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A Shift in the International Security Environment: Potential Implications for Defense—Issues for Congress

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Summary

World events have led some observers, starting in late 2013, to conclude that the international security environment has undergone a shift from the familiar post-Cold War era of the past 20 to 25 years, also sometimes known as the unipolar moment (with the United States as the unipolar power), to a new and different situation that features, among other things, renewed great power competition with China and Russia and challenges by these two countries and others to elements of the U.S.-led international order that has operated since World War II.

A previous change in the international security environment—the shift in the late 1980s and early 1990s from the Cold War to the post-Cold War era—prompted a broad reassessment by the Department of Defense (DOD) and Congress of defense funding levels, strategy, and missions that led to numerous changes in DOD plans and programs. Many of these changes were articulated in the 1993 Bottom-Up Review (BUR), a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.

The recent shift in the international security environment that some observers have identified—from the post-Cold War era to a new situation—has become a factor in the debate over the size of the U.S. defense budget in coming years, and over whether the Budget Control Act (BCA) of 2011 (S. 365/P.L. 112-25 of August 2, 2011) as amended should be further amended or repealed. Additional emerging implications of the shift include a new or renewed emphasis on the following in discussions of U.S. defense strategy, plans, and programs:

- grand strategy and geopolitics as part of the context for discussing U.S. defense budgets, plans, and programs;
- U.S. and NATO military capabilities in Europe;
- capabilities for countering so-called hybrid warfare and gray-zone tactics employed by countries such as Russia and China;
- capabilities for conducting so-called high-end warfare (i.e., large-scale, high-intensity, technologically sophisticated warfare) against countries such as China and Russia;
- maintaining U.S. technological superiority in conventional weapons;
- nuclear weapons and nuclear deterrence;
- speed of weapon system development and deployment as a measure of merit in defense acquisition policy; and
- minimizing reliance in U.S. military systems on components and materials from Russia and China.

The issue for Congress is whether to conduct a broad reassessment of U.S. defense analogous to the 1993 BUR, and more generally, how U.S. defense funding levels, strategy, plans, and programs should respond to changes in the international security environment. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements.

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Introduction

World events have led some observers, starting in late 2013, to conclude that the international security environment has undergone a shift from the familiar post-Cold War era of the past 20 to 25 years, also sometimes known as the unipolar moment (with the United States as the unipolar power), to a new and different situation that features, among other things, renewed great power competition with China and Russia and challenges by these two countries and others to elements of the U.S.-led international order that has operated since World War II.¹

A previous change in the international security environment—the shift in the late 1980s and early 1990s from the Cold War to the post-Cold War era—prompted a broad reassessment by the Department of Defense (DOD) and Congress of defense funding levels, strategy, and missions that led to numerous changes in DOD plans and programs. Many of these changes were articulated in the 1993 Bottom-Up Review (BUR), a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred. A new shift in the international security environment could similarly have a number of significant implications for U.S. defense plans and programs.

The issue for Congress is whether to conduct a broad reassessment of U.S. defense analogous to the 1993 BUR, and more generally, how U.S. defense funding levels, strategy, plans, and programs should respond to changes in the international security environment. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements.

This report focuses on defense-related issues and does not discuss potential implications of a shift in the international security environment for other policy areas, such as foreign policy and diplomacy, trade and finance, energy, and foreign assistance. Future CRS reports may address the potential implications of a shift in the international security environment for these other policy areas. A separate CRS report discusses the current debate over the future U.S. role in the world and the implications of this debate for both defense and other policy areas, particularly in light of the shift in the international security environment discussed in this report.²

¹ The term *international order* is generally used to refer to the collection of organizations, institutions, treaties, rules, and norms that are intended to organize, structure, and regulate international relations during a given historical period. Key features of the U.S.-led international order established at the end of World War II—also known as the open international order, liberal international order, or postwar international order, and often referred to as a rules-based order—are generally said to include the following: respect for the territorial integrity of countries, and the unacceptability of changing international borders by force or coercion; a preference for resolving disputes between countries peacefully, without the use or threat of use of force or coercion; strong international institutions; respect for international law and human rights; a preference for free markets and free trade; and the treatment of international waters, international air space, outer space, and (more recently) cyberspace as international commons.

² CRS Report R44891, *U.S. Role in the World: Background and Issues for Congress*, by Ronald O'Rourke and Michael Moodie.

Background

Previous International Security Environments

Cold War Era

The Cold War era, which is generally viewed as lasting from the late 1940s until the late 1980s/early 1990s, was generally viewed as a strongly bipolar situation featuring two superpowers—the United States and the Soviet Union—engaged in a political, ideological, and military competition for influence across multiple regions. The military component of that competition was often most acutely visible in Europe, where the U.S.-led NATO alliance and the Soviet-led Warsaw Pact alliance faced off against one another with large numbers of conventional forces and theater nuclear weapons, backed by longer-ranged strategic nuclear weapons.

Post-Cold War Era

The post-Cold War era, which is generally viewed as having begun in the early 1990s, tended toward a unipolar situation, with the United States as the world's sole superpower. The Warsaw Pact had disbanded, the Soviet Union had dissolved into Russia and the former Soviet republics, and neither Russia, China, nor any other country was viewed as posing a significant challenge to either the United States' status as the world's sole superpower or the U.S.-led international order. Compared to the Cold War, the post-Cold War era generally featured reduced levels of overt political, ideological, and military competition among major states. Following the terrorist attacks of September 11, 2001 (aka 9/11), the post-Cold War era was additionally characterized by a strong focus (at least from a U.S. perspective) on countering transnational terrorist organizations that had emerged as significant non-state actors, particularly Al Qaeda.

New International Security Environment

Some Observers Conclude a Shift Has Occurred

World events—including Chinese actions in the East and South China Seas since November 2013³ and Russia's seizure and annexation of Crimea in March 2014⁴—have led some observers, starting in late 2013, to conclude that the international security environment has undergone a shift from the familiar post-Cold War era of the last 20 to 25 years, also sometimes known as the unipolar moment (with the United States as the unipolar power), to a new and different situation that features, among other things, renewed great power competition with China and Russia and challenges by these two countries and others to elements of the U.S.-led international order that has operated since World War II.⁵

³ For discussions of these actions, see CRS Report R42784, *Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress*, by Ronald O'Rourke, and CRS Report R42930, *Maritime Territorial Disputes in East Asia: Issues for Congress*, by Ben Dolven, Mark E. Manyin, and Shirley A. Kan.

⁴ For discussion Russia's seizure and annexation of Crimea, see CRS Report RL33460, *Ukraine: Current Issues and U.S. Policy*, by Vincent L. Morelli.

⁵ For citations to articles by or about observers who have concluded that the international the international security environment has undergone a shift from the post-Cold War era to a new and different situation, see **Appendix A**.

In remarks on February 2, 2016, previewing DOD's proposed FY2017 budget (which was submitted to Congress a week later, on February 9), then-Secretary of Defense Ashton Carter stated

Let me describe the strategic thinking that drove our budget decisions. First of all, it's evident that America is still, today, the world's foremost leader, partner and underwriter of stability and security in every region across the globe—as we have been since the end of World War II.

And as we fulfill this enduring role, it's also evident that we're entering a new strategic era. Context is important here. A few years ago, following over a decade when we were focused, of necessity, on large scale counter insurgency operations in Iraq and Afghanistan, DOD began embarking on a major strategy shift to sustain our lead in full spectrum war fighting.

While the basic elements of our resulting defense strategy remain valid, it has also been abundantly clear to me over the last year that the world has not stood still since then. The emergence of ISIL and the resurgence of Russia being just a couple of the examples.

This is reflective of a broader strategic transition underway, not unlike those we've seen in history following the end of other major wars.

Today's security environment is dramatically different than the one we've been engaged in for the last 25 years and it requires new ways of thinking and new ways of acting.⁶

A November 22, 2015, press report states

The United States must come to grips with a new security environment as surging powers like Russia and China challenge American power, said [then-]Deputy Defense Secretary Robert Work.

"Great power competition has returned," he said Nov. 20 during a panel discussion at the Halifax International Security Forum.

"Russia is now a resurgent great power and I would argue that its long term prospects are unclear. China is a rising great power. Well, that requires us to start thinking more globally and more in terms of competition than we have in the past 25 years," Work said

During the 1990s and the early 2000s, the United States enjoyed a period of dominance that gave it an "enormous freedom of action," Work said. "I would argue that over that period of time ... our strategic muscles atrophied."

Work defined a great power as one that can engage with conventional forces and that has a nuclear deterrent that can survive a first strike.

Both Russia and China are challenging the order that has been prevalent since the end of World War II, he said. The United States will have to compete and cooperate with them.

"I believe what is happening in the United States is we're now trying to rebuild up our strategic muscles and to rethink in terms of global competitions and I believe the next 25 years will see a lot of give and take between the great powers," he said.⁷

⁶ Remarks by Secretary Carter on the Budget at the Economic Club of Washington, DC, February 2, 2016, accessed March 30, 2016, at <http://www.defense.gov/News/News-Transcripts/Transcript-View/Article/648901/remarks-by-secretary-carter-on-the-budget-at-the-economic-club-of-washington-dc>.

⁷ Yasmin Tadjdeh, "Work: 'Great Power Competition' Has Returned," *National Defense*, November 22, 2015. See also Andrew Clevenger, "Work: Future Includes Competition Between US, Great Powers," *Defense News*, November 20, 2015. Ellipsis as in original. Similarly, in a December 14, 2015, speech, then-Deputy Secretary Work stated

I firmly believe that historians will look back upon the last 25 years – I actually snap that 25 years (continued...)

Some Emerging Features of the New Environment

Observers who conclude that the international security environment has shifted to a new situation generally view the new period not as a bipolar situation (like the Cold War) or a unipolar situation (like the post-Cold War era), but as a situation characterized in part by renewed competition among three major world powers—the United States, China, and Russia. Other emerging characteristics of the new international security situation as viewed by these observers include the following:

- renewed ideological competition, this time against 21st-century forms of authoritarianism in Russia, China, and other countries;⁸
- the promotion in China and Russia through their state-controlled media of nationalistic historical narratives emphasizing assertions of prior humiliation or victimization by Western powers, and the use of those narratives to support revanchist or irredentist foreign policy aims;
- the use by Russia and China of new forms of aggressive or assertive military and paramilitary operations—called hybrid warfare or ambiguous warfare, among

(...continued)

between May 12, 1989, when President Bush said containment would no longer be the lens through which the defense program was built. That was the end of the Cold War for all intents and purposes for defense planning, even though it took a couple of years for the Soviet Union to finally implode.

And I'd look in December 2013, that's when China started to do its land reclamation project in the South China Sea and in March 2014, Russia illegally annexed Crimea and started to send its troops and support separatists in east Ukraine.

So that 25-year period, I believe, is remarkable and is unlike any other period in the post-Westphalian era, because during that period, the United States reigned supreme as the only world's great power and the sole military superpower. It gave us enormous freedom of action.

But the circumstance is now changing. The unipolar world is starting to fade and we enter a more multipolar world, in which U.S. global leadership is likely to be increasingly challenged.

So among the most significant challenges in this 25 years, and one in my view that promises to be the most stressing one, is the reemergence of great power competition.

Now, for the purpose of this discussion and for the purposes of building a defense program which is focused on potential adversary capabilities, not necessarily intentions, I'll borrow John Mearsheimer's definition of a great power: A state having sufficient military assets to put up a serious fight in an all-out conventional war against the dominant power—that would be the United States—and possessing a nuclear deterrent that could survive a first strike against it.

And by that narrow definition, getting away from what are their economic peers or what is the attractiveness of their soft power and their stickiness, from a defense program perspective, if Russia and China are not yet great powers, they're well on their ways to being one.

(Deputy Secretary of Defense Speech, CNAS Defense Forum, As Delivered by Deputy Secretary of Defense Bob Work, JW Marriott, Washington, D.C., December 14, 2015, accessed December 21, 2015, at <http://www.defense.gov/News/Speeches/Speech-View/Article/634214/cnas-defense-forum>.)

⁸ See, for example, Gideon Rachman, "The West Has Lost Intellectual Self-Confidence," *Financial Times*, January 5, 2015; Garry Kasparov, "The Global War on Modernity," *Wall Street Journal*, January 20, 2015; Anna Borshchevskaya, "Moral Clarity Is Needed In Countering Anti-Western Propaganda," *Forbes*, March 14, 2015; Ellen Bork, "Democracy in Retreat," *World Affairs Journal*, May 11, 2015; Christopher Walker, "The New Containment: Undermining Democracy," *World Affairs Journal*, May/June 2015; Michael J. Boyle, "The Coming Illiberal Order," *Survival*, Vol. 58, April-May 2016: 35-66; Larry Diamond, "Democracy in Decline," *Foreign Affairs*, June 13, 2016; Sohrab Ahmari, "Illiberalism: The Worldwide Crisis," *Commentary*, June 16, 2016; Larry Diamond, "Russia and the Threat to Liberal Democracy," *The Atlantic*, December 9, 2016; Alexander Cooley, "How the Democratic Tide Rolled Back," *Real Clear World*, January 17, 2017.

other terms, in the case of Russia's actions, and called salami-slicing tactics or gray-zone warfare, among other terms, in the case of China's actions—to gain greater degrees of control of areas on their peripheries;

- challenges by Russia and China to key elements of the U.S.-led international order, including the principle that force or threat of force should not be used as a routine or first-resort measure for settling disputes between countries, and the principle of freedom of the seas (i.e., that the world's oceans are to be treated as an international commons); and
- additional features alongside those listed above, including
 - continued regional security challenges from countries such as Iran and North Korea;
 - a continuation of the post-Cold War era's focus (at least from a U.S. perspective) on countering transnational terrorist organizations that have emerged as significant non-state actors (now including the Islamic State organization, among other groups); and
 - weak or failed states, and resulting weakly governed or ungoverned areas that can contribute to the emergence of (or serve as base areas or sanctuaries for) non-state actors, and become potential locations of intervention by stronger states, including major powers.

In his February 2, 2016, remarks previewing DOD's proposed FY2017 budget, then-Secretary Carter stated that for the United States, the international security environment poses five challenges—Russia, China, North Korea, Iran, and transnational terrorism:

I've talked with President Obama about this a great deal over the last year and as a result, we have five, in our minds, evolving challenges that have driven the focus of the Defense Department's planning and budgeting this year.

Two of these challenges reflect a return to great power of competition. First is in Europe, where we're taking a strong and balanced approach to deter Russian aggression, and we haven't had to worry about this for 25 years. While I wish it were otherwise, now we do. Second is in the Asia-Pacific, where China is rising and where we're continuing and will continue our rebalance, so-called, to maintain the stability in the region that we have underwritten for 70 years and that's allowed so many nations to rise and prosper and win. That's been our presence.

Third challenge is North Korea, a hardy perennial, a threat to both us and to our allies, and that's why our forces on the Korean Peninsula remain ready every single day, today, tomorrow, to, as we call it, fight tonight.

Iran is the fourth challenge, because while the nuclear deal was a good deal and doesn't limit us in the Defense Department in any way, none of its provisions affect us or limit us, we still have to counter Iran's malign influence against our friends and allies in the region, especially Israel.

And challenge number five is our ongoing fight to defeat terrorism and especially ISIL, most immediately in its parent tumor in Iraq and Syria, and also, where it is metastasizing in Afghanistan, Africa and elsewhere. All the time, we protect—all the while, we're protecting our homeland and our people....

DOD must and will address all five of those challenges as part of its mission to defend our people and defend our country.⁹

The June 2015 National Military Strategy released by DOD states

Since the last National Military Strategy was published in 2011, global disorder has significantly increased while some of our comparative military advantage has begun to erode. We now face multiple, simultaneous security challenges from traditional state actors and transregional networks of sub-state groups—all taking advantage of rapid technological change. Future conflicts will come more rapidly, last longer, and take place on a much more technically challenging battlefield. They will have increasing implications to the U.S. homeland....

Complexity and rapid change characterize today's strategic environment, driven by globalization, the diffusion of technology, and demographic shifts....

Despite these changes, states remain the international system's dominant actors. They are preeminent in their capability to harness power, focus human endeavors, and provide security. Most states today—led by the United States, its allies, and partners—support the established institutions and processes dedicated to preventing conflict, respecting sovereignty, and furthering human rights. Some states, however, are attempting to revise key aspects of the international order and are acting in a manner that threatens our national security interests.

While Russia has contributed in select security areas, such as counternarcotics and counterterrorism, it also has repeatedly demonstrated that it does not respect the sovereignty of its neighbors and it is willing to use force to achieve its goals. Russia's military actions are undermining regional security directly and through proxy forces. These actions violate numerous agreements that Russia has signed in which it committed to act in accordance with international norms, including the UN Charter, Helsinki Accords, Russia-NATO Founding Act, Budapest Memorandum, and the Intermediate-Range Nuclear Forces Treaty.

Iran also poses strategic challenges to the international community. It is pursuing nuclear and missile delivery technologies despite repeated United Nations Security Council resolutions demanding that it cease such efforts. It is a state-sponsor of terrorism that has undermined stability in many nations, including Israel, Lebanon, Iraq, Syria, and Yemen. Iran's actions have destabilized the region and brought misery to countless people while denying the Iranian people the prospect of a prosperous future.

North Korea's pursuit of nuclear weapons and ballistic missile technologies also contradicts repeated demands by the international community to cease such efforts. These capabilities directly threaten its neighbors, especially the Republic of Korea and Japan. In time, they will threaten the U.S. homeland as well. North Korea also has conducted cyber attacks, including causing major damage to a U.S. corporation.

We support China's rise and encourage it to become a partner for greater international security. However, China's actions are adding tension to the Asia-Pacific region. For example, its claims to nearly the entire South China Sea are inconsistent with international law. The international community continues to call on China to settle such issues cooperatively and without coercion. China has responded with aggressive land

⁹ Remarks by Secretary Carter on the Budget at the Economic Club of Washington, D.C., Secretary of Defense Ash Carter, February 2, 2016, accessed March 30, 2016, at <http://www.defense.gov/News/News-Transcripts/Transcript-View/Article/648901/remarks-by-secretary-carter-on-the-budget-at-the-economic-club-of-washington-dc>. See also, for example, Megan Eckstein, "CNO: Navy Needs More Agile Procurement To Keep Pace With '4-Plus-1' Threat Set," *USNI News*, December 7, 2015. The "4+1" refers to four countries (Russia, China, North Korea, and Iran) plus transnational terrorism.

reclamation efforts that will allow it to position military forces astride vital international sea lanes.

None of these nations are believed to be seeking direct military conflict with the United States or our allies. Nonetheless, they each pose serious security concerns which the international community is working to collectively address by way of common policies, shared messages, and coordinated action....

For the past decade, our military campaigns primarily have consisted of operations against violent extremist networks. But today, and into the foreseeable future, we must pay greater attention to challenges posed by state actors. They increasingly have the capability to contest regional freedom of movement and threaten our homeland. Of particular concern are the proliferation of ballistic missiles, precision strike technologies, unmanned systems, space and cyber capabilities, and weapons of mass destruction (WMD)—technologies designed to counter U.S. military advantages and curtail access to the global commons....

Today, the probability of U.S. involvement in interstate war with a major power is assessed to be low but growing. Should one occur, however, the consequences would be immense. VEOs [violent extremist organizations], in contrast, pose an immediate threat to transregional security by coupling readily available technologies with extremist ideologies. Overlapping state and non-state violence, there exists an area of conflict where actors blend techniques, capabilities, and resources to achieve their objectives. Such “hybrid” conflicts may consist of military forces assuming a non-state identity, as Russia did in the Crimea, or involve a VEO fielding rudimentary combined arms capabilities, as ISIL has demonstrated in Iraq and Syria. Hybrid conflicts also may be comprised of state and non-state actors working together toward shared objectives, employing a wide range of weapons such as we have witnessed in eastern Ukraine. Hybrid conflicts serve to increase ambiguity, complicate decision-making, and slow the coordination of effective responses. Due to these advantages to the aggressor, it is likely that this form of conflict will persist well into the future.¹⁰

Markers of the Shift to the New Environment

For observers who conclude that the international security environment has shifted to a new situation, the sharpest single marker of the shift arguably was Russia’s seizure and annexation of Crimea in March 2014, which represented the first forcible seizure and annexation of one country’s territory by another country in Europe since World War II. Other markers of the shift—such as Russia’s actions in eastern Ukraine and elsewhere in Eastern Europe since March 2014, China’s economic growth and military modernization over the last several years, and China’s actions in the East and South China Seas over the last several years—have been more gradual and cumulative.

Some observers trace the beginnings of the argued shift in the international security environment back to 2008. In that year, Russia invaded and occupied part of the former Soviet republic of Georgia without provoking a strong cost-imposing response from the United States and its allies. Also in that year, the financial crisis and resulting deep recessions in the United States and Europe, combined with China’s ability to weather that crisis and its successful staging of the 2008 Summer Olympics, are seen by observers as having contributed to a perception in China of the United States as a declining power, and to a Chinese sense of self-confidence or triumphalism.¹¹

¹⁰ Department of Defense, *The National Military Strategy of the United States of America 2015*, *The United States Military’s Contribution To National Security*, June 2015, pp. i, 1-4.

¹¹ See, for example, Howard W. French, “China’s Dangerous Game,” *The Atlantic*, October 13, 2014.

China's assertive actions in the East and South China Seas can be viewed as having begun (or accelerated) soon thereafter. Other observers trace the roots of the end of the post-Cold War era further, to years prior to 2008.¹²

Comparisons of the New Environment to Earlier Periods

Each international security environment features a unique combination of major actors, dimensions of competition and cooperation among those actors, and military and other technologies available to them. A new international security environment can have some similarities to previous ones, but it will also have differences, including, potentially, one or more features not present in any previous international security environment. In the early years of a new international security environment, some of its features may be unclear, in dispute, or not yet apparent. In attempting to understand a new international security environment, comparisons to earlier ones are potentially helpful in identifying avenues of investigation. If applied too rigidly, however, such comparisons can act as intellectual straightjackets, making it more difficult to achieve a full understanding of a new international security environment's characteristic features, particularly those that differentiate it from previous ones.

Some observers have stated that the world is entering a new Cold War (or Cold War II or 2.0). That term may have utility in referring specifically to U.S.-Russian relations, because the new international security environment that some observers have identified features competition and tension with Russia. Considered more broadly, however, the Cold War was a bipolar situation, while the new environment appears to be a situation that also includes China as a major competing power. The bipolarity of the Cold War, moreover, was reinforced by the opposing NATO and Warsaw Pact alliances, whereas in contrast, Russia today does not lead an equivalent of the Warsaw Pact. And while terrorists were a concern during the Cold War, the U.S. focus on countering transnational terrorist groups was not nearly as significant during the Cold War as it has been since 9/11.

Other observers, viewing the emerging situation, have drawn comparisons to the multipolar situation that existed in the 19th century and the years prior to World War I. Still others, observing the promotion in China and Russia of nationalistic historical narratives supporting revanchist or irredentist foreign policy aims, have drawn comparisons to the 1930s. Those two earlier situations, however, did not feature a strong focus on countering globally significant transnational terrorist groups, and the military and other technologies available then differ vastly from those available today. The new situation that some observers have identified may be similar in some respects to previous situations, but it also differs from previous situations in certain respects, and might be best understood by direct observation and identification of its key features.

Naming the New Environment

Observers who conclude that the international security environment has shifted to a new situation do not yet appear to have reached a consensus on what term to use to refer to the new situation. As noted above, some observers have used terms such as a new Cold War (or Cold War II or 2.0). Other observers have referred to the new situation as an era of renewed great power competition, a competitive world order, a multipolar era, and a disorderly world (or era).

¹² See, for example, Walter Russell Mead, "Who's to Blame for a World in Flames?" *The American Interest*, October 6, 2014.

Congressional Participation in Reassessment of U.S. Defense During Previous Shift

A previous change in the international security environment—the shift in the late 1980s and early 1990s from the Cold War to the post-Cold War era—prompted a broad reassessment by the Department of Defense (DOD) and Congress of defense funding levels, strategy, and missions that led to numerous changes in DOD plans and programs. Many of these changes were articulated in the 1993 Bottom-Up Review (BUR),¹³ a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.¹⁴ In general, the BUR reshaped the U.S. military into a force that was smaller than the Cold War U.S. military, and oriented toward a planning scenario being able to conduct two major regional contingencies (MRCs) rather than the Cold War planning scenario of a NATO-Warsaw Pact conflict.¹⁵

Through both committee activities and the efforts of individual Members, Congress played a significant role in the reassessment of defense funding levels, strategy, plans, and programs that was prompted by the end of the Cold War. In terms of committee activities, the question of how to change U.S. defense plans and programs in response to the end of the Cold War was, for example, a major focus for the House and Senate Armed Services Committees in holding hearings and marking up annual national defense authorization acts in the early 1990s.¹⁶

¹³ See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

¹⁴ Secretary of Defense Les Aspin's introduction to DOD's report on the 1993 BUR states:

In March 1993, I initiated a comprehensive review of the nation's defense strategy, force structure, modernization, infrastructure, and foundations. I felt that a department-wide review needed to be conducted "from the bottom up" because of the dramatic changes that have occurred in the world as a result of the end of the Cold War and the dissolution of the Soviet Union. These changes in the international security environment have fundamentally altered America's security needs. Thus, the underlying premise of the Bottom-Up Review was that we needed to reassess all of our defense concepts, plans, and programs from the ground up.

(Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, p. iii.)

¹⁵ For additional discussion of the results of the BUR, see CRS Report 93-839 F, *Defense Department Bottom-Up Review: Results and Issues*, October 6, 1993, 6 pp., by Edward F. Bruner, and CRS Report 93-627 F, *Defense Department Bottom-Up Review: The Process*, July 2, 1993, 9 pp., by Cedric W. Tarr, Jr. (both nondistributable and available from the author of this report).

¹⁶ See, for example:

the House Armed Services Committee's report on the FY1991 National Defense Authorization Act (H.Rept. 101-665 of August 3, 1990, on H.R. 4739), pp. 7-14;

the Senate Armed Services Committee's report on the FY1991 National Defense Authorization Act (S.Rept. 101-384 of July 20 (legislative day, July 10), 1990, on S. 2884), pp. 8-36;

the House Armed Services Committee's report on the FY1992 and FY1993 National Defense Authorization Act (H.Rept. 102-60 of May 13, 1991, on H.R. 2100), pp. 8 and 13;

the Senate Armed Services Committee's report on the FY1992 and FY1993 National Defense Authorization Act (S.Rept. 102-113 of July 19 (legislative day, July 8), 1991, on S. 1507), pp. 8-9;

the House Armed Services Committee's report on the FY1993 National Defense Authorization Act (H.Rept. 102-527 of May 19, 1992, on H.R. 5006), pp. 8-10, 14-15, and 22;

the Senate Armed Services Committee's report on the FY1993 National Defense Authorization Act (S.Rept. 102-352 of July 31 (legislative day, July 23), 1992, on S. 3114), pp. 7-12;

the House Armed Services Committee's report on the FY1994 National Defense Authorization Act

(continued...)

In terms of efforts by individual Members, some Members put forth their own proposals for how much to reduce defense spending from the levels of the final years of the Cold War,¹⁷ while others put forth detailed proposals for future U.S. defense strategy, plans, programs, and spending. Senator John McCain, for example, issued a detailed, 32-page policy paper in November 1991 presenting his proposals for defense spending, missions, force structure, and weapon acquisition programs.¹⁸

Perhaps the most extensive individual effort by a Member to participate in the reassessment of U.S. defense following the end of the Cold War was the one carried out by Representative Les Aspin, the chairman of the House Armed Services Committee. In early 1992, Aspin, supported by members of the committee's staff, devised a force-sizing construct and potential force levels and associated defense spending levels U.S. defense for the new post-Cold War era. A principal aim of Aspin's effort was to create an alternative to the "Base Force" plan for U.S. defense in the post-Cold War era that had been developed by the George H. W. Bush Administration.¹⁹ Aspin's effort included a series of policy papers in January and February 1992²⁰ that were augmented by press releases and speeches. Aspin's policy paper of February 25, 1992, served as the basis for his testimony that same day at a hearing on future defense spending before the House Budget Committee. Although DOD and some other observers (including some Members of Congress) criticized Aspin's analysis and proposals on various grounds,²¹ the effort arguably proved

(...continued)

(H.Rept. 103-200 of July 30, 1993, on H.R. 2401), pp. 8-9 and 18-19;

the House Armed Services Committee's report on the FY1995 National Defense Authorization Act (H.Rept. 103-499 of May 10, 1994, on H.R. 4301), pp. 7 and 9;

the Senate Armed Services Committee's report on the FY1995 National Defense Authorization Act (S.Rept. 103-282 of June 14 (legislative day, June 7), 1994, on S. 2182), pp. 8-9; and

the House Armed Services Committee's report on the FY1996 National Defense Authorization Act (H.Rept. 104-131 of June 1, 1995, on H.R. 1530), pp. 6-7 and 11-12.

¹⁷ See, for example, Clifford Krauss, "New Proposal for Military Cut," *New York Times*, January 7, 1992: A11 (discussing a proposal by Senator Phil Gramm for reducing defense spending by a certain amount); "Sen. Mitchell Proposes \$100 Billion Cut in Defense," *Aerospace Daily*, January 17, 1992: 87; John Lancaster, "Nunn Proposes 5-Year Defense Cut of \$85 Billion," *Washington Post*, March 25, 1992: A4.

¹⁸ Senator John McCain, *Matching A Peace Dividend With National Security, A New Strategy For The 1990s*, November 1991, 32 pp.

¹⁹ See, for example, "Arms Panel Chief Challenges Ending Use of Threat Analysis," *Aviation Week & Space Technology*, January 13, 1992: 28; Patrick E. Tyler, "Top Congressman Seeks Deeper Cuts in Military Budget," *New York Times*, February 23, 1991: 1; Barton Gellman, "Debate on Military's Future Crystallizes Around 'Enemies List,'" *Washington Post*, February 26, 1992: A20; Pat Towell, "Planning the Nation's Defense," *CQ*, February 29, 1992: 479. For more on the Base Force, see CRS Report 92-493 S, *National Military Strategy, The DoD Base Force, and U.S. Unified Command Plan*, June 11, 1992, 68 pp., by John M. Collins (nondistributable and available from the author of this report).

²⁰ These policy papers included the following:

- National Security in the 1990s: Defining a New Basis for U.S. Military Forces, Rep. Les Aspin, Chairman, House Armed Services Committee, Before the Atlantic Council of the United States, January 6, 1992, 23 pp.;
- An Approach to Sizing American Conventional Forces For the Post-Soviet Era, Rep. Les Aspin, Chairman, House Armed Services Committee, January 24, 1991, 20 pp.;
- Tomorrow's Defense From Today's Industrial Base: Finding the Right Resource Strategy For A New Era, by Rep. Les Aspin, Chairman, House Armed Services Committee, Before the American Defense Preparedness Association, February 12, 1992, 20 pp.; and
- An Approach to Sizing American Conventional Forces For the Post-Soviet Era, Four Illustrative Options, Rep. Les Aspin, Chairman, House Armed Services Committee, February 25, 1992, 27 pp.

²¹ See, for example, "Aspin Defense Budget Plans Rebuffed By Committee," *Defense Daily*, February 24, 1992: 289; (continued...)

consequential the following year, when Aspin became Secretary of Defense in the new Clinton Administration. Aspin's 1992 effort helped inform his participation in DOD's 1993 BUR. The 1993 BUR in turn created a precedent for the subsequent Quadrennial Defense Review (QDR) process (renamed Defense Strategy Review in 2015) that remained in place until 2016.

Some Emerging Implications for Defense

Defense Funding Levels

The shift in the international security environment that some observers have identified—from the post-Cold War era to a new situation—has become a factor in the debate over the size of the U.S. defense budget in coming years, and over whether the Budget Control Act (BCA) of 2011 (S. 365/P.L. 112-25 of August 2, 2011) as amended should be further amended or repealed. The nature of the U.S. response to a shift in the international security environment could lead to defense spending levels that are higher than, lower than, or about the same as those in the BCA.

Renewed Emphasis on Grand Strategy and Geopolitics

Discussion of the shift in the international security environment that some observers have identified has led to a renewed emphasis on grand strategy²² and geopolitics²³ as part of the context for discussing U.S. defense budgets, plans, and programs.²⁴ A November 2, 2015, press report, for example, stated:

The resurgence of Russia and the continued rise of China have created a new period of great-power rivalry—and a corresponding need for a solid grand strategy, [then-]U.S. Deputy Defense Secretary Robert Work said Monday at the Defense One Summit in Washington, D.C.

“The era of everything is the era of grand strategy,” Work said, suggesting that the United States must carefully marshal and deploy its great yet limited resources.²⁵

From a U.S. perspective on grand strategy and geopolitics, it can be noted that most of the world's people, resources, and economic activity are located not in the Western Hemisphere, but in the other hemisphere, particularly Eurasia. In response to this basic feature of world geography, U.S. policymakers for the last several decades have chosen to pursue, as a key element of U.S. national strategy, a goal of preventing the emergence of a regional hegemon in one part of Eurasia

(...continued)

“Pentagon Spurns Aspin's Budget Cuts as ‘Political,’” *Washington Post*, February 28, 1992: A14.

²² The term *grand strategy* generally refers to a country's overall strategy for securing its interests and making its way in the world, using all the national tools at its disposal, including diplomatic, information, military, and economic tools (sometimes abbreviated in U.S. government parlance as DIME). For the United States, grand strategy can be viewed as strategy at a global or interregional level, as opposed to U.S. strategies for individual regions, countries, or issues.

²³ The term *geopolitics* is often used as a synonym for international politics or strategy relating to international politics. More specifically, it refers to the influence of basic geographic features on international relations, and to the analysis of international relations from a perspective that places a strong emphasis on the influence of such geographic features. Basic geographic features involved in geopolitical analysis include things such as the relative sizes and locations of countries or land masses; the locations of key resources such as oil or water; geographic barriers such as oceans, deserts, and mountain ranges; and key transportation links such as roads, railways, and waterways.

²⁴ For citations to articles discussing grand strategy and geopolitics for the United States in the new international security environment, see **Appendix B**.

²⁵ Bradley Peniston, “Work: ‘The Age of Everything Is the Era of Grand Strategy,’” *Defense One*, November 2, 2015.

or another, on the grounds that such a hegemon could represent a concentration of power strong enough to threaten core U.S. interests by, for example, denying the United States access to some of the other hemisphere's resources and economic activity. Although U.S. policymakers have not often stated this key national strategic goal explicitly in public, U.S. military (and diplomatic) operations in recent decades—both wartime operations and day-to-day operations—can be viewed as having been carried out in no small part in support of this key goal.

The U.S. goal of preventing the emergence of a regional hegemon in one part of Eurasia or another has been a major reason why the U.S. military is structured with force elements that enable it to cross broad expanses of ocean and air space and then conduct sustained, large-scale military operations upon arrival. Force elements associated with this goal include, among other things, an Air Force with significant numbers of long-range bombers, long-range surveillance aircraft, long-range airlift aircraft, and aerial refueling tankers, and a Navy with significant numbers of aircraft carriers, nuclear-powered attack submarines, large surface combatants, large amphibious ships, and underway replenishment ships.²⁶

U.S. and NATO Military Capabilities in Europe

Russia's seizure and annexation of Ukraine and Russia's subsequent actions in eastern Ukraine and elsewhere in Eastern Europe have led to a renewed focus among policymakers on the adequacy of U.S. and NATO military capabilities in Europe. Some observers have expressed particular concern about the ability of the United States and its NATO allies to defend the Baltic members of NATO in the event of a fast-paced Russian military move into those countries.

DOD in recent years has announced a series of specific actions to bolster military deterrence in Europe, including an annually funded package of measures originally called the European Reassurance Initiative and now called the European Deterrence Initiative. As part of its proposed FY2018 defense budget, the Trump Administration is requesting \$4.8 billion for this initiative for FY2018. NATO leaders since 2014 announced a series of initiatives for refocusing NATO away from "out of area" (i.e., beyond-Europe) operations, and back toward a focus on territorial defense and deterrence in Europe itself.²⁷

The increased attention that U.S. policymakers are paying to the security situation in Europe, combined with U.S. military operations in the Middle East against the Islamic State organization and similar groups, has intensified questions among some observers about whether the United States will be able to fully implement the military component of the U.S. strategic rebalancing to the Asia-Pacific region that was formally announced in the January 2012 defense strategic guidance document.

Countering Hybrid Warfare and Gray-Zone Tactics

Russia's seizure and annexation of Crimea, as well as subsequent Russian actions in eastern Ukraine and elsewhere in Eastern Europe, have led to a focus among policymakers on how to counter Russia's so-called hybrid warfare or ambiguous warfare tactics.²⁸ China's actions in the

²⁶ For additional discussion, see CRS In Focus IF10485, *Defense Primer: Geography, Strategy, and U.S. Force Design*, by Ronald O'Rourke.

²⁷ For further discussion, see CRS Report R43698, *NATO's Wales Summit: Outcomes and Key Challenges*, by Paul Belkin; CRS Report R44550, *NATO's Warsaw Summit: In Brief*, by Paul Belkin; CRS Report R43478, *NATO: Response to the Crisis in Ukraine and Security Concerns in Central and Eastern Europe*, coordinated by Paul Belkin.

²⁸ For citations to articles discussing possible U.S. strategies for countering Russia's hybrid warfare tactics, see **Appendix C**.

East and South China Seas have similarly prompted a focus among policymakers on how to counter China's so-called salami-slicing or gray-zone tactics in those areas.²⁹

Capabilities for High-End Warfare

China's continuing military modernization effort³⁰ and Russia's actions to modernize its own military have led to a renewed emphasis in U.S. defense plans and programs on capabilities for conducting so-called high-end warfare, meaning large-scale, high-intensity, technologically sophisticated warfare. Included in this emphasis are (to mention only a few examples) programs for procuring advanced aircraft such as the F-35 Joint Strike Fighter (JSF)³¹ and the next-generation long-range bomber,³² highly capable warships such as the Virginia-class attack submarine³³ and DDG-51 class Aegis destroyer,³⁴ ballistic missile defense (BMD) capabilities,³⁵ longer-ranged land-attack and anti-ship weapons, new types of weapons such as lasers, railguns, and hypervelocity projectiles,³⁶ new ISR (intelligence, surveillance, and reconnaissance) capabilities, military space capabilities,³⁷ electronic warfare capabilities, and military cyber capabilities.³⁸ In his February 2, 2016, remarks previewing DOD's proposed FY2017 budget, then-Secretary Carter stated

We will be prepared for a high-end enemy. That's what we call full spectrum. In our budget, our plans, our capabilities and our actions, we must demonstrate to potential foes, that if they start a war, we have the capability to win. Because the force that can deter conflict, must show that it can dominate a conflict.

In this context, Russia and China are our most stressing competitors. They have developed and are continuing to advance military system that seek to threaten our advantages in specific areas. And in some case, they are developing weapons and ways of wars that seek to achieve their objectives rapidly, before they hope, we can respond.³⁹

²⁹ See CRS Report R42784, *Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress*, by Ronald O'Rourke.

³⁰ For more on China's military modernization effort, see CRS Report R44196, *The Chinese Military: Overview and Issues for Congress*, by Ian E. Rinehart; and CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke.

³¹ For more on the F-35 program, see CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program*, by Jeremiah Gertler.

³² CRS Report RL34406, *Air Force Next-Generation Bomber: Background and Issues for Congress*, by Jeremiah Gertler.

³³ For more on the Virginia-class program, see CRS Report RL32418, *Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress*, by Ronald O'Rourke.

³⁴ For more on the DDG-51 program, see, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke.

³⁵ See, for example, CRS Report R43116, *Ballistic Missile Defense in the Asia-Pacific Region: Cooperation and Opposition*, by Ian E. Rinehart, Steven A. Hildreth, and Susan V. Lawrence, and CRS Report RL33745, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, by Ronald O'Rourke.

³⁶ See, for example, CRS Report R44175, *Navy Lasers, Railgun, and Hypervelocity Projectile: Background and Issues for Congress*, by Ronald O'Rourke.

³⁷ See, for example, CRS In Focus IF10337, *Challenges to the United States in Space*, by Steven A. Hildreth and Clark Groves.

³⁸ See, for example, CRS Report R43848, *Cyber Operations in DOD Policy and Plans: Issues for Congress*, by Catherine A. Theohary.

³⁹ Remarks by Secretary Carter on the Budget at the Economic Club of Washington, D.C., Secretary of Defense Ash Carter, February 2, 2016, accessed March 30, 2016, at <http://www.defense.gov/News/News-Transcripts/Transcript-View/Article/648901/remarks-by-secretary-carter-on-the-budget-at-the-economic-club-of-washington-dc>.

Maintaining Technological Superiority in Conventional Weapons

DOD officials have expressed concern that the technological and qualitative edge that U.S. military forces have had relative to the military forces of other countries is being narrowed by improving military capabilities in other countries, particularly China and (in some respects) Russia. To arrest and reverse the decline in the U.S. technological and qualitative edge, DOD in November 2014 announced a new **Defense Innovation Initiative**.⁴⁰ In related efforts, DOD has also announced that it is implementing a **Long-Range Research and Development Plan (LRRDP)**,⁴¹ and that it is seeking a new general U.S. approach—a so-called “**third offset strategy**”—for maintaining U.S. superiority over opposing military forces that are both numerically large and armed with precision-guided weapons.⁴² A November 24, 2014, press report stated:

After spending 13 years fighting non-state actors in Iraq, Afghanistan and Syria, the US Defense Department is shifting its institutional weight toward developing a new acquisition and technology development strategy that focuses more on major state competitors, the Pentagon’s No. 2 told Defense News on Nov. 21[, 2014].

Deputy Defense Secretary Bob Work said that at the top of the agenda are powers like China and Russia, both of whom have “regional and global aspirations, so that’s going to increasingly take a lot of our attention.”

Next come regional states that want to become nuclear powers, such as Iran and North Korea, and finally are transnational terrorist groups and their myriad offshoots.

“Layered on top of all three are technological advancements that are happening at a very rapid pace,” Work said, which has given rise to a global competition for the latest in stealth, precision strike, communications and surveillance capabilities over which the United States no longer holds a monopoly.

⁴⁰ See, for example, Cheryl Pellerin, “Hagel Announces New Defense Innovation, Reform Efforts,” *DOD News*, November 15, 2014; Jake Richmond, “Work Explains Strategy Behind Innovation Initiative,” *DOD News*, November 24, 2014; and memorandum dated November 15, 2015, from Secretary of Defense Chuck Hagel to the Deputy Secretary of Defense and other DOD recipients on The Defense Innovation Initiative, accessed online on July 21, 2015, at <http://www.defense.gov/pubs/OSD013411-14.pdf>.

⁴¹ See, for example, Cheryl Pellerin, “DoD Seeks Novel Ideas to Shape Its Technological Future,” *DoD News*, February 24, 2015.

⁴² See Deputy Secretary of Defense Speech, Reagan Defense Forum: The Third Offset Strategy, As Delivered by Deputy Secretary of Defense Bob Work, Reagan Presidential Library, Simi Valley, CA, November 7, 2015, accessed December 21, 2015, at <http://www.defense.gov/News/Speeches/Speech-View/Article/628246/reagan-defense-forum-the-third-offset-strategy>, and Deputy Secretary of Defense Speech, CNAS Defense Forum, As Delivered by Deputy Secretary of Defense Bob Work, JW Marriott, Washington, DC, December 14, 2015, accessed December 21, 2015, at <http://www.defense.gov/News/Speeches/Speech-View/Article/634214/cnas-defense-forum>. See also Jason Sherman, “DOD Unveils Technology Areas That Will Drive ‘Third Offset’ Investments, Experimentation,” *InsideDefense.com Daily News*, December 9, 2014; Aaron Mehta, “Work Outlines Key Steps in Third Offset Tech Development,” *Defense News*, December 14, 2015; Jon Harper, “2017 Budget Proposal to Include Billions for Next-Generation Weapons Research,” *National Defense*, December 14, 2015; Tony Bertuca, “Work Pegs FY-17 ‘Third Offset’ Investment at \$12B-\$15B,” *InsideDefense.com Daily News*, December 14, 2015; Jason Sherman, “DOD ‘Red Teams’ Aim to Anticipate Russia, Chinese Reaction to ‘Third Offset Strategy,’” *Inside the Pentagon*, December 22, 2016; Kyle Mizokami, “America’s Military is Getting Deadly Serious About China, Russia, and North Korea,” *The Week*, February 10, 2016; Mackenzie Eaglen, “What is the Third Offset Strategy?” *Real Clear Defense*, February 16, 2016; Tony Bertuca, “DOD Breaks Down ‘Third Offset’ FYDP Investments,” *Inside the Pentagon*, February 17, 2016; David Ignatius, “The Exotic New Weapons the Pentagon Wants to Deter Russia and China,” *Washington Post*, February 23, 2016; Amaani Lyle, “Pentagon: New Technology Deters Russia, China,” *Scout*, March 13, 2016; Shawn Brimley and Loren DeJonge Schulman, “Sustaining the Third Offset Strategy in the Next Administration,” *War on the Rocks*, March 15, 2016.

The new Defense Innovation Initiative that Defense Secretary Chuck Hagel recently announced is “really focused on state actors,” Work said, “and looking at the capabilities that could potentially hurt our nation the most and how [the Pentagon can] prepare to address those capabilities and deter their use.”

A major part of this push is the new “offset” strategy, which is looking to identify new technologies that the United States can use in order to deter or defeat those threats.⁴³

Another related aspect of DOD’s efforts to maintain superiority in conventional weapons is the **Strategic Capabilities Office (SCO)**, which DOD created in 2012. In his February 2, 2016, remarks previewing DOD’s proposed FY2017 budget, then-Secretary Carter stated:

And as you can imagine, the budget also makes important investments in new technologies. We have to do this to stay ahead of future threats in a changing world. As other nations try to catch on the advantages that we have enjoyed for decades, in areas like precision-guided munitions, stealth, cyber and space.

Some of these investments are long-term, and I will get to them in a moment. But to help maintain our advantages now, DOD has an office that we don't often talk about, but I want to highlight today. It's called the Strategic Capabilities Office, or SCO for short.

I created the SCO in 2012 when I was deputy secretary of defense to help us to re-imagine existing DOD and intelligence community and commercial systems by giving them new roles and game-changing capabilities to confound potential enemies—the emphasis here was on rapidity of fielding, not 10 and 15-year programs. Getting stuff in the field quickly.

We need to make long-term investments as well. I will get to them in a moment. But the focus here was to keep up with the pace of the world....

SCO is incredibly innovative, but it also has the rare virtue of rapid development, and a rarer virtue of keeping current capabilities viable for as long as possible—in other words, it tries to build on what we have.⁴⁴

On April 12, 2016, the Senate Armed Services Committee held a hearing on the third offset strategy that also included testimony on the LRRDP and the SCO.⁴⁵

Nuclear Weapons and Nuclear Deterrence

Russia’s reassertion of its status as a major world power has included, among other things, references by Russian officials to nuclear weapons and Russia’s status as a major nuclear weapon

⁴³ Paul McLeary, “DoD Shifts Acquisition, Tech Efforts Toward Major Powers,” *Defense News*, November 14, 2014.

⁴⁴ Remarks by Secretary Carter on the Budget at the Economic Club of Washington, D.C., Secretary of Defense Ash Carter, February 2, 2016, accessed March 30, 2016, at <http://www.defense.gov/News/News-Transcripts/Transcript-View/Article/648901/remarks-by-secretary-carter-on-the-budget-at-the-economic-club-of-washington-dc>. See also Sam LaGrone, “Little Known Pentagon Office Key to U.S. Military Competition with China, Russia,” *USNI News*, February 2, 2016; Jason Sherman, “Carter Lifts the Veil on Classified Work of Secretive Strategic Capabilities Office,” *Inside the Pentagon*, February 4, 2016; Colin Clark and Sydney J. Freedberg Jr., “Robot Boats, Smart Guns & Super B-52s: Carter’s Strategic Capabilities Office,” *Breaking Defense*, February 5, 2016; Dan Lamothe, “Veil of Secrecy Lifted on Pentagon Office Planning ‘Avatar’ Fighters and Drone Swarms,” *Washington Post*, March 8, 2016; Anthony Capaccio, “Once-Secret Pentagon Agency Asks Industry to Help Find New Ideas,” *Bloomberg*, March 29, 2016; Reuters, “New ‘Take Risk’ Office Rebuilds Navy’s Arsenal,” *Maritime Executive*, March 29, 2016; Sydney J. Freedberg Jr., “Countin On Chaos In The Offset Strategy: SCO,” *Breaking Defense*, April 12, 2016.

⁴⁵ For an additional perspectives on the question of how to maintain U.S. military technological superiority in the new international security environment, see Nathan Freier, “How to Adapt Military Risk to an Era of Hypercompetition,” *Defense One*, June 29, 2017; Stephen Rodriguez, Leo Blanken, and Jason Lepore, “America Needs a New ‘Dreadnought Strategy,’” *Foreign Policy*, July 28, 2017.

power. This has led to an increased emphasis in discussions of U.S. defense and security on nuclear weapons and nuclear deterrence—a development that comes at a time when DOD is in the early stages of a multi-year plan to spend scores of billions of dollars to modernize U.S. strategic nuclear deterrent forces.⁴⁶ DOD, for example, currently has plans to acquire a new class of ballistic missile submarines⁴⁷ and a next-generation long-range bomber.⁴⁸

Speed of Weapon System Development and Deployment

DOD officials and other observers have argued that staying ahead of improving military capabilities in countries such as China in coming years will require adjusting U.S. defense acquisition policy to place a greater emphasis on speed of development and deployment as a measure of merit in defense acquisition policy (alongside other measures of merit, such as minimizing cost growth). As a consequence, they have stated, defense acquisition should feature more experimentation, risk-taking, and tolerance of failure during development. The previously mentioned Defense Innovation Initiative and Strategic Capabilities Office (SCO) (see “Maintaining Technological Superiority in Conventional Weapons” above) form two aspects of DOD’s efforts to move in this direction. Efforts within individual military services to move toward more-rapid acquisition of new capabilities form another. DOD officials have also requested greater flexibility in how they are permitted to use funds for prototyping and experimentation.⁴⁹

In a December 22, 2014, opinion column, Frank Kendall, then-Under Secretary of Defense for Acquisition, Technology and Logistics, stated:

For some time I have been trying to make the point that the United States’ military technological superiority is being challenged in ways we have not seen for decades. This is not a future problem, nor is it speculative. My concerns are based on the intelligence reports I have received on a daily basis for almost five years....

Some time ago, I asked the Defense Intelligence Agency to produce a poster size document showing the scope of China’s modernization programs in key war-fighting areas. The result is a dense compendium of dozens of programs. More recently, I asked my staff to prepare a similar depiction of the United States’ ongoing and projected modernization programs. The two documents are strikingly different.

The chart on China is dense with program descriptions and timelines. The chart on the US programs is characterized by a high amount of white space. China and Russia are fielding state-of-the-art weapons designed specifically to overmatch US capabilities....

In the face of increasing and sophisticated threats to our technological superiority, paying a reasonable price for the equipment we acquire and incentivizing industry to perform at its best is a means to an end, not the end itself. While we will continue those efforts, we have to turn our attention more toward meeting the very real challenges to our technological superiority.

⁴⁶ See CRS Report RL33640, *U.S. Strategic Nuclear Forces: Background, Developments, and Issues*, by Amy F. Wolf, and Congressional Budget Office, *Projected Costs of U.S. Nuclear Forces, 2015 to 2024* January 2015, 7 pp.

⁴⁷ CRS Report R41129, *Navy Columbia Class (Ohio Replacement) Ballistic Missile Submarine (SSBN[X]) Program: Background and Issues for Congress*, by Ronald O’Rourke.

⁴⁸ CRS Report RL34406, *Air Force Next-Generation Bomber: Background and Issues for Congress*, by Jeremiah Gertler.

⁴⁹ See, for example, John Grady, “Sean Stackley Asks Congress for More Department of Navy Flexibility in Acquisition,” *USNI News*, January 7, 2016; Valerie Insinna, “Acquisition Officials Call For Quicker Access to Funds For Prototyping, Experimentation,” *Defense Daily*, January 8, 2016: 1-3.

[DOD's] BBP [Better Buying Power] 3.0 [defense acquisition improvement initiative] will focus on the ways we pursue innovation and acquire technology. All of our investments in research and development will be reviewed with the goal of improving the output of those investments. We will look for ways to reduce cycle time for product development. We will examine the barriers to greater use of commercial and international sources of technology.

The emphasis on the professionalism of the acquisition workforce that I introduced in BBP 2.0 [in 2012] will continue, but the focus now will be on encouraging innovation and technical excellence; not just within the defense government enterprise but across industry as well. We will conduct a long-range research and development planning effort to ensure we are investing in the highest payoff technologies. We will seek resources to increase the use of prototyping and experimentation. Our ability to accept and manage risk, which is essential to technological superiority and inherent in cutting edge programs, will be re-examined....

As a nation we must overcome these threats, or we will wake up one day to the realization that the United States is no longer the most capable military power on the planet.⁵⁰

Minimizing Reliance on Components and Materials from Russia and China

Increased tensions with Russia have led to an interest in eliminating or at least minimizing instances of being dependent on Russian-made military systems and components for U.S. military systems. A recent case in point concerns the Russian-made RD-180 rocket engine, which is

⁵⁰ Frank Kendall, "Kendall: Why Better Buying Power 3.0?," *Defense News*, December 22, 2014. See also, for example, Aaron Mehta, "Pentagon Begins Better Buying Power 3.0," *Defense News*, April 9, 2015; Megan Eckstein, "CNO: Navy Needs More Agile Procurement To Keep Pace With '4-Plus-1' Threat Set," *USNI News*, December 7, 2015; Sydney J. Freedberg, Jr., "CNO Richardson Urges Fast-Track For Cyber, EW & Drones," *Breaking Defense*, December 7, 2015; Valerie Insinna, "CNO Pushes to Expedite Acquisition Process," *Defense Daily*, December 8, 2015; Anthony L. Velocci, Jr., "Opinion: Risk And Failure Drive Innovation," *Aviation Week & Space Technology*, December 18, 2015. See also Testimony of Vice Admiral (retired) Michael J. Connor before the United States House of Representatives Armed Services Committee Sea Power and Projection Forces Committee Hearing Game Changers – Undersea Warfare, October 27, 2015.

See also John Grady, "Sean Stackley Asks Congress for More Department of Navy Flexibility in Acquisition," *USNI News*, January 7, 2016; Valerie Insinna, "Acquisition Officials Call For Quicker Access to Funds For Prototyping, Experimentation," *Defense Daily*, January 8, 2016; Jared Serbu, "Navy Building New Office to 'Short Circuit' Traditional DoD Acquisition System," *Federal News Radio*, January 8, 2016; Megan Eckstein, "New Navy Procurement Office, Marines to Push Rapid Innovation In 2016," *USNI News*, March 1, 2016; Valerie Insinna, "Navy Establishing Maritime Accelerated Capabilities Office as Acquisition Fast Track," *Defense Daily*, March 11, 2016: 1-2; John Grady, "CSIS Panel: Speed, Not Cost, is Key Question in Defense Acquisition Reform," *USNI News*, April 25, 2016; Dan Parsons, "Navy, Marine Corps Chiefs Lament Sluggish Acquisition System," *Defense Daily*, May 16, 2016: 2-3; Jennifer McDermott, "Defense Secretary Carter Calls for Faster Technology Development," *Military Times*, May 25, 2016; Patrick Tucker, "To Counter Russia's Cyber Prowess, US Army Launches Rapid-Tech Office," *Defense One*, August 31, 2016; Jen Judson, "Army Launches Rapid Capabilities Office," *Defense News*, August 31, 2016; Dan Parsons, "Army Launches Rapid Capabilities Office To Speed Fielding Of Merging Technologies," *Defense Daily*, September 1, 2016: 1-3; Dan Parsons, "Marine Corps Seeks To Rapidly Prototype, Speed Non-Developmental Gear To The Field," *Defense Daily*, September 28, 2016: 1-2; Megan Eckstein, "DoN Grapples With Need For Rapid Prototyping Amid Congressional Concerns," *USNI News*, October 7, 2016; Lee Hudson, "Naval Forces Use R&D Funding Mechanism to 'Rapidly Prototype Capabilities,'" *Inside the Navy*, October 21, 2016; Justin Doubleday, "Navy Establishes New Rapid Acquisition, Prototyping Processes," *Inside the Navy*, January 9, 2017; Pat Host, "Kendall Says Maximizing Combat Capability Should Be Most Important Acquisition Metric," *Defense Daily*, January 19, 2017: 2; Aaron Mehta, "Acquisition Reform panel: Cut Restrictions so DoD Can Take 'Mission First' Approach," *Defense News*, May 17, 2017.

incorporated into U.S. space launch rockets, including rockets used by DOD to put military payloads into orbit.⁵¹

Concerns over Chinese cyber activities or potential Chinese actions to limit exports of certain materials (such as rare earth elements) have similarly led to concerns over the use of certain Chinese-made components (such as electronic components) or Chinese-origin materials (such as rare earth elements) for U.S. military systems.⁵²

Issues for Congress

Potential policy and oversight issues for Congress include the following:

- **Potential reassessment of U.S. defense analogous to 1993 Bottom-Up Review (BUR).** In response to changes in the international security environment, should there be a broad reassessment of U.S. defense funding levels, strategy, plans, and programs, analogous to the 1993 Bottom-Up Review (BUR)? If so, how should it be done, and what role should Congress play? Should Congress conduct the reassessment itself, through committee activities? Should Congress establish the terms of reference for a reassessment to be conducted by the executive branch or by an independent, third-party entity (such as a blue ribbon panel)? Should some combination of these approaches be employed?
- **Defense funding levels.** In response to changes in the international security environment, should defense funding levels in coming years be increased, reduced, or maintained at about the current level? Should the Budget Control Act (BCA) of 2011, as amended, be further amended or repealed?
- **U.S. grand strategy.** Should the United States continue to include, as a key element of U.S. grand strategy, a goal of preventing the emergence of a regional hegemon in one part of Eurasia or another?⁵³ If not, what grand strategy should the United States pursue? What is the Trump Administration's position on this issue?

⁵¹ See CRS Report R44498, *National Security Space Launch at a Crossroads*, by Steven A. Hildreth.

⁵² For more on China and rare earth elements, see CRS Report R43864, *China's Mineral Industry and U.S. Access to Strategic and Critical Minerals: Issues for Congress*, by Marc Humphries, and CRS Report R41744, *Rare Earth Elements in National Defense: Background, Oversight Issues, and Options for Congress*, by Valerie Bailey Grasso.

⁵³ One observer states that this question was reviewed in 1992, at the beginning of the post-Cold War era:

As a Pentagon planner in 1992, my colleagues and I considered seriously the idea of conceding to great powers like Russia and China their own spheres of influence, which would potentially allow the United States to collect a bigger "peace dividend" and spend it on domestic priorities.

Ultimately, however, we concluded that the United States has a strong interest in precluding the emergence of another bipolar world—as in the Cold War—or a world of many great powers, as existed before the two world wars. Multipolarity led to two world wars and bipolarity resulted in a protracted worldwide struggle with the risk of nuclear annihilation. To avoid a return such circumstances, Secretary of Defense Dick Cheney ultimately agreed that our objective must be to prevent a hostile power to dominate a "critical region," which would give it the resources, industrial capabilities and population to pose a global challenge. This insight has guided U.S. defense policy throughout the post-Cold War era.

(Zalmay Khalilzad, "4 Lessons about America's Role in the World," *National Interest*, March 23, 2016.)

- **U.S. and NATO military capabilities in Europe.** Are the United States and its NATO allies taking appropriate and sufficient steps regarding U.S. and NATO military capabilities and operations in Europe? What potential impacts would a strengthened U.S. military presence in Europe have on total U.S. military force structure requirements? What impact would it have on DOD's ability to implement the military component of the U.S. strategic rebalancing toward the Asia-Pacific region?
- **Hybrid warfare and gray-zone tactics.** Do the United States and its allies and partners have adequate strategies for countering Russia's so-called hybrid warfare in eastern Ukraine and China's so-called salami-slicing tactics in the East and South China Seas?
- **Capabilities for high-end warfare.** Are DOD's plans for acquiring capabilities for high-end warfare appropriate and sufficient? In a situation of constraints on defense funding, how should tradeoffs be made in balancing capabilities for high-end warfare against other DOD priorities?
- **Maintaining technological superiority in conventional weapons.** Are DOD's steps for maintaining U.S. technological superiority in conventional weapons appropriate and sufficient? What are the Trump Administration's intentions regarding the Defense Innovation Initiative, the Long-Range Research and Development Plan, the third offset strategy, and the Strategic Capabilities Office?
- **Nuclear weapons and nuclear deterrence.** Are current DOD plans for modernizing U.S. strategic nuclear weapons, and for numbers and basing of non-strategic (i.e., theater-range) nuclear weapons, aligned with the needs of the new international security environment?
- **Speed in defense acquisition policy.** To what degree should defense acquisition policy be adjusted to place greater emphasis on speed of development and deployment, and on experimentation, risk taking, and greater tolerance of failure during development? Are DOD's steps for doing this appropriate?
- **Reliance on Russian and Chinese components and materials.** Aside from the Russian-made RD-180 rocket engine, what Russian or Chinese components or materials are incorporated into DOD equipment? What are DOD's plans regarding reliance on Russian- or Chinese-made components and materials for DOD equipment?

Appendix A. Articles on Shift to New International Security Environment

This appendix presents citations to articles by or about observers who have concluded that the international the international security environment has undergone a shift from the post-Cold War era to a new and different situation.

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For citations from July through December 2016, see, for example, Michael Lind, “Can America Share Its Superpower Status?” *National Interest*, August 21, 2016; Bret Stephens, “The New Dictators’ Club,” *Wall Street Journal*, August 22, 2016; Gregory R. Copley, “The Era of Strategic Containment is Over,” *Defense & Foreign Affairs*, September 7, 2016; Ulrich Speck, “The Crisis of Liberal Order,” *American Interest*, September 12, 2016; Aaron Kliegman, “Robert

D. Kaplan: Think Tragically to Avoid Tragedy,” *Washington Free Beacon*, September 16, 2016; Lauren Villagran, “Former Defense Secretary Describes ‘New World Order,’” *Stars and Stripes*, September 14, 2016; George F. Will, “Vladimir Putin Is Bringing Back the 1930s,” *Washington Post*, October 7, 2016; Philip Stephens, “How the West Has Lost the World,” *Financial Times*, October 12, 2016; John Sawers, “We Are Returning to a World of Great-Power Rivalry,” *Financial Times*, October 19, 2016; Patrick Wintour, Luke Harding, and Julian Borger, “Cold War 2.0: How Russia and the West Reheated a Historic Struggle,” *The Guardian*, October 24, 2016; John Schaus, “U.S. Leadership in an Era of Great Power Competition,” *Defense 360 (Center for Strategic & International Studies)*, December 2016; Charles Krauthammer, “After a Mere 25 Years, the Triumph of the West Is Over,” *Washington Post*, December 1, 2016; Julia Ioffe, “The End of the End of the Cold War,” *Foreign Policy*, December 21, 2016.

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Appendix B. Articles on Grand Strategy and Geopolitics

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Appendix C. Articles on Countering Russia's Hybrid Warfare Tactics

This appendix presents citations to articles discussing possible U.S. strategies for countering Russia's hybrid warfare tactics.

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