program, raised the specter of nuclear proliferation emanating from Pakistan. While in detention Khan

admitted to providing nuclear intelligence to Libya, North Korea, and Iran.<sup>35</sup> Although the State Department has determined that his network is “no longer operating” it does warn of the continued threat of proliferation from Khan’s associates.<sup>36</sup>

An additional dimension to the Pakistan proliferation threat is the presence of terrorist and extremist groups. While Pakistani and U.S. officials maintain that terrorist groups have never endangered the nuclear arsenal, assaults by these groups on major Pakistan military facilities highlight this threat.<sup>37</sup> Thus, as one analyst succinctly described, within Pakistan “there is a lethal proximity between terrorists, extremists, and nuclear weapons insiders.”<sup>38</sup>

The potential for nuclear escalation with India also presents an unacceptable reality. Although Pakistani officials have stated they will only use nuclear weapons “if the very existence of Pakistan as a state is at stake,”<sup>39</sup> Pakistan has refused to adopt a no-first-use policy toward nuclear states.<sup>40</sup> As such, one recent analysis concluded, “given conventional military disparities, nuclear weapons and a willingness to use them remain Pakistan’s primary deterrent against India.”<sup>41</sup>

## **Now What? Points of Emphasis for the Next Administration**

Considering these factors, the next administration will need to redefine America’s partnership with Pakistan, placing an emphasis on ensuring the security and integrity of Pakistan’s nuclear arsenal.

A successful U.S. policy toward Pakistan must appreciate the complications informing the partnership and seek to capitalize on areas where interests intersect. As such, the U.S. can continue to work with the military to conduct counterterrorism operations while also promoting policies that enhance the rule of law and good governance.<sup>42</sup>

American leaders can encourage Pakistan to adopt the IAEA Additional Protocol while also supporting Pakistan’s stated desire to create a Nuclear Security Training Centre, which would increase Pakistani scientists’ interaction with regional colleagues.<sup>43</sup> Encouraging Pakistan to produce a formal nuclear strategy and to adopt a no-first-use policy toward all states may also be prudent.

The U.S. can seek to assuage Pakistani concerns over India by encouraging increased bilateral trade and establishing formalized nuclear confidence building measures, both of which are integral to regional stability. Toward this end, Washington should encourage continued engagements such as the Ottawa Dialogue<sup>44</sup> and attempt to foster a consensus on the framework for a Fissile Material Cutoff Treaty.<sup>45</sup>

Ultimately, an effective US policy toward Pakistan should be explicit enough to establish clear goals, functional enough to allocate necessary resources to those goals, and dynamic enough to navigate the myriad conflicting forces permeating the region.



# The U.S. Nuclear Deterrent

## The New Security Environment

The strategic environment of the 21<sup>st</sup> century is very different from the threats faced during the Cold War. The risk of a nuclear war between the U.S. and Russia has greatly diminished; other risks – terrorism, cyberwar, climate change – have grown.

As threats have changed, so too should the tools we use to address those threats change.

The U.S. nuclear arsenal has shrunk since the end of the Cold War, but the nuclear force structure remains basically the same. The world has moved on, threats have changed, but U.S. nuclear strategy is still shaped by the Cold War.



There is a strong consensus among U.S. national security experts that nuclear weapons should play a smaller role in the U.S. national security strategy. Respected military leaders like General James Cartwright and General Eugene Habiger, former commanders of the U.S. Strategic Command, have called for revising the U.S. nuclear strategy, eliminating excess warheads, and reassessing the nuclear triad.<sup>46</sup>

Past presidents have made some progress towards a new nuclear strategy by downsizing the massive arsenal built during the Cold War and that is no longer needed. The current administration has made some progress as well by suspending unnecessary programs to build new nuclear facilities. But the nuclear enterprise – with assistance from members of Congress protecting parochial interests – moves on.

The next administration's decisions regarding the U.S. nuclear arsenal are critical. The right choices will give us a leaner, meaner nuclear arsenal, suited to the security challenges of the 21<sup>st</sup> century. The wrong choices will perpetuate outdated, unnecessary nuclear weapons systems, at the expense of more important defense programs.

## Updating the U.S. Nuclear Strategy

The next administration will have several opportunities to alter the path of U.S. nuclear policy. Strategic thinking about the threats that we face and the resources required to meet those threats will yield a more effective nuclear policy.

The first opportunity is to build on the success of the Strategic Arms Reduction Treaty between the U.S. and Russia. Since the treaty entered into force over one year ago, both sides have made great strides in removing unnecessary nuclear weapons from their arsenals.

But the thousands of warheads that remain – 10,000 for Russia; 8,000 for the U.S.<sup>47</sup> – are still excessive. Eliminating unnecessary strategic warheads, and establishing for the first time limits on tactical and nondeployed warheads, is a logical step.

The next president will also have an opportunity to conduct a review of the U.S. nuclear force posture. In addition to setting guidelines for nuclear targeting and other procedures, this review represents a unique opportunity to rethink the size and shape of the U.S. arsenal – specifically the nuclear triad.

Plans to modernize the three legs of the nuclear triad – the air, sea, and ground based nuclear delivery systems – are moving forward, all though the need for all three platforms is still unclear.

These systems will cost hundreds of billions of dollars. Buying a new nuclear-capable bomber program, for example, could cost \$60 billion. The total procurement and operating cost for the new nuclear submarine program is close to \$350 billion.<sup>48</sup>

Investing billions of dollars in nuclear delivery systems of questionable utility is unwise. The administration’s nuclear review should carefully examine the strategy behind maintaining redundant nuclear systems that divert resources from other defense programs – programs that better address 21<sup>st</sup> century security threats.



Finally, the budget requests submitted to Congress each year are an opportunity to eliminate wasteful spending on unnecessary nuclear programs. The administration develops these budget requests in conjunction with government agencies. Rather than rubber-stamping the agencies’ requests, the next administration must scrutinize each line item to ensure that resources are going to essential priorities, not unnecessary nuclear programs.

## Conclusion

The next president will have many similar opportunities to rethink U.S. nuclear strategy. The choice should be clear. Rather than perpetuating the nuclear posture that lasted through the Cold War, but is increasingly irrelevant in the 21<sup>st</sup> century, the next administration should choose to craft a smaller, more efficient, and more effective nuclear deterrent.

Updating the U.S. nuclear strategy will require that the president work closely with congressional decision makers. This will not be easy. Heated political rhetoric often gets in the way of smart policy choices.

All sides should eschew partisan politics and begin a regular dialogue with each other about U.S. nuclear strategy.

Our nation’s nuclear deterrent and the nuclear threats we face are too important to be part of the annual tug of war in Washington.

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## **Building a New American Arsenal**

The American Security Project (ASP) is a nonpartisan initiative to educate the American public about the changing nature of national security in the 21st century.

Gone are the days when a nation's strength could be measured by bombers and battleships. Security in this new era requires a New American Arsenal harnessing all of America's strengths: the force of our diplomacy; the might of our military; the vigor of our economy; and the power of our ideals.

We believe that America must lead other nations in the pursuit of our common goals and shared security. We must confront international challenges with all the tools at our disposal. We must address emerging problems before they become security crises. And to do this, we must forge a new bipartisan consensus at home.

ASP brings together prominent American leaders, current and former members of Congress, retired military officers, and former government officials. Staff direct research on a broad range of issues and engages and empowers the American public by taking its findings directly to them.

We live in a time when the threats to our security are as complex and diverse as terrorism, the spread of weapons of mass destruction, climate change, failed and failing states, disease, and pandemics. The same-old solutions and partisan bickering won't do. America needs an honest dialogue about security that is as robust as it is realistic.

ASP exists to promote that dialogue, to forge consensus, and to spur constructive action so that America meets the challenges to its security while seizing the opportunities the new century offers.



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