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Defense Outlook 2016 What to Know, What to Expect

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A Report of Defense Outlook: A CSIS Series on Strategy, Budget, Forces, and Acquisition

AUTHORS

Kathleen H. Hicks Mark Cancian Todd Harrison Andrew Hunter

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Rowman & Littlefield 4501 Forbes Boulevard Lanham, MD 20706 301-459-3366 | www.rowman.com

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| Introduction

In 1959 the military strategist Bernard Brodie wrote, "We do not have and probably never will have enough money to buy all of the things we could effectively use for our defense. The choices we have to make would be difficult and painful even if our military budget were twice what it is today." Fifty-seven years later, the defense budget is roughly double (adjusting for inflation) what it was at the time of Brodie's writing, and the choices are indeed difficult and painful. The United States faces a range of security challenges in the Middle East, Europe, and Asia-Pacific regions, and each of these challenges demand forces that are additive in the aggregate capacity required—forces cannot be present in two places at once. At the same time, the capabilities needed in each of these regions are dissimilar in many ways, requiring weapons, operational concepts, and training across a wide spectrum of contingencies. And just as in 1959, the budget is an ever-present constraint on the military, forcing difficult decisions about what to cut, what to keep, where to invest, and where to take risks.

If the purpose of strategy is to align ends, ways, and means, then the job of defense analysis is to understand the trades and choices involved. In this spirit, CSIS has initiated an annual series of reports collectively known as the Defense Outlook Series. The purpose of this series is to examine the intersection of strategy, budget, forces, and acquisition. The Defense Outlook Series will include four annual publications, the first of which—and the subject of this report—is a review of what happened over the preceding year and a forecast of what to look for in the coming year. It tracks where the course of policy and actions relating to strategy, budget, forces, and acquisition has run and what curves lie ahead.

Two annual reports will follow in the spring that examine the president's budget request and proposed force levels in more detail, and a fourth report will be issued in the summer analyzing trends in defense acquisition. The annual analysis of the defense budget will look at trends and discontinuities in the budget, including military and civilian compensation, acquisition funding, readiness funding, and war-related funding in the president's request. The annual analysis of forces will explore trends and current plans for the force structure, end strength, and readiness levels of each of the services as projected in the president's budget request. The annual analysis of acquisition trends will focus on changes in contract spending and the direction and performance of the acquisition system, focusing in particular on the effects of acquisition reform efforts over time.

This inaugural report in the Defense Outlook Series looks back at what happened in 2015, specifically with respect to strategy and the security environment, the debate in Congress over the defense budget and force structure, and changes in the acquisition system, and looks ahead to what these developments may mean in 2016 and beyond.

| Strategy and the Security Environment

What Happened in 2015

The Quadrennial Defense Review released in early 2014 presaged very little of the major happenings of 2015. Few strategic documents could have. The global environment in 2015 was almost as confounding as the American political scene. Global trends mixed with regional realities to create a kaleidoscope of pressing and slow-burning challenges that did not seem to fit into any previous singular explanation of the international order. One might be tempted to ask, "What didn't happen in 2015?" Although the range of challenges and change was substantial, six events, or series of events, stand out as particularly notable for their implications on U.S. defense strategy.

The ISIS Threat

ISIS continued to dominate security headlines in 2015. Within ISIS's main operating theater—stretching across portions of Syria and Iraq—the U.S.-led coalition stepped up its operations in all realms. The most embarrassing results for the United States revolved around its train and equip efforts for moderate Syrian forces. The unattainability of the original U.S. plan to train over 5,000 rebels in 2015—and many times more over several years—became apparent by September, after an incident in which trained rebels defected to ISIS with their U.S. equipment and testimony in which U.S. defense officials admitted that only around 100–120 rebels had been trained. President Barack Obama formally halted the train and equip program entirely in October. In Iraq, the crucial town of Ramadi fell to ISIS in May. The fight on the ground was more promising for the coalition as the year progressed. The United States stepped up its air support in both Iraq and Syria over the summer, with President Obama announcing in December that the U.S. had undertaken 9,000 airstrikes since operations against IS began in the fall of 2014. Moreover, the United States loosened the rules of engagement for its special operations forces (SOF) operating in support of Kurdish, Sunni, Iraqi national, and other local fighters and also increased the number of SOF deployed. By early 2016, the U.S.-led coalition had recaptured most of Ramadi.

ISIS actions beyond the Iraq-Syria theater were particularly striking, none more than the November attacks in Paris, France. The Paris assault jarred Europeans, creating modest—although as yet unrealized—momentum for resolution to the crisis in Syria, deepening debates over management of the migration crisis consuming Europe (itself a significant security development in 2015), and relegating concerns about possible Russian activity in Eastern Europe to a secondary security issue for most of Western and Southern Europe. Beyond Paris, the downing of a Russian commercial airliner in Egypt and growing evidence of ISIS influence in the Sinai region as well as Afghanistan, Libya, and elsewhere brought home to many defense planners the global nature of the organization's reach.

Iran Nuclear Deal

The Iran nuclear deal was a watershed event in Middle East security policy. After years of sanctions against Iran for enriching uranium, the permanent five members of the United Nations Security Council reached an agreement with Iran in July in which Iran agreed to an inspections regime to ensure it does not enrich uranium for the next 15 years. The agreement promised relief from sanctions for Iran in return for abiding by the inspections process. It met with significant debate within the United States, narrowly surviving a September congressional vote that would have effectively killed the deal by requiring Iran to recognize Israel and release detained Americans before sanctions could be lifted. Critics of the deal were further incensed when Iran conducted a long-range ballistic missile test in October. Although such testing did not violate the Iran nuclear deal, it did violate a 2010 United Nations Security Council resolution, calling into question Iran's interest in abiding by its international commitments and demonstrating a system capable of delivering nuclear warheads or other payloads into Israeli territory. The Iran deal also heightened tensions between the United States and its Arab partners, many of whom were engaged in operations in Yemen against Iranian-backed forces. At the same time, it brought about an agreement with Iran that was sought by the Bush and Obama administrations and was impossible to reach under the prior Ahmadinejad presidency, leveraging unprecedented international solidarity that appeared unlikely to sustain itself for much longer.

Halting Progress in Afghanistan

In late March 2015, just over a year after declaring an end to the U.S. combat mission in Afghanistan, President Obama announced that 9,800 U.S. service members would remain in Afghanistan through the end of 2015 rather than be reduced by half in that period, as he had announced in 2014. In October, the president announced that the United States would still reduce to that roughly half-sized force—some 5,500 troops—but that they would remain in Afghanistan through 2017. The president had previously stated that the United States would draw down to a "normal embassy presence"—before he left office. Under the new plan, the reduction to 5,500 troops is not anticipated to occur before the next president takes office. The shift in administration approach reflected the stark reality that security in Afghanistan is tenuous, and was no doubt influenced by the troubling experience in Iraq, where conditions rapidly deteriorated after the withdrawal of U.S. forces. The reality of further force demands on the United States amid planned drawdowns that did not account for such presence contributed to the debate whether the United States was experiencing a strategy-force (and funding) mismatch.

Russian Opportunism in Ukraine and Syria

In February 2015, Russia and Ukraine reached a ceasefire agreement. Leading to Minsk II, President François Hollande of France and Chancellor Angela Merkel of Germany succeeded in driving Russia and Ukraine to the bargaining table despite the failure of the prior Minsk Agreement to hold for more than one day. The ceasefire largely held throughout 2015, although there are credible accusations of violations on both sides. With the temperature in Ukraine reduced to simmering, Russia substantially built up its existing military presence in Syria over the late summer. In September, Russia began striking targets inside Syria, with significant evidence to belie its claims of focusing attacks on ISIS rather than Syrian moderates. Russia's air war in Syria became particularly heated when Turkey shot down a Russian fighter jet violating its airspace. Russia's stepped-up role further complicated the U.S. domestic discussion of an end-game for Syria, especially regarding a more expansive U.S. military role in the country. The United States and Russia developed a deconfliction regime to avoid any mishaps between the two powers, but tension over Russia's role in supporting the Syrian regime and attacking non-ISIS targets remained high throughout the year.

Chinese Maritime Incrementalism

Many nations in East and Southeast Asia continued to create or expand land features in the Pacific during 2015. China, however, did so far more extensively than any of its neighbors. In May, a CNN aircrew filmed such Chinese growth, including the building of military infrastructure, from aboard a Navy P-8 surveillance aircraft, much to the displeasure of the Chinese. The resulting film, combined with a growing catalogue of such photographic proof (notably from CSIS's own Asia Maritime Transparency Initiative), created pressure on the administration to take action. This pressure increased when senior Defense Department officials stated in response to questions posed during a September Senate Armed Services Committee hearing that the United States had not conducted a freedom-of-navigation operation within 12 nautical miles of Chinese reclaimed land features in at least several years. In late October, the United States Navy did sail within 12 nautical miles of one such feature; however, its legal justification of the operation as an exercise of "innocent passage" rather than "freedom of the high seas" appeared to give de facto recognition to the Chinese land claim.

Cyber

The hacking of computer systems at the Office of Personnel Management last year exposed the personal and financial information of more than 21 million government employees, contractors, and family members. OPM first acknowledged the compromise in July, but admitted that the theft had begun at least a full year earlier. Although the administration did not publicly name a perpetrator for the attacks, a number of reports, citing unnamed senior officials, pointed to China. Congressional lawmakers, including those briefed by the administration, were more forward-leaning, stating that China was indeed to blame. Unlike the 2014 North Korean attack against Sony Pictures, the OPM hack brought home to Americans that state actors might be seeking to exploit the cyber domain for more than commercial gain. The incident guaranteed that Chinese President Xi Jinping would be forced to address cyber warfare during his September visit to the White House. Indeed, Obama and Xi pledged during that visit not to conduct statesponsored cyber-theft, although no enforcement mechanisms were put in place and Xi claimed that China had not previously engaged in such theft, counter to all available evidence. Congressional interest in cybersecurity also increased substantially in the wake of the hack, culminating in passage of the Cybersecurity Act of 2015 in December,

which promotes sharing of cyber threat information between the U.S. government and private industry. These actions would have been unthinkable in the immediate wake of the Snowden revelations, demonstrating how far the debate over the government's role in cybersecurity had shifted over the last few years.

What to Watch in 2016

There is no reason to think 2016 will be any more predictable, or any less challenging, than 2015. The key question is whether enough will change in the environment to force a fundamental rethinking of the Defense Department's current strategic approach. Absent a cataclysmic event, there will almost certainly not be a new defense strategy in this eighth year of the administration and likely few, if any, major policy shifts. Most insiders will instead be looking ahead to the 2017 U.S. presidential transition and the possible policy and strategy changes it might entail, including the first Strategic Defense Review, Congress's newly mandated replacement for the QDR. Before 2016 ends, however, several key activities and trends may already have shaped the range of choices available to the next administration's defense team.

World Events

It is a truism for defense strategists that those looking for accurate predictions about the evolution of world affairs are bound to be disappointed. Strategists seldom foresee how trends will culminate in particular combinations and ways to advance or challenge U.S. interests in the coming year. Nevertheless, below are some issues most likely to shape U.S. strategic planning between now and 2017.

The Syria-Iraq Theater

The contest for territory and influence between ISIS and the U.S.-led international coalition is likely to continue throughout 2016. After taking back most of Ramadi, the coalition has designs on liberating Mosul. How well the coalition performs in this task, and more generally in freeing northern and western Iraq from the grip of ISIS, will be an important bellwether for the success of U.S.-backed military efforts. In Syria, the military campaign will be measured not only in terms of reducing ISIS's territorial control, but also in devastating its leadership. It will also be important to watch the prospects for a political resolution to Syria's governance crisis, including a deal that transitions President Bashar al-Assad from power. At present, the likelihood of a political resolution seems dim, but post-Paris attacks, Europeans are motivated more than ever to see the flow of refugees to their countries stemmed and the human toll of the war reduced.

The Global ISIS Challenge

American policymakers will be watching for the spread of ISIS's influence in the Greater Middle East, Europe, and here in the United States. Cutting off its sources of funding and its robust media campaign to recruit people and inspire attacks abroad are major goals. Thwarting ISIS's desire to purchase a nuclear weapon should garner particular attention. Watch for greater public-private partnerships to counter violent extremist messages on social media. In Europe and the United States, a key question will be how to resolve the tension between concern for migrants' human rights and security worries. Moreover, the migration crisis—spurred by the atrocities of the Assad regime, ISIS, and gains by the Taliban in Afghanistan—may create enough impetus for action within southern and western Europe to materially improve the coalition against ISIS and perhaps even spur greater military and political action to resolve the Syrian crisis.

Iran

Now that the nuclear deal is complete and associated sanctions lifted, we are likely to see some early indications in 2016 about Iran's security ambitions in the region. Will it seek to mollify concern by reducing its unconventional warfare and military activities—from the Levant to the Arabian Peninsula to North Africa and beyond—or will it increase these activities now that it is out from under nuclear sanctions? Iran already provided an early sign by conducting a long-range ballistic missile test in violation of a UN Security Council resolution, to which the United States responded with economic sanctions. It also captured U.S. sailors in the Persian Gulf, although it returned them within hours. Israel and the Arab states will also be watching Iran. Look for the United States to continue reassuring these partners that it is not Pollyannaish about Iran, possibly concluding major new arms sales or defense agreements with key allies and partners. A step-down in U.S. presence in the Gulf this year would be a significant signal from the administration that it believes it has reached a new accord with Iran in the military sphere.

Russian Aggression

With his economy sputtering and estimates of thousands of Russians killed during operations in Ukraine, will President Vladimir Putin pause this year to consolidate his gains or push his foreign policy agenda further in Syria, Eastern Europe, or elsewhere? Europe watchers will be paying attention to party politics along the border with Russia to see if Kremlin influence is eroding democratic principles and stability. The chances of an overt Russian attack against NATO territory remains low, but the risks are so substantial for the alliance and the world that many will be keeping an eye on Russian snap exercises and military developments.

Chinese Defense Development and Reform

In addition to watching for the growth of Chinese activities in the East and South China Seas and the pace and scale of its military advancement, defense analysts should attend to the effect of ongoing Chinese defense organizational reform. President Xi Jinping began an aggressive series of landmark defense reform initiatives in 2015 that, in their totality, constitute a Chinese version of the 1986 Goldwater-Nichols Act. President Xi has strengthened civilian (communist party) authority over the military, mandated headquarters efficiencies, reduced the size of the army, and created joint command entities. Defense analysts should be watching to see if China is able to increase the effectiveness and efficiency of its defense enterprise through these changes, particularly in the midst of a slowdown in the Chinese economy.

The Counterterrorism Strategy in Afghanistan

U.S. plans for the Afghan drawdown have already changed multiple times in the past three years and may change again in 2016, despite the impending close of the Obama administration. The Afghan government's hold on the country is extremely fragile, and trends are not promising. The United States might decide to increase its air support to Afghan Security Forces in order for the Afghans to achieve greater success in their counterterrorism campaign. A change in the posture of forces—exactly where they are deployed—and the rules of engagement under which they operate may likewise be possible; changes along these lines in Iraq seemed to be helping there. It is also possible that the Taliban will continue to gain territory and advantage against the Afghan government, further spurring the flight of Afghans into Europe and threatening to undue the progress made in the past 14 years of war.

Geostrategy and the Defense Budget

A related issue set to monitor in 2016 is the degree to which critical elements of U.S. strategy will be bolstered by the defense budget and military activities. In Europe, attention will be on the seriousness of the U.S. commitment to deterring Russia. One of the earliest assessments will be of the measures included in DoD's FY2017 Overseas Contingency Operations account and base defense budget requests, from additional prepositioned equipment to headquarters support to the continuation of DoD's so-called "persistent presence" in Eastern Europe. Similarly, the budget's support for global counterterrorism operations, especially against ISIS, will be important to watch. The FY 2017 budget request should also provide signs as to how well the Department of Defense is able to advance the Asia rebalance tenet of the defense strategy amid competing needs in Europe, the Middle East, and the global counterterrorism campaign. This might be seen in the types of capabilities that the Department prioritizes, the timelines associated with acquiring those capabilities, and the investment in Pacific relationships, infrastructure, operations, and access. Deterring North Korean aggression—as well as staying ahead of Chinese developments—will be critical.

U.S. Defense Reform

From Capitol Hill to the Pentagon, Washington is buzzing about the need for defense reform. Senator John McCain called a series of over 10 Senate Armed Services Committee (SASC) hearings in 2015 loosely relating to the reform goals of the 1986 Goldwater-Nichols Act. The Pentagon stepped forward in early 2016 with its own review process for reform. All eyes are on the interplay between these two efforts as defense authorizers begin their legislative process. Indications are that Senator McCain intends to mandate some reforms in his committee's 2017 National Defense Authorization Act bill, with the potential for further legislation in the following year's cycle. However, no nearconsensus themes emerged from the Senate hearing process (except, perhaps, the importance of defining problems well before undertaking reform) and the problems on which reform efforts might focus—and the solutions that might be sought—remain murky to even close observers of the SASC. Meanwhile, Pentagon leadership seems intent on working independently of Capitol Hill and is adopting a wait-and-see approach to SASC efforts. Major items to watch this year on the defense reform front include the following:

- Whether the SASC will press for reforms in 2016, and if so on what;
- Whether the House Armed Services Committee, which has been keeping its head down to work a more focused and long-term reform agenda, will join in the debate, and if so, on what side;
- Whether the Department's efforts will yield thoughtful secretary of defensedriven changes and/or legislative proposals or conclude that reform is not needed or ready at this time; and
- Whether perceived DoD intransigence to reform will simply spur reform momentum in the Senate.

Possible reform areas to watch are headquarters efficiencies, unified command structure, and changes to the role and responsibilities of the chairman of the joint chiefs.

Budget

What Happened in 2015

The 2015 budget season began on February 2, 2015, with the president's submission of the FY 2016 budget request, marking only the second time the Obama administration submitted its budget by the statutory deadline of the first Monday in February (see Figure 1 for the defense budget timeline). The request called for a national defense budget of \$561 billion in base discretionary funding (including \$534 billion for DoD), which was \$38 billion more than the Budget Control Act of 2011 (BCA) budget caps allowed. The request further included \$51 billion in Overseas Contingency Operations (OCO) funding for DoD, which is not restricted by the budget caps.

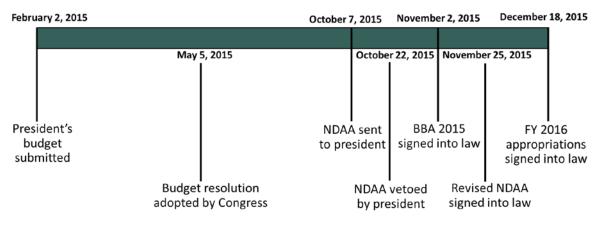


Figure 1: FY 2016 Defense Budget Timeline

With Republicans in control of both the House and Senate for the first time during this administration, Congress passed a budget resolution that included \$523 billion for national defense, equal to the BCA budget cap but \$38 billion less than the president's request. The budget resolution also included \$89 billion in OCO funding for defense, \$38 billion more than the president's request. The budget caps unchanged and added \$38 billion to OCO, while the president's request called for increasing the budget caps for defense and nondefense by \$38 billion each.

With this unresolved difference hanging over the FY 2016 budget, the House and Senate Armed Services Committees went to work on the 2016 National Defense Authorization Act (NDAA). The 2016 NDAA that emerged from conference in October implied the use of OCO funding to supplement the base budget, consistent with the congressional budget resolution. Citing this disagreement, the president vetoed the bill on October 22, 2015—only the fifth veto of the Obama presidency. The defense appropriations bill, which actually sets the level of defense funding, remained stalled in the Senate due to the same disagreement over the use of OCO funding.

The budget gridlock did not break until the surprise announcement of a budget deal in late October. This deal was enabled in part by the resignation of House Speaker John Boehner just a few weeks earlier, which created a window of opportunity for the budget compromise known as the Bipartisan Budget Act of 2015 (BBA 2015). The BBA 2015 increases the BCA budget caps by \$25 billion for defense and \$25 billion for nondefense in FY 2016 and by \$15 billion on each side of the ledger in FY 2017. The deal also increases OCO funding above the FY 2016 request by \$8 billion for defense and \$8 billion for nondefense. Further, it specifies that OCO must be at least the same total amount in FY 2017, meaning \$59 billion for defense OCO and \$14 billion for nondefense OCO.

BBA 2015 is similar in many ways to the Bipartisan Budget Act of 2013 (BBA 2013), also known as the Ryan-Murray or Murray-Ryan budget deal. Both BBA 2015 and BBA 2013 increase the budget caps for defense and nondefense by equal amounts. Moreover, both agreements extend for two years: FY 2014 and FY 2015 in the BBA 2013 deal, and FY 2016 and FY 2017 in the BBA 2015 deal. A notable difference, however, is that the BBA 2015 deal raises the budget caps much closer to the president's request and explicitly includes OCO funding as part of the deal.

Following the budget deal, Congress quickly modified the 2016 NDAA accordingly and passed it again, with the president signing it into law on November 25. Acquisition reform notwithstanding (as discussed in more detail below), one of the most consequential reforms in the NDAA is the change to the military retirement system. Based on the recommendations of the congressionally created Military Compensation and Retirement Modernization Commission (MCRMC), Congress created a new 401k-style defined contribution retirement plan with matching contributions from the government. In exchange for this new benefit, service members will receive a lower pension (e.g., 40 percent of pay for life versus 50 percent for a person retiring with 20 years of service) and a continuation bonus after 12 years of service if a person agrees to continue for at least another four years. Importantly, these changes do not affect any current retirees or current service members who do not want to participate. Only personnel joining the military after January 1, 2018 and current service members with less than 12 years of service who voluntarily opt-in will be part of the new hybrid system. Once fully implemented, the new system is projected to save nearly \$2 billion annually in the DoD budget.

What to Watch in 2016

Despite the uncertainty and last-minute deal-making over the past year, the FY 2016 budget ended up being much closer to the president's request than many expected. It also marks a turnaround for defense, with the defense budget growing in real terms for the first time in five years. While the BBA 2015 budget deal included an increase in the budget caps for FY 2017, the topline still falls short of what the administration was planning. Last year's request projected a base discretionary national defense budget caps in the BBA 2015 deal limit the national defense budget to \$551 billion. Some of this difference, however, will be offset by the use of OCO funding, which the budget deal

specified would be \$59 billion for FY 2017, or \$8 billion more than DoD requested in FY 2016 and likely more than would have otherwise been requested for FY 2017.

Just as it did in the second year of the BBA 2013 deal, the administration has indicated it will stick to the terms of the BBA 2015 deal and submit an FY 2017 request at the revised budget cap level. In the FY 2015 request, the administration included a separate proposal known as the Opportunity, Growth, and Security Initiative (OGSI), which was effectively an administration wish list paid for by proposals for savings and revenue increases. Congressional appropriators largely disregarded OGSI, and administration officials have not indicated that they plan to offer a similar package this year.

Three critical budget issues to watch in the FY 2017 budget request are: 1) the use of economic and efficiency assumptions; 2) tradeoffs between capacity and capability and the competition for resources; and 3) the use of OCO funding.

Economic and Efficiency Assumptions

In recent budgets, the Department has used anticipated savings from efficiency initiatives to help make ends meet. But over time this practice has led to a defense budget that is highly leveraged on anticipated savings. In some cases, such as the lower pay raises proposed for civilian and military personnel, these savings have come to fruition. In other cases, such as proposals to restructure the TRICARE healthcare program and retire legacy platforms, Congress has blocked the proposed changes. A risk in the FY 2017 request is that the defense budget will be even more highly leveraged on anticipated savings. For example, every budget must make certain economic assumptions about the future, such as the price of fuel, labor costs, and the general rate of inflation. These assumptions can and should be adjusted as economic conditions change, but the future is never certain. If economic assumptions are too aggressive, the budget allocated for some accounts will be insufficient to cover actual costs. When assumed savings do not materialize, funding must instead be taken from other areas, such as acquisitions, readiness, and force structure.

The request may also include changes to the military healthcare system and another round of base closures. Congress has indicated some willingness to consider healthcare reform in this budget cycle, and it may reconsider the changes proposed by the MCRMC last year, which called for creating a basic allowance for healthcare for military dependents and retirees. This allowance would allow dependents and retirees to buy private-sector health insurance plans, similar to the healthcare options available to federal civilian workers. The commission estimated that its proposal would save some \$6 billion annually once fully implemented. It is less likely that Congress would consider approving another round of base closures in this budget cycle, particularly because it is an election year. However, in the 2016 NDAA Congress included language allowing DoD to conduct "an inventory and assessment of infrastructure necessary to support the force structure." This would allow DoD to be more specific about how much excess infrastructure it has and potentially make a more compelling case for base closures in the future.

Capability, Capacity, and the Competition for Resources

A leaked memo from Defense Secretary Ash Carter to Navy Secretary Ray Mabus in December provided a glimpse into the ongoing debate within the military on the proper balance between capability and capacity. In the memo, the secretary of defense makes clear that he prioritizes new capabilities over capacity. Accordingly, he orders the Navy to cut funding for the smaller, less expensive, and less capable Littoral Combat Ship and restore funding for larger, more expensive, and more capable destroyers and submarine upgrades, among other changes. While the memo is specific to the Navy, a similar debate rages within each of the services. The Air Force, for example, must balance support of legacy aircraft used for close air support, intelligence, surveillance, and reconnaissance (ISR), and other missions currently in high demand with investments in high-end capabilities, such as the F-35 and LRS-B. In a cost-capped budget environment, investments in one area must come at the expense of investments in other areas.

The capability-versus-capacity debate is also part of a broader competition for resources among the services, defense agencies, and the National Nuclear Security Administration (NNSA). The Army has attempted to avoid this debate by insisting its capability is its capacity—and so far it has largely served as a bill payer for the other services. As shown in Figure 2, the FY 2016 budget request projected a shift in funding over the FYDP, with the Army and defense-wide funding growing the least and the Air Force growing the most.



Figure 2: Changes in the Services' Budgets in the President's FY 2016 Request

While not included in the DoD budget, funding for NNSA is part of the national defense budget caps under the BCA and thus competes directly with DoD for funding. NNSA funds the maintenance and upgrade of nuclear weapons, and in recent years the share of total national defense funding for NNSA has grown at the expense of funding for DoD.

Whether these budget trends continue, subside, or accelerate in the FY 2017 request is an important indicator of strategic priorities for the military.

Use of OCO

Another issue to watch in the FY 2017 request is the use of OCO funding. While the total level of OCO funding is part of the BBA 2015 budget deal, the types of funding included in the OCO request may provide insight into how this funding mechanism may be used in future years. The administration's criteria for what counts as OCO funding are established in OMB guidance. Not having the force of law, this puts the burden of enforcement on OMB to police what is allowed in the administration's OCO request. But once the request is submitted, OMB cannot prevent Congress from adding OCO funding for whatever purposes it deems fit. Both Congress and the administration have expanded the use of OCO funding since the BCA went into enforcement, moving more items that previously resided in the base budget into OCO.

In this final year of the administration, OMB may need to consider updating its OCO criteria and releasing a five-year plan for OCO funding as part of the budget. The Department's reliance on OCO funding has evolved significantly since the OMB criteria were last revised in 2010. OCO funding also played an important role in the FY 2016 budget debate, resulting in the president vetoing the NDAA over its implied use of \$38 billion in OCO funding for base budget activities. In the end, however, the president agreed to \$8 billion in additional OCO funding for base budget activities as part of the budget deal. OCO is also being used to support operations against ISIS and for the European Reassurance Initiative (ERI)—operations not envisioned in 2010.

While the use of supplemental war-related funding for these activities is understandable, submitting OCO funding requests one year at a time does not lend itself to long-term planning and is not particularly reassuring for U.S. partners and allies. Indeed, the lack of a five-year plan is one reason the administration cited for opposing congressional efforts to shift more of DoD's base budget into OCO in FY 2016. This limitation could be overcome by publishing a five-year OCO funding plan, much like the FYDP that accompanies the base budget request. While a five-year plan goes against the intent of the emergency supplemental funding process, it would better reflect the budgetary reality in which the Department finds itself.

Forces

What Happened in 2015

Most of the congressional action on force structure in 2015 followed the administration's lead in implementing existing plans for force changes. That is seen clearly in Table 1, where Congress made only one small change (in the active Air Force) to the administration's manpower plans.

FY 2016 End Strength*				
	Proposed	Authorized/Funded		
Army Active	475,000	475,000		
Army National Guard	342,000	342,000		
Army Reserve	198,000	198,000		
Navy Active	329,200	329,200		
Navy Reserve	57,400	57,400		
Air Force Active	317,000	320,715		
Air Force National Guard	105,500	105,500		
Air Force Reserve	69,200	69,200		
Marine Corps Active	184,000	184,000		
Marine Corps Reserve	38,900	38,900		
Total	2,116,200	2,119,915		

Table 1: FY 2016 End Strength

* End strength = the number of service members on September 30 of the fiscal year.

Source: FY 2016 National Defense Authorization Act.

Nevertheless, Congress did show that it had a mind of its own by making changes or giving direction in areas where it had particular interests or policy differences with the administration.

Army

The Army continues its planned drawdown. Active duty personnel have declined from a peak of 566,000 in FY 2010/2011, headed for a target of 450,000 in FY 2018, with the FY

2016 level of 475,000 as a way point. Similarly, the National Guard is on a path to 335,000 and the Army Reserve to 195,000.

The Army announced where it would cut units in order to get down to its target manpower of 450,000. Although the reduction affects 30 installations, six are hit hardest—Fort Benning (GA), Fort Hood (TX); Joint Base Elmendorf-Richardson (AK); Joint Base Lewis-McChord (WA); Schofield Barracks (HI); and Fort Bliss (TX). The cuts don't seem to be so deep that they make any installation particularly vulnerable to future closure. What is new is that, instead of deactivating whole brigades, the Army will reduce them to smaller "task forces," thus mitigating the effects at individual installations.

The Army continues its reorganization of Brigade Combat Teams (BCTs) begun in 2014. Under the reorganization the Army will add a third maneuver battalion to infantry and armored brigades, which had only two. (Stryker brigades already had three maneuver battalions.) This reorganization had the effect of making brigades larger and more flexible but reducing the number and increasing the perception of diminishing Army capabilities. In FY 2016 there are 30 active BCTs (-2 from 2015) and 27 National Guard BCTs (-1 from 2015).

Congress continued restrictions on the Aviation Restructure Initiative (ARI). Developed in 2013, the ARI would eliminate about 800 aircraft from the Army's planned force structure by divesting several types of older helicopters (OH-58 A/C/D Kiowa Warriors and TH-67 Creek), moving all National Guard attack helicopters to the active force, and replacing the Guard's attack helicopters with cargo helicopters from the active force. Most of the changes are going ahead. However, the National Guard objected to losing its attack helicopters and the combat role they represented. Congress responded in 2014 (FY 2015 NDAA) by restricting the transfers and creating the National Commission on the Future of the Army to resolve this and other active/reserve issues. This year Congress continued the restrictions, pending the commission's recommendations.

Navy

Concerned that the number of Navy ships was too low for the global missions being required, Congress continued its restrictions on retiring cruisers and LSDs. The Navy had planned to retire three LSDs entirely and to put 11 of the 22 CG-47-class cruisers in reduced operating status. The inactivated cruisers would be modernized in the future and brought back into active service in increments in the 2020s as other cruisers retired at the end of their service lives. Fearing that the ships would be stripped and never reactivated, Congress balked. The Navy reluctantly agreed on a plan whereby the LSDs and cruisers would stay on active duty and be modernized in groups. This plan, called "2/4/6," mandates that two ships go into modernization at a time, the work last no more than four years, and no more than six ships be in maintenance at any given time.

Continuing the theme of expanding the number of ships, Congress added three and a half ships—a Joint High Speed Vessel, an Afloat Forward Staging Base, a Fleet tug, and half a destroyer. (The Navy must pay for the other half in the FY 2017 budget.)

Announced in 2014, the Optimized Fleet Response Plan put ships on a regular cycle of training, maintenance and deployment. That was good for readiness and quality of life but had the effect of reducing time deployed. The FY 2016 budget expanded the plan's implementation.

The National Sea-Based Deterrence Fund, established in 2015 to help the Navy pay for the expensive Ohio-replacement submarines, continues its nebulous existence. Congressional authorizers want to do something to help Navy shipbuilding, which is facing a bow wave in the years ahead. However, appropriators, and the department, regard this as a gimmick and provided no funds. So the fund continues with its existing, and not very helpful, transfer authorities.

Air Force

The Air Force has been trying to retire older fighter attack aircraft such as the A-10 for several years. In the past, Congress has allowed some reductions to the F-15, F-16, B-1, B-52 and C-130 fleets. However, Congress continued language prohibiting the retirement of A-10 aircraft and directed that the Air Force retain 1,100 fighter attack aircraft (combat coded), which constrains its ability to retire other aircraft types, though the Air Force is allowed some wiggle room. Although often framed as an issue of efficiency versus parochial interests, there is also an underlying strategic question: in a time of fiscal constraints, what kinds of conflicts should the Air Force be preparing for? As discussed earlier, the Air Force must find a balance between maintaining the capacity it needs for low-end conflicts by keeping legacy aircraft in the inventory longer or developing new capabilities it may need for more sophisticated adversaries by continuing to invest in more advanced aircraft. This tension will continue until budget constraints ease.

An interesting and unusual provision is that Congress "allows the Air Force to conduct a demonstration of close air support capabilities." (The Senate bill originally required such a demonstration but the final bill made it discretionary.) This demonstration, which Congress describes in great detail, would examine close air support operations in a variety of environments and would be conducted by the Air Force in conjunction with both the Army and Defense Advanced Research Projects Agency (DARPA).

There are congressional prohibitions against retiring other aircraft as well: EC-130 (electronic warfare), JSTARS (ground surveillance), and AWACS aircraft (airspace control). The missions are narrow but important to joint operations. The restrictions reflect concerns about continuing the missions until replacement aircraft become available.

Congress continues to restrict reductions in the number of bombers—B-1s, B-2s, B-52s but the restrictions are not as stringent as those on legacy fighter attack aircraft. Aircraft can be retired if the secretary includes in the budget materials a notification of the proposed retirement. This likely reflects both the lack of a parochial interest—less Guard/reserve involvement in the bomber mission—and a belief that the inventory is sufficient, even with some reductions, until the new bomber, the LRS-B, is fielded in the 2020s.

Marine Corps

The Marine Corps, often defensive because of past attempts to restrict or eliminate it as an independent organization, got language into the authorization act reaffirming its role and value. It is cited as "the nation's leanest force" that "needs to be most ready when the nation is least ready." There is a sense of Congress reaffirming the statutory language established by the 82nd Congress, which specified the missions of the Marine Corps. Interestingly, alone among the services, the Marine Corps' active-duty structure is established in law and reiterated in this legislation: "not less than three combat divisions and three air wings and such other . . . services as may be organic."

DoD Civilians

Congress continued its efforts both to operate the government civilian workforce more like workforces in the private sector and, conversely, to make it more usable in conflicts. Thus, there were provisions to make job performance a primary criterion when implementing reductions in force. Previously, seniority, location, and job category were more important. The probationary period for new civilian hires was also extended to two years, allowing more time to weed out poor hires.

Congress also extended authorities for allowances and benefits of civilian personnel in combat zones. Before Congress provided these authorities, civilians sent to combat zones did not receive the many benefits that military personnel do. That made it harder to deploy civilians and to help with the political-military aspects of a conflict.

One piece of good news for federal employees was that they got a pay raise, which was equal to the military's 1.3 percent.

Contractors

Concerns about the size of headquarters prompted Congress to again make cuts in contractors who support management headquarters. Further, there was no relief from the long-standing restrictions against contracting out government work to the private sector

DoD-wide

Expressing its discontent with what it saw as excessive overhead, Congress required DoD to (1) find \$10 billion in savings from "headquarters, administrative and support activities" between 2015 and FY 2019; (2) cut 25 percent from management headquarters budgets, which would count toward this \$10 billion target; and (3) conduct a "comprehensive review" of management headquarters, including the combatant commands, to streamline and consolidate them. The GAO will verify the cuts. DoD already has efforts underway to find efficiencies and cut headquarters by 20 percent, so has a good start on making the reductions. Nevertheless, these reductions will be noticed in the Washington area where most of the headquarters are located.

As it has done in recent years, Congress added money for Guard and Reserve equipment, signaling both its strong support for Reserve Component missions and its support for the reservists in their home districts. The National Guard and Reserve Equipment Account received \$1 billion from OCO, as has been the custom for several years, even though the equipment is not specifically war-related.

Finally, in case there was a question in anyone's mind, Congress prohibited "the use of funds for gaming or entertainment that involved nude entertainment." One shudders to think what incident caused that provision to be added.

What to Watch in 2016

Table 2 shows the administration's manpower plan for FY 2017 as contained in the FY 2016 president's budget proposal; that is, when the president submitted his budget for FY 2016 back in February 2015, what the budget projected manpower to be in the following year, FY 2017. That provides a useful benchmark to see whether DoD's plans have changed since last year.

Service End Strength*				
	FY 2016 Funded	FY 2017 Planned	Change	
Army	475,000	460,000	-15,000	
Army National Guard	342,000	335,000	-7,000	
Army Reserve	198,000	195,000	-3,000	
Navy	329,200	326,500	-2,700	
Navy Reserve	57,400	~58,000	+600	
Air Force	320,715	312,900	-7,815	
Air National Guard	105,500	102,800	-2,700	
Air Force Reserve	69,200	67,300	-1,900	
Marine Corps	184,000	182,000	-2,000	
Marine Corps Reserve	38,900	38,000	-900	
Total	2,119,915	2,077,500	-42,415	

Table 2: Service End Strength, FY 2016 vs. FY 2017

* End strength = the number of service members on September 30 of the fiscal year. Source: Army, Navy (active duty), Marine Corps numbers from FY 2016 budget materials; Air Force and Navy Reserve numbers calculated from FY 2017 projected manpower totals.

It is unlikely that we will see many changes to these plans. They were set by major strategic reviews (the 2012 Comprehensive Review and the subsequent 2014 QDR) and will not likely be revised without another strategic review. The next strategic review, formerly called the Quadrennial Defense Review and now called the Strategic Defense Review, will take place next year under a new administration, so there is little incentive to make major changes this year.

The big issues will likely play out in Congress after the administration has submitted its budget. There is broad sentiment, both within Congress and in the broader national security community, that the challenges to the nation are increasing, including challenges from Russian aggression in Eastern Europe, Chinese assertiveness in the South China Sea, and IS attacks both in the Middle East and globally. As a result, many believe that U.S. forces are too small. Therefore, there will be efforts inside the Congress to expand the forces. This may be difficult, however, because that expansion requires more money, which can only be obtained through some government-wide budget agreement with the administration. Additional forces could be funded temporarily through OCO funding if Congress directs it or the administration revises its own guidance for what is allowed in the OCO request, as previously discussed.

Army

The biggest news for Army force structure in 2016 will likely be the findings and recommendations of the National Commission on the Future of the Army. The commission was created to resolve disagreements between the Army's active and reserve components over how to conduct the postwar drawdown. The commission reports out on January 28. Its recommendations will not arrive in time to be incorporated in the president's budget but will drive much of the congressional debate about the future of the Army. (A CSIS paper on the commission's findings and recommendations will appear on January 30.)

Navy

The big issue for Navy force structure leaked before the budget was released. Secretary Carter directed the Navy to cut 12 Littoral Combat Ships and instead procure enhancements to its existing ships such as advanced munitions and combat systems. The secretary characterized this as focusing on "posture" rather than "presence." Presumably, we'll see a version of that plan implemented in the budget, both for FY 2017 and in the out-year plans.

Navy had planned to fund 10 ships in FY 2017, including 3 LCSs. LCSs will presumably drop to 2. Battle force ship count was projected to increase from 282 in FY 2016 to 284 in FY 2017. The ship count is often used, rightly or wrongly, as a measure of Navy capability so any change will get a lot of attention.

Another Navy issue is whether it will again propose its cruiser inactivation plan. The Navy reluctantly went along with congressional direction in 2015 and would like to go back to its original plan, but prospects for getting Congress to change its mind are slim.

Air Force

Close air support will remain a contentious issue in 2016, with the Air Force confronting a decision on whether to conduct the close air support demonstration that Congress allows, and clearly recommends, but does not require. On the one hand, these kinds of field experiments can yield important insights into real-world operations. The Air Force has conducted many of them in the past. On the other hand, the Air Force may object to the premise, which is that its current plans for providing close air support may not be adequate. The Air Force will also likely to be sensitive to anything that endangers its F-35 program, which is just now beginning to show some stability.

Another hot button in 2016 will be the proposal to retire legacy aircraft like the A-10. Retiring these aircraft is central to the service's plan to shrink its force and put the savings into more modern aircraft. However, Congress has allowed some aircraft retirements but not others, especially protecting the A-10. News reports say that the Air Force has not given up on retiring the A-10 but will delay any such proposals beyond FY 2017.

Marine Corps

The secretary of the navy has directed that the Marine Corps produce a plan to gender integrate its basic training. That will be a big change to the Marine Corps' traditionally rigorous, and segregated, training. The budget may contain details.

DoD Civilians

A big question for civilians in budget proposals is the size of the pay raise. In 15 of the last 20 years, the civilian raise was the same as the military pay raise. However, there were three years (2011, 2012, 2013) when civilians received no pay raise at all while the military did get a pay raise. The placeholder for FY 2017 in the FY 2016 budget was 1.3 percent, the same as the military, but that is not a commitment.

The administration is unlikely to propose any major restructuring of the civil service. Those proposals have typically come from Congress, particularly the Republicans, in its efforts to make the civil service run more like the private-sector workforce.

Contractors

Over its seven years in office, the administration has implemented its policies about tighter oversight of operational contractors (i.e., those on the battlefield who provide food service, base operations, long-haul trucking, and some security) and prohibiting contracting out of government activities, so major proposals are unlikely in 2016.

Outside factors may push some changes. There is a growing recognition that operational contractors are a permanent element of DoD force structure. However, today's processes for management of operational contractors were put in place at a time when there were large and nearby military forces. Given the lighter military footprint of today's overseas

missions, current policies may call for oversight that exceeds what military forces can provide. New oversight structures may then be needed in situations where the U.S. presence is contractor heavy. The implementing policies and procedures are largely internal to DoD though, not requiring any annual budgetary or statutory changes.

The government process for contracting out activities, described in OMB Circular A-76, has been inactive since 2008. However, the wide interest in reducing infrastructure costs may engender some renewed interest, especially in the Congress. Because contracting out is so controversial, however, action in 2016 will likely be limited to hearings, policy proposals, and discussion. Any implementation will likely be deferred to the next Congress and a new administration.

Force of the Future, "Tranche 2"

In November, Secretary Carter announced the long-awaited "Force of the Future" initiative to modernize DoD's personnel practices. Although rolled out with great flourish, the actual elements—21 items such as workforce studies, improved specialty programs, a new analytics office, and expanded opportunities for career intermission— were useful but far less ambitious than what senior officials had been hinting. There were no changes, for example, to the military's "up-or-out" promotion system. Will the budget announce a "tranche 2" (as Carter termed it) of the Force of the Future?

| Acquisition

What Happened in 2015

The previous year served as a major inflection point for defense acquisition with three closely related trends registering changes in direction that are likely to prove lasting and significant. Providing the foundation for 2015 as an inflection point is the coming reversal in the trend for contract spending. Although the exact timing on when contract spending will be shown to have stopped declining is not yet certain, 2015 is likely to be recorded as the low point in the current contract spending drawdown. At a minimum, it became clear at the end of 2015 that the bottom was in sight. As a result of this change, the defense market in 2015 began to confront questions of how to handle, and ideally to capitalize on, growth rather than simply absorbing losses. Two other closely related trends entered new phases in 2015 as well. The ever-present push for acquisition reform shifted from a primary focus on efficiency and increased productivity toward a focus on innovation. And finally, 2015 began to see certain elements of industry move away from a primary focus on cost cutting, shedding lower growth units, share buybacks, and dividend payments, and move toward ways of capturing potential growth.

Decline in Contract Spending Coming to an End

The past year is likely to be the final year of a drawdown in contract spending, a drawdown caused by the end of the wars in Iraq and Afghanistan, defense budget caps, and sequestration and its aftermath (Figure 3). The drawdown resulted in a substantial decline in contracts to industry and a significant decline in contract spending's share of DoD funding.

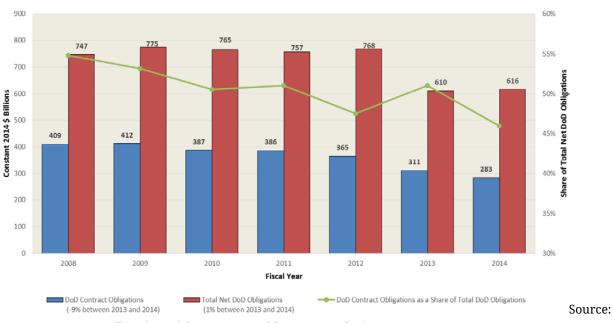


Figure 3: Defense Contract Obligations vs. Total Defense Net Obligations, 2008–2014

FPDS; DoD Comptroller Financial Summary Tables; CSIS analysis.

DoD contract obligations not only fell over 31 percent over this period, but they declined from 53 percent of DoD net obligations in 2009 to 46 percent in 2014, meaning that the share of the defense budget that supports the defense market declined by approximately 13 percent. This trend along with the contentious budgetary maneuvering between the Department of Defense and Congress in the period from 2012–2015 created significant uncertainty for acquisition. This situation is particularly problematic for acquisition because major acquisition programs require the ability to make long-range projections with at least reasonable fidelity. Uncertainty makes these challenging decisions all the more complicated.

The BBA 2015 signaled the end of this long down draft on contract spending, and while it provided only limited certainty in the form of top-line spending in fiscal years 2016 and 2017, it signaled to both the Department of Defense and to industry that the risk in investing in long-term acquisition efforts is substantially less now than at any time in the previous five years.

Five-Year Trough in the Pipeline for Major Weapon Systems

Also in 2015, we saw the culmination of important shifts within contract spending. Primary among these has been a shift toward emphasizing basic and applied research, while taking significant reductions in the pipeline of new development programs for major weapon systems. While sequestration in 2013 fostered major concerns that DoD would be forced to "eat its seed corn," in fact the early stages of research and development (R&D) declined much less slowly than contract spending overall. By contrast, later-stage R&D efforts declined far more dramatically.

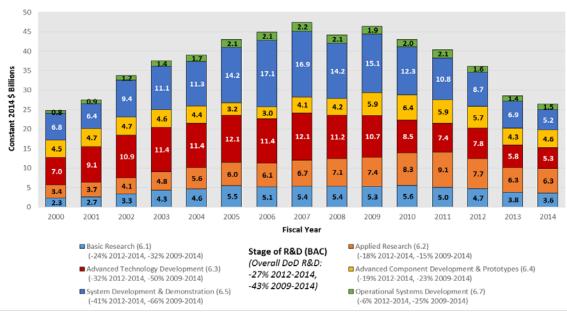


Figure 4: Defense R&D Contract Obligations, by Stage of R&D, 2000–2014

Source: FPDS; CSIS analysis.

The data show that the share of R&D contract obligations going to basic and applied research has risen from 27 percent in 2009 to 38 percent in 2014 (Figure 4). Compared to overall DoD R&D contract obligations, which declined by 43 percent between 2009 and 2014, contract obligations for basic and applied research combined declined by only 22 percent. While early-stage R&D has fallen back to just below 2004 levels in constant dollar terms, R&D contract obligations generally have fallen almost to 2000 levels.

By 2015, this dynamic means that a five-year trough has developed in the pipeline for weapon systems as many R&D programs related to Major Defense Acquisition Programs (MDAPs) either have been canceled or have matured out of R&D and into production. DoD has been largely unable to start and sustain new development programs, due either to budgetary pressures or to programmatic difficulties. This problem particularly affects the Army, which, in the wake of the failure of the Future Combat Systems, has been largely unable to start and sustain new major development programs.

Major Program Developments

Notably, 2015 saw major contracts awarded by each of the services for new programs; however, even these contract awards will have limited effects on the five-year trough. That's because with a few notable exceptions, most of these contracts either involve very little new technology development, move quickly to production, or ramp up development slowly. Major contracts were awarded for:

- Multiyear production of the C-130J Hercules
- Development of the Air Force's Long Range Strike Bomber (LRS-B),

- Production of the Army and Marine Corps Joint Light Tactical Vehicle (JLTV),
- Design and construction of the Navy's next nuclear carrier, the John F. Kennedy
- Development of the Marine Corps' Amphibious Combat Vehicle (ACV)
- Upgrade of the Marine Corps' existing Amphibious Assault Vehicles (AAV)
- Development of the Army's Joint Air-to-Ground Missile (JAGM), replacing the Hellfire
- Development of the Air Force's next rocket engine (replacing the Russian RD-180)
- Construction of the Missile Defense Agency's (MDA) Long Range Discrimination Radar in Alaska
- Development of the Army's countermeasures program for protecting helicopters
- Development of DoD's Electronic Health Records system
- Production and long-lead purchases for Lots 9-11 of F-35 and F135 engines
- Production of the Army's Rifleman handheld radio
- Support of the Air Force's ICBMs.

Services Contracts Surprisingly Resilient

The past year also revealed a somewhat surprising facet of contract spending: the continued resilience of the contract spend for services. Despite the spend for contract services having been explicitly targeted for reduction by Congress in successive National Defense Authorization Acts, and to a lesser extent by the Department itself in response to the BCA budget caps, spending on services increased its share. This is dramatically true for both the Army and Air Force. Navy contract spending has been reduced less overall during the drawdown, and the balance between products, services, and R&D has also shifted significantly less.

Acquisition Reform Focus Shifted

In 2015, DoD and Capitol Hill simultaneously made substantial efforts to reform the defense acquisition system. DoD's internal effort, Better Buying Power 3.0 (BBP), represented the latest iteration of the Better Buying Power Series originally launched in 2010 to improve the efficiency of the defense acquisition system. While largely continuing the initiatives of previous iterations, BBP 3.0's primary focus was not to find additional efficiencies in the system, but to preserve U.S. technological superiority into the future. As such, new initiatives under the BBP 3.0 guidance largely sought to maintain U.S. technological superiority by leveraging existing R&D investments made by

both DoD and defense industry firms, increasing the use of modular open-system approaches, and improving communication between industry and DoD.

On Capitol Hill, the 2016 NDAA made the most significant changes to the defense acquisition system since those made in the Federal Acquisition Streamlining Act of 1994. In fact, the provisions adopted in 2015 are simply the beginning of Congress's efforts to improve efficiency within DoD as both Armed Services Committee chairmen have indicated their intention to continue the effort in 2016. Key in the FY 2016 NDAA was the effort to consolidate authority, and therefore accountability, for acquisition in the military services. Along with this significant change, the FY 2016 NDAA also creates or expands several mechanisms intended to accelerate acquisition programs in the hopes of replicating acquisition successes such as the rapid fielding of Mine-Resistant Ambush Protected vehicles (MRAPs) and developing and fielding rapidly emerging capabilities. Also notable were a range of provisions adopted to streamline documentation and approvals, increase access to commercial and nondevelopmental technologies, and improve the acquisition workforce.

The Pursuit of Innovation and the Emergence of the Third Offset Strategy

Secretary of Defense Ash Carter embraced the pursuit of innovation early in 2015 when he went to Silicon Valley and announced that DoD would be establishing a new organization there, the Defense Innovation Unit Experimental (DIUX), to help forge new and strengthen existing relationships between the Department and innovative companies. A few months after this announcement, DoD established a new partnership with several Silicon Valley firms called the FlexTech Alliance, specifically to work on advanced electronics that are thin and flexible enough to wear or to apply to vehicles, aircraft, and ships. At about the same time, DIUX was stood up in Mountain View, California, under the leadership of George Duchak, with a mission to establish more effective partnerships with Silicon Valley firms.

Meanwhile, the push for more innovative technology did not go unremarked among more traditional defense suppliers. The year included an intense focus on the independent research and development (IRAD) expenses that DoD reimburses to its major contractors, and led to a direct, frank conversation between DoD and industry on whether technology investments for national security were sufficient. For its part, many of the traditional defense industry players noted the millions they invest and the thousands of engineers they employ to work on national security technologies with little to no commercial application. A compromise was eventually reached that required industry to give prior notice to, but not get prior approval from, DoD as to its plans for IRAD.

Concrete details on the Third Offset Strategy emerged in the latter part of 2015. Deputy Secretary of Defense Bob Work revealed the first set of insights about where Third Offset is heading at the 2015 Reagan Defense Forum. In remarks and a Q&A, he related that human-machine collaboration and combat teaming were the big ideas emerging from DoD's three simultaneous efforts over the past year to assess the capabilities required for potential future conflicts in the next 5, 10, and 20–30 years. This focus suggests that the unique military advantage in Third Offset will come from the integration of new technologies with the capabilities of the highly trained personnel of the U.S. military.

Industry Structure Responded to Spending Shifts

While the composition of the defense industrial base, measured by size of vendor, has been remarkably stable since the industry consolidation of the 1990s, there was a notable shift in the most recent data. The share of defense contract obligations to small vendors rose from 16 percent in 2013 to 19 percent in 2014, the highest share observed. As overall spending was falling, obligations to small businesses actually rose by 11 percent. Within the Army, the share of contract obligations to small vendors increased from 21 percent to 26 percent, the highest share for any of the three military services between 2000 and 2014, while the Navy and Air Force saw smaller increases.

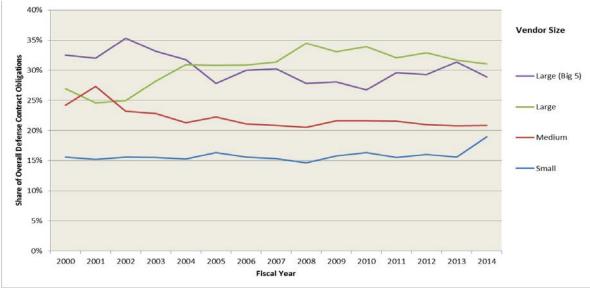


Figure 5: Share of Defense Contract Obligations by Size of Vendor, 2000–2014

Source: FPDS; CSIS analysis.

At the same time, the Big 5 defense vendors (Lockheed Martin, Boeing, Northrop Grumman, Raytheon, and General Dynamics) lost market share. Although these firms have consistently accounted for the largest share of defense R&D contract obligations, that share has declined from 63 percent in 2006 to 41 percent in 2014, the lowest share observed. This decline is largely attributable to many large development programs either being canceled or maturing into production in recent years, as well as the dearth of new major development programs being started and sustained over that same period as discussed above. Since development for major weapons systems is disproportionately performed by the Big 5, this interruption of the development pipeline in recent years has impacted them the hardest.

Defense Industry Consolidation

The past year witnessed significant merger and acquisition (M&A) activity among major defense vendors. The purchase of Excelis by Harris Corporation, the merger of ATK and Orbital Sciences Corporation, the merger of CSCGov and SRA International, and the sale of United Technologies' Sikorsky business unit to Lockheed Martin all affected the composition of major sectors of the defense-contracting portfolio. Though the current budget drawdown has not seen a wave of consolidation at the prime-contractor level comparable to the 1990s, this M&A activity (particularly the Lockheed Martin acquisition of Sikorsky) has prompted statements of concern from Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)) Frank Kendall as well as discussion of possible changes in antitrust review procedures.

This is in contrast to the preceding several years, where the trend had been one of spinoffs and divestitures, as major defense vendors attempted to refocus on their core business areas and get out of less promising/profitable business areas. The spinoff of Northrop Grumman's shipbuilding business into Huntington Ingalls Industries, the spinoff of ITT's defense business as Excelis, the spinoff of Computer Sciences Corporation's government services business, and the spinoff of Engility from L3 Communications have all changed the structure of the defense industrial base, particularly for services, but did not lower the number of competitors in their respective markets. Other major defense vendors, including Lockheed Martin and BAE Systems, are seriously exploring the possibility of selling or spinning off major business units. The shift from spinoffs and selloffs toward greater consolidation, particularly in services, may indicate that industry is preparing itself for the potential for some growth in certain areas in the years ahead.

What to Watch in 2016

Acquisition in 2016 will be characterized by a return to growth, albeit slow growth, in contract spending, a continued push in pursuit of innovation in acquisition reform and in the acquisition system generally, and shifts in industry driven by the combination of potential growth and the competition for innovation.

Slow Growth in Contract Spending

While the good news for 2016 is that the era of contract spending decline is over, there is little reason to think that contract spending will return to garnering a larger share of defense spending going forward. In all likelihood, the reduced share going to the defense market is the new normal. It is almost certain that the recovery of acquisition from the defense drawdown and sequestration and its aftermath will be slower and lower than the recovery of the defense budget overall. This is because the increased share of defense budgets going to cover personnel, readiness, and other internal DoD costs is unlikely to be significantly reversed in the foreseeable future absent unprecedented efforts by the Department of Defense and Congress to embrace heretofore unpopular reforms.

The increase in spending should be particularly helpful in 2016, but should continue beyond. The BBA was less helpful to defense acquisition in the second year of the agreement, FY 2017, than in the first. While investment spending in FY 2016 will be essentially at the level the president requested, a gap remains between what the budget deal allows in FY 2017 and what DoD had previously planned for FY 2017. This gap could be taken from planned increases in the investment accounts. Nevertheless, contract spending can be expected to show modest increases in FY 2017 and going forward.

The pipeline for major weapon systems should start to refill as spending for major development programs such as LRS-B and the Navy's Ohio Replacement Program ramp up. The potential notable exception here is the Army, where it is less clear that significant development programs will get off the ground in 2016 or in the near future. Any gaps in the major weapon systems pipeline could present an interesting opportunity for the next administration and for implementation of the Third Offset Strategy. In areas where the pipeline is not full of systems conceived before the Third Offset Strategy was generated, the opportunity exists to develop programs that leverage these new technologies from their inception. The opportunity may be particularly strong for the Army in this regard, and indeed, the Army has commissioned several studies from the Army Science Board to explore this potential.

Enabling Innovation

In 2016, we will see continued focus on innovation and on acquisition reform as an enabler for that innovation. A key factor in 2016 will be the implementation of the legislative changes adopted in the FY 2016 NDAA. Many of these changes were new authorities provided to DoD to waive requirements or establish new processes, but the actual structure of how this authority will be used is entirely at DoD's discretion. This presents opportunity for DoD to utilize these authorities to enable increased prototyping and accelerated fielding of innovative technologies.

As indicated recently by Assistant Secretary of the Navy for Research, Development and Acquisition Sean Stackley in testimony before the House Armed Services Committee, a critical enabler for success in inserting innovative technology into planned and fielded systems is having funding available that can be rapidly repurposed to take advantage of emerging technology and emerging threats. The traditional funding process can take two years or longer to allocate funding to capitalize on new technologies or address new threats. Additional legislation will likely be proposed, and funding requested, in 2016 to enable these efforts.

It's in 2016 that DoD is likely to open the aperture somewhat on its approach to a Third Offset Strategy both with industry partners and with foreign partners and allies. Sharing details on the Third Offset Strategy is an inherently challenging (due to classification and related sensitivities) but absolutely necessary effort.

Also, 2016 will likely prove that patience will be required to assess the success of these efforts. Changes in acquisition policy take years to begin to show effects, the complexity of the acquisition system makes it challenging to identify and implement policy changes

that deliver clear outcomes, and it is even harder to identify policy changes that significantly alter the performance of the acquisition system. There will inevitably be setbacks in acquisition in 2016 as well as successes.

Industry Response to Potential Growth

A key issue to watch is whether industry structure continues to shift toward small business utilization as it has in recent years, shifts back toward the big primes as it was in the 2000s, or stabilizes where it is in 2015. The significant increase in small business's share of spending in 2014 will likely be hard to follow. Because a further increase in small business's share of the market requires a decline in the share of larger firms, and because major programs tend to belong to larger firms, it seems unlikely that growth in small-business market share would extend beyond 20 percent. While the Big 5 companies may not quickly regain market share in 2016, it seems more likely that they will expand market share in succeeding years as F-35 continues to ramp up and large development efforts for major weapons systems such as the LRS-B and the Ohio-class replacement ramp up.

As more defense market participants begin to see the potential for growth, M&A activity may continue at roughly 2015 levels. Legislation related to M&A and industry consolidation is expected to be proposed by the administration in 2016. Congress is likely to be reluctant to act on concerns about industry consolidation. In part, this will be because jurisdiction over the legislation will lie with committees that are relatively comfortable with current antitrust processes and distrust any increase in government scrutiny of mergers. The committees that traditionally focus on national security are likely to be only ancillary players.

Lastly, a key trend to watch in 2016 will be whether the focus of those investing in the defense sector changes. In 2015 and the years immediately preceding it, defense stocks have primarily been of interest to income investors who've appreciated the value provided by share buybacks and large dividends. If growth-oriented investors begin to be drawn back into the defense sector as a result of the changing defense market, defense firms' investment strategies will likely change as a result. Investing in new research to gain competitive advantage may take on greater emphasis as a result.

| Conclusion

Three themes emerge from our analysis.

The first is that the administration is unlikely to propose major changes in its last year in office. Its policies are largely set, and its strategic reviews are long published. In 2016, the administration will likely continue implementing these plans and policies and stick to the two-year budget deal negotiated in 2015. The president may use his executive powers to change particular policy areas, including in national security, but the overall strategy, defense budget, structure of the forces, and major acquisition programs are unlikely to change.

The second theme is that the world will not stand down for a year while the United States waits to elect a new president. China, Russia, North Korea, Iran, and ISIS will continue to drive events to which the U.S. must respond. Congress seems willing to take up some issues now, like defense reform and the size of the armed forces, but some level of strategic agility may be necessary.

The third theme is that the recent budget agreement likely represents a turnaround for the defense budget. When 2015 began, the budget caps remained at the original level set by the BCA. The BBA 2015 budget deal raised the budget caps for FY 2016 and FY 2017, and there is reason to believe that this pattern of last-minute deal making could continue through the end of the budget caps in FY 2021. The prospective turnaround in acquisition budgets may also prompt changes in industry behavior.

Looming over all of these issues is the U.S. presidential election cycle. With primaries and caucuses about to begin, candidates who once were vague may be pressed into being more specific about their proposed national security policies and program, especially as the general election approaches. The issues outlined here provide key defense issues on which candidates should be prepared to take positions. By this time next year, a new presidential administration will be in place. The choices it makes will guide the direction of defense policy, budget, forces, and acquisition in 2017 and beyond.

About the Authors

Kathleen H. Hicks is a senior vice president, the Henry A. Kissinger chair, and director of the International Security Program at CSIS. Prior to joining CSIS, she served as principal deputy under secretary of defense for policy and deputy under secretary of defense for strategy, plans, and forces. She focuses on U.S. national security and foreign policy, geopolitical trends, and defense matters.

Mark Cancian is a senior adviser with the CSIS International Security Program. He joined CSIS in April 2015 from the Office of Management and Budget, where he spent more than seven years as chief of the Force Structure and Investment Division. Previously, he worked on force structure and acquisition issues in the Office of the Secretary of Defense and spent over three decades in the U.S. Marine Corps.

Todd Harrison is the director of defense budget analysis and a senior fellow in the International Security Program at CSIS. He joined CSIS from the Center for Strategic and Budgetary Assessments, where he was a senior fellow for defense budget studies. He previously worked at Booz Allen Hamilton and in the aerospace industry and served in the U.S. Air Force Reserves.

Andrew Hunter is a senior fellow in the International Security Program and director of the Defense-Industrial Initiatives Group at CSIS. Previously, he served as a senior executive in the Department of Defense as well as chief of staff to the Under Secretary of Defense for Acquisition, Technology, and Logistics. Additionally, he served as a professional staff member of the House Armed Services Committee and in a variety of staff positions in the House of Representatives.

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