

**GAO**

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Before the Armed Services Committee,  
House of Representatives

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**DEFENSE ACQUISITIONS**

**Actions Needed to Get  
Better Results on Weapons  
Systems Investments**

Statement of David M. Walker  
Comptroller General of the United States



# Report Documentation Page

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# Highlights

Highlights of [GAO-06-585T](#), a testimony before the Armed Services Committee, House of Representatives

## Why GAO Did This Study

In the past 5 years, DOD has doubled its planned investments in weapons systems, but this huge increase has not been accompanied by more stability, better outcomes, or more buying power for the acquisition dollar. Rather than showing appreciable improvement, programs are experiencing recurring problems with cost overruns, missed deadlines, and performance shortfalls. GAO was asked to testify on ways to obtain a better return on DOD's weapons systems investments.

This testimony identifies the following steps as needed to provide a better foundation for executing weapon programs: (1) developing a DOD-wide investment strategy that prioritizes programs based on realistic and credible threat-based customer needs for today and tomorrow, (2) enforcing existing policies on individual acquisitions and adhering to practices that assure new programs are executable, and (3) making it clear who is responsible for what and holding people accountable when these responsibilities are not fulfilled. Past GAO reports have made similar recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-06-585T](http://www.gao.gov/cgi-bin/getrpt?GAO-06-585T).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Schinasi at (202) 512-4841 or [schinasi@gao.gov](mailto:schinasi@gao.gov).

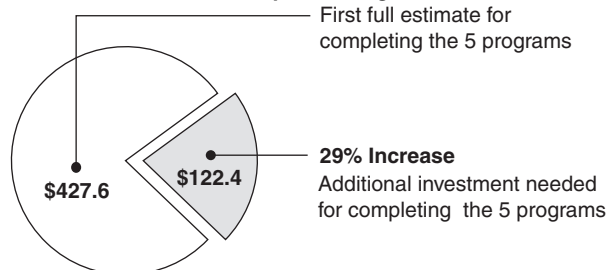
## DEFENSE ACQUISITIONS

# Actions Needed to Get Better Results on Weapons Systems Investments

## What GAO Found

DOD has a mandate to deliver high-quality products to warfighters, when they need them and at a price the country can afford. Quality and timeliness are especially critical to maintain DOD's superiority over others, to counter quickly changing threats, and to better protect and enable the warfighter. Cost is critical given DOD's stewardship responsibility for taxpayer money, combined with long-term budget forecasts which indicate that the nation will not be able to sustain its currently planned level of investment in weapons systems, and DOD's plans to increase investments in weapons systems that enable transformation of various military operations. At this time, however, DOD is simply not positioned to deliver high quality products in a timely and cost-efficient fashion. It is not unusual to see cost increases that add up to tens or hundreds of millions of dollars, schedule delays that add up to years, and large and expensive programs frequently rebaselined or even scrapped after years of failing to achieve promised capability.

### Additional Investment: Top Five Programs in 2006 Plan, Billions in Constant 2006 Dollars



### Fiscal year 2006: \$550 billion total

Source: GAO analysis of DOD data.

Note: Estimate includes total research, development, test, and evaluation (RDT&E); procurement; military construction; and acquisition, operation, and maintenance.

Recognizing this dilemma, DOD has tried to embrace best practices in its policies, and instill more discipline in requirements setting, among numerous other actions. Yet it still has trouble distinguishing wants from needs, and many programs are still running over cost and behind schedule.

Our work shows that acquisition problems will likely persist until DOD provides a better foundation for buying the right things, the right way. This involves making tough tradeoff decisions as to which programs should be pursued, and more importantly, not pursued, making sure programs are executable, locking in requirements before programs are ever started, and making it clear who is responsible for what and holding people accountable when these responsibilities are not fulfilled. These changes will not be easy to make. They require DOD to re-examine the entirety of its acquisition process—what we think of as the “Big A”—including requirements setting, funding, and execution. Moreover, DOD will need to alter perceptions of what success means, and what is necessary to achieve success.

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Mr. Chairman and Members of the Committee:

I am pleased to be here today to discuss how to get better results from the Department of Defense's (DOD) weapons systems investments and why we must ensure that DOD be held accountable for doing so. DOD has a mandate to deliver high-quality products to warfighters, when they need them and at a price the country can afford. Quality and timeliness are especially critical to maintain DOD's superiority over others, to counter quickly changing threats, and to better protect and enable the warfighter. Cost is also critical given DOD's stewardship over taxpayer money, long-term budget forecasts which indicate that the nation will not be able to sustain its currently planned level of investment in weapons systems, and plans to increase investments in weapons systems that enable transformation of various military operations. At this time, however, DOD is simply not positioned to deliver high quality products in a timely and cost-efficient fashion. It is not unusual to see cost increases that add up to tens or hundreds of millions of dollars, schedule delays that add up to years, and large and expensive programs continually rebaselined or even scrapped after years of failing to achieve promised capability.

Recognizing this dilemma, DOD has tried to embrace best practices in its policies, instill more discipline in requirements setting, strengthen training for program managers, reorganize offices that support and oversee programs, and require the use of independent cost estimates and systems engineering. Yet despite these and many other actions, the Department still has trouble distinguishing wants from needs, and many programs are still running over cost and behind schedule.

Our work shows that poor performance and cost overruns will likely persist until DOD provides a better foundation for executing its weapons programs. As I will further discuss today, this foundation includes (1) a DOD-wide investment strategy that prioritizes programs based on realistic and credible threat-based customer needs for today and tomorrow ("Big A" acquisition); (2) enforcing existing policies on individual acquisitions and adhering to practices that assure new programs are executable ("little a" acquisition); and (3) making it clear who is responsible for what and holding people accountable when these responsibilities are not fulfilled. While such steps represent basic and commonly accepted sound business practices, they will be extremely difficult to implement within DOD, given the myriad of missions that compete for the attention of DOD's leadership and resources, frequent turnover in leadership and key personnel, DOD's intricate and outdated organizational structure, outmoded and flawed supporting business

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processes, as well as entrenched cultural behaviors and internal pressures. As a result, solutions demand the highest levels of leadership attention and commitment from DOD, the Administration, and the Congress over a sustained period of years.

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## A Mandate for Change

Today we are at a key crossroad. In the next few decades, the nation will be struggling with a large and growing structural deficit. At the same time, however, weapons programs are commanding larger budgets as DOD undertakes increasingly ambitious efforts to transform its ability to address current and potential future conflicts. These costly current and planned acquisitions are running head-on into the nation's unsustainable fiscal path. In the past 5 years, DOD has doubled its planned investments in weapons systems, but this huge increase has not been accompanied by more stability, better outcomes, or more buying power for the acquisition dollar. Rather than showing appreciable improvement, programs are experiencing recurring problems with cost overruns, missed deadlines, and performance shortfalls.

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## Dollars Available for Weapons Will Face Serious Budget Pressures

As I have testified previously, our nation is on an imprudent and unsustainable fiscal path. Budget simulations by GAO, the Congressional Budget Office, and others show that, over the long term, we face a large and growing structural deficit due primarily to known demographic trends, rising health care costs, and lower federal revenues as a percentage of the economy. Continuing on this path will gradually erode, if not suddenly damage, our economy, our standard of living, and ultimately our national security. Federal discretionary spending, along with other federal policies and programs, will face serious budget pressures in the coming years stemming from new budgetary demands and demographic trends. Defense spending falls within the discretionary spending accounts. Further, current military operations, such as those in Afghanistan and Iraq, consume a large share of DOD budgets and are causing faster wear on existing weapons. Refurbishment or replacement sooner than planned is putting further pressure on DOD's investment accounts.

It is within this context that we must engage in a comprehensive and fundamental reexamination of new and ongoing investments in our nation's weapons systems. Weapons systems are one of the single largest investments the federal government makes. In the last 5 years, DOD has doubled its planned investments in new systems from about \$700 billion in 2001 to nearly \$1.4 trillion in 2006. Annual procurement totals are

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expected by DOD to increase from about \$75 billion to about \$100 billion during 2006 to 2011.

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## Programs Are Seeking Larger Budgets

At the same time DOD is facing future budget constraints, programs are seeking larger budgets. To illustrate, the projected cost of DOD's top five programs in fiscal year 2001 was about \$291 billion. In 2006, it was \$550 billion<sup>1</sup>. A primary reason why budgets are growing is that DOD is undertaking new efforts that are expected to be the most expensive and complex ever. Moreover, it is counting on these efforts to enable transformation of military operations. The Army, for example, is undertaking the Future Combat Systems (FCS) program in order to enable its combat force to become lighter, more agile, and more capable. FCS is comprised of a family of weapons, including 18 manned and unmanned ground vehicles, air vehicles, sensors, and munitions, which will be linked by an information network. These vehicles, weapons, and equipment will comprise the majority of the equipment needed for a brigade combat team in the future. When considering complementary programs, projected investment costs for FCS are estimated on the order of \$200 billion. Affordability of the FCS programs depends on two key assumptions. First, the program must proceed without exceeding its currently projected costs. Second, FCS has expected large annual procurement costs beginning in 2012. FCS procurement will represent 60 to 70 percent of Army procurement from fiscal years 2014 to 2022. As the Army prepares the next Defense Plan, it will face the challenge of allocating sufficient funding to meet increasing needs for FCS procurement in fiscal years 2012 and 2013. If all the needed funding cannot be identified, the Army will have to consider reducing the FCS procurement rate or delaying or reducing items to be spun out to current Army forces.

At the same time, the Air Force is undertaking two new satellite programs that are expected to play a major role in enabling FCS and other future systems. The Transformational Satellite Communications System, which is to serve as a linchpin in DOD's future communications network, and Space Radar, which is focused on generating volumes of radar imagery data for transmission to ground-, air-, ship-, and space-based systems. Together, these systems are expected to cost more than \$40 billion. The

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<sup>1</sup>The top five programs in 2001 were: the F-22A Raptor aircraft, DDG 51 class destroyer ship, Virginia class submarine, C-17 Globemaster airlift aircraft, and the F/A-18 E/F Super Hornet fighter aircraft. The top 5 programs in 2006 are: the Joint Strike Fighter aircraft, Future Combat Systems, Virginia class submarine, DDG 51 class destroyer ship, and the F-22A Raptor aircraft.

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Department has also been focused on modernizing its tactical aircraft fleet. These efforts include the Joint Strike Fighter (JSF) aircraft program, currently expected to cost more than \$200 billion, and the Air Force's F-22A Raptor aircraft, expected to cost more than \$65 billion.

Concurrently, the Navy is focused on acquiring new ships and submarines with significantly advanced designs and technologies. These include the Virginia Class Submarine, expected to cost about \$80 billion, and the DDG-51 class destroyer ship, expected to cost some \$70 billion, and the newer DD(X) destroyer program, which is focused on providing advanced land attack capability in support of forces ashore and to contribute to U.S. military dominance in the shallow coastal water environment. The Navy shipbuilding plan requires more funds than may reasonably be expected. Specifically, the plan projects a supply of shipbuilding funds that will double by 2011 and will stay at high levels for years to follow.

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## Problematic Acquisitions Continue to Reduce DOD's Buying Power







Despite doubling its investment the past 5 years, our assessments do not show appreciable improvement in DOD's management of the acquisition of major weapons systems. A large number of the programs included in our annual assessment of weapons systems<sup>2</sup> are costing more and taking longer to develop than estimated. It is not unusual to see development cost increases between 30 percent and 40 percent and schedule delays of approximately 1, 2 or more years.

The consequence of cost and cycle-time growth is manifested in a reduction of buying power of the defense dollar—causing programs to either cut back on planned quantities, capabilities, or to even scrap multi-billion dollar programs, after years of effort, in favor of pursuing more promising alternatives. Figure 1 illustrates seven programs with a significant reduction in buying power; we have reported similar outcomes in many more programs. This is not to say that the nation does not get superior weapons in the end, but that at currently projected twice the level of investment, DOD has an obligation to get better results.

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<sup>2</sup>GAO, *Defense Acquisitions: Assessments of Selected Major Weapon Programs*, GAO-06-391 (Washington, D.C.: Mar. 31, 2006).

**Figure 1: Examples of Programs with Reduced Buying Power**

Program		Initial estimate	➔	Initial quantity	Latest estimate	➔	Latest quantity	Percent of unit cost increase
Joint Strike Fighter		\$189.8 billion		2,866 aircraft	\$206.3 billion		2,458 aircraft	26.7
Future Combat Systems		\$82.6 billion		15 systems	\$127.5 billion		15 systems	54.4
F-22A Raptor		\$81.1 billion		648 aircraft	\$65.4 billion		181 aircraft	188.7
Evolved Expendable Launch Vehicle		\$15.4 billion		181 vehicles	\$28.0 billion		138 vehicles	137.8
Space Based Infrared System High		\$4.1 billion		5 satellites	\$10.2 billion		3 satellites	315.4
Expeditionary Fighting Vehicle		\$8.1 billion		1,025 vehicles	\$11.1 billion		1,025 vehicles	35.9

Source: GAO analysis of DOD data. Images sourced in their respective order: JSF Program Office; Program Manager, Unit of Action, U.S. Army; F-22A System Program Office; (Left) © 2003 ILS/Lockheed Martin, (right) © 2003 The Boeing Company; Lockheed Martin Space Systems Company; General Dynamics Land Systems.

Furthermore, the conventional acquisition process is not agile enough to meet today's demands. Congress has expressed concern that urgent warfighting requirements are not being met in the most expeditious manner and has put in place several authorities for rapid acquisition to work around the process. The U.S. Joint Forces Command's Limited Acquisition Authority and the Secretary of Defense's Rapid Acquisition Authority seek to get warfighting capability to the field quicker. According to U.S. Joint Forces Command officials, it is only through Limited Acquisition Authority that the command has had the authority to satisfy the unanticipated, unbudgeted, urgent mission needs of other combatant commands. With a formal process that requires as many as 5, 10, or

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15 years to get from program start to production, such experiments are needed to meet the warfighters' needs.

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## Underlying Causes of Acquisition Problems

Our reviews have identified a number of causes behind the problems just described, but several stand out. First, DOD starts more weapons programs than it can afford and sustain, creating a competition for funding that encourages low cost estimating, optimistic scheduling, over promising, and suppressing of bad news. Programs focus on advocacy at the expense of realism and sound management. Invariably, with too many programs in its portfolio, DOD and the Congress are forced to continually shift funds to and from programs—undermining well-performing programs to pay for poorly performing ones. Adding pressure to this environment are changes that have occurred within the defense supplier base. Twenty years ago, there were more than 20 fully competent prime contractors competing for multiple new programs annually; today, there are only 6 that compete for considerably fewer programs, according to a recent DOD-commissioned study. This adds pressure on DOD to keep current suppliers in business and limits DOD's ability to maximize competition.

Second, DOD has exacerbated this problem by not clearly defining and stabilizing requirements before programs are started. At times, in fact, it has allowed new requirements to be added well into acquisition cycle—significantly stretching technology and creating design challenges, and exacerbating budget overruns. For example, in the F-22A program, the Air Force added a requirement for air-to-ground attack capability. In its Global Hawk program, the Air Force added both signals intelligence and imagery intelligence requirements. While experience would caution DOD not to pile on new requirements, customers often demand them fearing there may not be another chance to get new capabilities since programs can take a decade or longer to complete. Yet, perversely, such strategies delay delivery to the warfighter, oftentimes by years.

Third, DOD commits to its programs before it obtains assurance that the capabilities it is pursuing can be achieved within available resources and time constraints. Funding processes encourage this approach, since acquisition programs attract more dollars than efforts concentrating solely on proving out technologies. Nevertheless, when DOD chooses to extend technology invention into acquisition, programs experience technical problems that have reverberating effects and require large amounts of time and money to fix. When programs have a large number of interdependencies, even minor technical “glitches” can cause disruptions. Only 10 percent of the programs in our latest annual assessment of

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weapons systems had demonstrated critical technologies to best practice standards at the start of development; and only 23 percent demonstrated them to DOD's standards.<sup>3</sup> The cost effect of proceeding without completing technology development before starting an acquisition can be dramatic. For example, research, development, test and evaluation costs for the programs included in our review that met best practice standards at program start increased by a modest average of 4.8 percent over the first full estimate, whereas the costs for the programs that did not meet these standards increased by a much higher average of 34.9 percent over the first full estimate.

Fourth, officials are rarely held accountable when programs go astray. There are several reasons for this, but the primary ones include the fact that DOD has never clearly specified who is accountable for what, invested responsibility for execution in any single individual, or even required program leaders to stay until the job is done. Moreover, program managers are not empowered to make go or no-go decisions, they have little control over funding, they cannot veto new requirements, and they have little authority over staffing. Because there is frequent turnover in their positions, program managers also sometimes find themselves in the position of having to take on efforts that are already significantly flawed.

Likewise, contractors are not always held accountable when they fail to achieve desired acquisition outcomes. In a recent study,<sup>4</sup> for example, we found that DOD had paid out an estimated \$8 billion in award fees on contracts in our study population regardless of outcomes. In one instance, we found that DOD paid its contractor for a satellite program—the Space-Based Infrared System High—74 percent of the award fee available, or \$160 million, even though research and development costs increased by more than 99 percent, the program was delayed for many years and was rebaselined three times.<sup>5</sup> In another instance, DOD paid its contractor for

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<sup>3</sup>DOD's policy states technologies should be demonstrated in at least a relevant environment before a program enters system development; whereas, GAO utilizes the best practice standard that calls for technologies to be demonstrated one step higher—demonstration in an operational environment.

<sup>4</sup>GAO, *Defense Acquisitions: DOD Has Paid Billions in Award and Incentive Fees Regardless of Outcomes*, [GAO-06-66](#) (Washington, D.C.: Dec. 19, 2005).

<sup>5</sup>When calculating the percentage of award fee paid (i.e., percentage of award fee paid = total fee paid to date / (total fee pool – remaining fee pool)), we included rolled-over fees in the remaining fee pool when those fees were still available to be earned in future evaluation periods.

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the F-22A aircraft more than \$848 million, 91 percent of the available award fee, even though research and development costs increased by more than 47 percent, the program has been rebaselined 14 times, and delayed by more than 2 years.

Fifth, these strategies work, because they win dollars. DOD and congressional funding approval reinforces these practices and serves to undercut reform efforts. Stated differently, typically no one is held accountable for unacceptable outcomes and there are little or no adverse consequences for the responsible parties. This is a shared responsibility of both the executive and legislative branches of government.

Of course, there are many other factors that play a role in causing weapons programs to go astray. They include workforce challenges, poor contractor oversight, frequent turnover in key leadership, and a lack of systems engineering, among others. Moreover, many of the business processes that support weapons development—strategic planning and budgeting, human capital management, infrastructure, financial management, information technology, and contracting—are beset with pervasive, decades-old management problems, including outdated organizational structures, systems, and processes. In fact, these areas—along with weapons system acquisitions—are on GAO’s high risk list of major government programs and operations.

DOD has long recognized such problems and initiated numerous improvement efforts. In fact, since 1949, more than 10 commissions have studied issues such as long cycle time and cost increases as well as deficiencies in the acquisition workforce. This committee just last week heard testimony regarding several of them.<sup>6</sup> Among these recent studies, there is a consensus that DOD needs to instill much stronger discipline into the requirements setting process, prioritize its investments, seek additional experienced and capable managers, control costs, strengthen accountability, and enhance the basis for enterprise-wide decision making.

In response to past studies and recommendations, including our own, DOD has taken a number of acquisition reforms. Specifically, DOD has restructured its acquisition policy to incorporate best practices as the suggested way of doing business. For example, policies embrace the

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<sup>6</sup>House Armed Services Committee, “Hearing on Department of Defense Acquisition Reform,” (Washington, D.C.: Mar. 29, 2006)

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concept of closing gaps between requirements and resources before launching new programs. DOD is also reviewing changes to requirements setting. DOD has also strengthened training for program managers, required the use of independent cost estimating, reemphasized the discipline of systems engineering, and tried extracting better performance from contractors—by alternately increasing and relaxing oversight.

While all of these steps are well-intentioned, recent policy statements, such as the Quadrennial Defense Review (QDR), and decisions on individual programs have fallen far short of the needed fundamental review reassessment, reprioritization and reengineering efforts. For example, the Office of the Secretary of Defense (OSD) does not seem to be pushing for dramatic and fundamental reforms in its acquisition process. In fact, it has either disagreed with recommendations we have made over the past year or claimed that it was already addressing them. These include reports on specific systems such as JSF, the Missile Defense program, FCS, and Global Hawk as well as reports on cross-cutting issues, such as DOD's rebaselining practices, acquisition policy, and support for program managers. We believe DOD's recently issued QDR did not lay out a long term, resource constrained, investment strategy. In fact, the gap between wants, needs, affordability and sustainability seems to be greater than ever.

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## Solutions

Our work shows that acquisition problems will likely persist until DOD provides a better foundation for buying the right things, the right way. This involves making tough tradeoff decisions as to which programs should be pursued, and more importantly, not pursued, making sure programs are executable, locking in requirements before programs are ever started, and making it clear who is responsible for what and holding people accountable when these responsibilities are not fulfilled. These changes will not be easy to make. They require DOD to reexamine the entirety of its acquisition process—what we think of as the “Big A”. This includes making deep-seated changes to program requirements setting, funding, and execution. It also involves changing how DOD views success, and what is necessary to achieve success.

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## Buy the Right Thing: Develop and Implement an Investment Strategy

The first, and most important, step is implementing a revised DOD-wide investment strategy for weapons systems. In a recent study on program management best practices,<sup>7</sup> we recommended that DOD determine the priority order of needed capabilities based on assessments of the resources—that is dollars, technologies, time, and people needed to achieve these capabilities. We also recommended that capabilities not designated as a priority should be set out separately as desirable but not funded unless resources were both available and sustainable.

DOD’s Under Secretary of Defense for Acquisition Technology and Logistics—DOD’s corporate leader for acquisition—should develop this strategy in concert with other senior leaders, for example, combatant commanders who would provide input on user needs; DOD’s comptroller; science and technology leaders, who would provide input on available resources; and acquisition executives from the military services, who could propose solutions. Finally, once priority decisions are made, Congress will need to enforce discipline through various authorization and appropriation decisions.

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**Table 1: Steps That Can Be Taken for Developing an Investment Strategy for Acquiring New Systems**

<b>Who</b>	<b>Under Secretary of Defense for Acquisition, Technology and Logistics in concert with other senior officials</b>
Action	<ul style="list-style-type: none"><li>• Analyze customer needs vs. wants based on available technology and available resources</li><li>• Compare analysis to DOD’s long-term vision</li><li>• Determine priorities for acquisitions based on this comparison</li><li>• Separate other programs as “desirable,” resources permitting</li><li>• Enforce funding for priorities annually; measure success against the plan</li></ul>

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## Buy the Right Way: Ensure Individual Programs Are Executable

Once DOD has prioritized capabilities, it should work vigorously to make sure each new program is executable before the acquisition begins. This is the “little a.” More specifically, this means assuring requirements are clearly defined and achievable given available resources and that all alternatives have been considered. System requirements should be agreed

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<sup>7</sup>GAO, *Best Practices: Better Support of Weapon System Program Managers Needed to Improve Outcomes*, [GAO-06-110](#) (Washington, D.C.: Nov. 30, 2005).

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to by Service Acquisition Executives as well as Combatant Commanders. Once programs begin, requirements should not change without assessing their potential disruption to the program and assuring that they can be accommodated within time and funding constraints. In addition, DOD should prove that technologies can work as intended before including them in acquisition programs. This generally requires a prototype to be tested in an operational environment. More ambitious technology development efforts should be assigned to the science and technology community until they are ready to be added to future generations of the product. DOD should also require the use of independent cost estimates as a basis for budgeting funds. Our work over the past 10 years has consistently shown when these basic steps are taken, programs are better positioned to be executed within cost and schedule.

To further ensure that programs are executable, DOD should pursue an evolutionary path toward meeting user needs rather than attempting to satisfy all needs in a single step. This approach has been consistently used by successful commercial companies we have visited over the past decade because it provides program managers with more achievable requirements, which, in turn, would facilitate shorter cycle times. With shorter cycle times, the companies we have studied have also been able to assure that program managers and senior leaders stay with programs throughout the duration of a program. DOD has policies that encourage evolutionary development, but programs often favor pursuing more exotic solutions that will attract funds and support.

Lastly, to keep programs executable, DOD should demand that all go/no-go decisions be based on quantifiable data and demonstrable knowledge. These data should cover critical program facets such as cost, schedule, technology readiness, design readiness, production readiness, and relationships with suppliers. Development should not be allowed to proceed until certain thresholds are met, for example, a high percentage of engineering drawings completed at critical design review. DOD's current policies encourage these sorts of metrics to be used as a basis for decision making, but they do not demand it. DOD should also place boundaries on time allowed for specific phases of development and production.

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**Table 2: Steps That Can Be Taken for Making Sure Programs are Executable**

Who	Military services and joint developers with support from USD AT&L
Action	<ul style="list-style-type: none"><li>• Keep technology discovery/invention out of acquisition programs</li><li>• Follow an incremental path toward meeting user needs; assure all alternatives are considered</li><li>• Ensure system requirements are agreed to by service acquisition executives and warfighters and that no additional requirements are added during execution unless they are fully resourced</li><li>• Use systems engineering to close gaps between requirements and resources prior to launching the development process</li><li>• Require the use of independent cost estimates as a basis for budgeting funds; update cost estimates annually and track against the original baseline estimate</li><li>• Use earned value data at each systems engineering technical review in order to track program progress against original baseline estimates</li><li>• Use quantifiable data and demonstrable knowledge to make decisions to move to next phases</li><li>• Employ additional management reviews when deviations of cost or schedule exceed a certain level (e.g. 10 percent) against baseline estimates.</li><li>• Place boundaries on time allowed for specific phases of development</li></ul>

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## Hold People Accountable

To strengthen accountability, DOD will need to clearly delineate responsibilities among those who have a role in deciding what to buy as well as those who have role in executing, revising, and terminating programs. Within this context, rewards and incentives will need to be altered so that success can be viewed as delivering needed capability at the right price and the right time, rather than attracting and retaining support for numerous new and ongoing programs. After all, given our current and projected fiscal imbalances, every dollar spent on a want today may not be available for an important need tomorrow. To enable accountability to be exercised at the program level, DOD will also need to (1) match program manager tenure with development or the delivery of a product; (2) tailor career paths and performance management systems to incentivize longer tenures; (3) strengthen training and career paths as needed to ensure program managers have the right qualifications for run the programs they are assigned to; (4) empower program managers to execute their programs, including an examination of whether and how much additional authority can be provided over funding, staffing, and approving requirements proposed after the start of a program; and (5) develop and provide automated tools to enhance management and

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oversight as well as to reduce the time required to prepare status information.

DOD also should hold contractors accountable for results. As we have recently recommended, this means structuring contracts so that incentives actually motivate contractors to achieve desired acquisition outcomes and withholding award fees when those goals are not met. In addition, DOD should collect data that will enable it to continually assess its progress in this regard.

**Table 3: Steps That Can Be Taken to Instill Accountability**

<b>Who</b>	<b>The Secretary of Defense and military service secretaries</b>
Actions	<ul style="list-style-type: none"><li>• Make it clear who is accountable on a program for what, including program managers, their leaders, stakeholders, and contractors</li><li>• Hold people accountable when these responsibilities are not met</li><li>• Require program managers and others, as appropriate, to stay with programs until a product is delivered or for system design and demonstration</li><li>• Empower program managers to execute their programs so that they can be accountable; strengthen training and career paths as needed to ensure that qualified program managers are being assigned</li><li>• Improve the use of award fees in order to hold contractors accountable</li></ul>

In closing, the past year has seen several defense reviews that include new proposed approaches to improve the way DOD buys weapons. These reviews contain many constructive ideas. If they are to produce better results, however, they must heed the lessons taught—but perhaps not learned—by acquisition history. Specifically, DOD must separate needs from wants in the context of the nation’s greater fiscal challenges. Policy must also be manifested in decisions on individual programs or reform will be blunted. DOD’s current acquisition policy is a case in point. The policy supports a knowledge-based, evolutionary approach to acquiring new weapons. The practice—decisions made on individual programs—sacrifices knowledge and executability in favor of revolutionary solutions. It’s time to challenge such solutions. Reform will not be real unless each weapons system is shown to be both a worthwhile investment and an executable program. Otherwise, we will continue to start more programs than we can finish, produce less capability for more money, and create the next set of case studies for future defense reform reviews.

Mr. Chairman and Members of the Committee, this concludes my statement. I will be happy to take any questions.

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## Scope and Methodology

In preparing for this testimony, we relied on previously issued GAO reports and analyzed recent acquisition reform studies from various organizations. We conducted our review between March 20 and April 5, 2006, in accordance with generally accepted government auditing standards.

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