

United States Government Accountability Office

Report to the Committee on Armed Services, U.S. Senate

April 2010

WARFIGHTER SUPPORT

Improvements to DOD's Urgent Needs Processes Would Enhance Oversight and Expedite Efforts to Meet Critical Warfighter Needs





Highlights of GAO-10-460, a report to the Committee on Armed Services, U.S. Senate

Why GAO Did This Study

Forces in Iraq and Afghanistan have faced rapidly changing threats to mission failure or loss of life. highlighting the Department of Defense's (DOD) need to develop and field new capabilities more quickly than its usual acquisition procedures allow. Since 2006, Congress has provided nearly \$16 billion to counter improvised explosive devices alone. GAO and others have reported funding, organizational, acquisition, and oversight issues involving DOD's processes for meeting warfighters' urgent needs. The Senate Armed Services Committee asked GAO to determine 1) the extent to which DOD has a means to assess the effectiveness of its urgent needs processes, and 2) what challenges. if any, have affected the overall responsiveness of DOD's urgent needs processes. To conduct this review GAO looked at three urgent needs processes-joint, Army, and the Marine Corps processesvisited forces overseas that submit urgent needs requests and receive solutions, and conducted 23 case studies.

What GAO Recommends

GAO recommends the Secretary of Defense take nine actions to improve DOD's ability to assess how well its processes are meeting critical warfighter needs, address challenges with training, make decisions about when to use its rapid acquisition authority, and make reprogramming decisions to expedite fielding of solutions. DOD generally concurred with our recommendations and noted actions to be taken.

View GAO-10-460 or key components. For more information, contact William Solis at (202) 512-8365 or solisw@gao.gov.

WARFIGHTER SUPPORT

Improvements to DOD's Urgent Needs Processes Would Enhance Oversight and Expedite Efforts to Meet Critical Warfighter Needs

What GAO Found

Although DOD has taken steps to create urgent needs processes that are more responsive to urgent warfighter requests than traditional acquisition procedures, DOD is unable to fully assess how well the processes address critical deficiencies or to measure the effectiveness of solutions fielded in the theater because it has not established an effective management framework for those processes. GAO found that DOD's guidance for its urgent needs processes is dispersed and outdated. Further, DOD guidance does not clearly define roles and responsibilities for implementing, monitoring, and evaluating all phases of those processes or incorporate all of the expedited acquisition authorities available to acquire joint urgent need solutions. Data systems for the processes lack comprehensive, reliable data for tracking overall results and do not have standards for collecting and managing data. In addition, the joint process does not include a formal method for feedback to inform joint leadership on the performance of solutions. In one case, a solution for a joint request was fielded for 18 months without meeting warfighter needs. In the absence of a management framework for its urgent needs processes, DOD lacks tools to fully assess how well its processes work, manage their performance, ensure efficient use of resources, and make decisions regarding the long-term sustainment of fielded capabilities.

In conducting field work in Iraq as well as 23 case studies, GAO found several challenges that could hinder DOD's ability to rapidly respond to urgent warfighter needs. First, not all personnel involved in the initial development and review of urgent needs documentation receive adequate training. DOD policy states that deploying personnel should receive priority for training and be responsive to the needs of the combatant commander; however, officers responsible for drafting, submitting, and reviewing Army and joint urgent needs requests are not likely to receive such training. Hence, once in theater, they often face difficulties processing the large volume of requests, in a timely manner. Second, in 11 of 23 cases GAO studied, challenges obtaining funding were the primary factor that increased the amount of time needed to field solutions. Funding has not always been available for joint urgent needs in part because the Office of the Secretary of Defense (OSD) has not assigned primary responsibility for implementing the department's rapid acquisition authority. Congress provided OSD with that authority to meet urgent warfighter needs, but OSD has played a reactive rather than proactive role in making decisions about when to invoke it. In addition, DOD can reprogram funds appropriated for other purposes to meet urgent needs requests, but authority for determining when and how to reprogram funds has been delegated to the services and combatant commands. Prior GAO work has shown that strong leadership from OSD over resource control is critical, and midlevel agencies such as the Joint Rapid Acquisition Cell, which is responsible for facilitating urgent needs requests, including funding, cannot guide other agencies at a high enough level to promote effective interagency coordination. Finally, GAO found that attempts to meet urgent needs with immature or complex technologies can result in significant delays.

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United States Government Accountability Office Washington, DC 20548

April 30, 2010

The Honorable Carl Levin Chairman The Honorable John McCain Ranking Member Committee on Armed Services United States Senate

The dynamic nature of the enemy and tactical conditions encountered by forces in Iraq and Afghanistan have prompted the Department of Defense (DOD) to rapidly identify and field new capabilities as quickly as possible in order to prevent mission failure or loss of life. Warfighters have requested new capabilities such as intelligence, surveillance, and reconnaissance technology; technology to counter improvised explosive devices (IED); and command and control equipment for their operations. With the shift in priority for overseas operations from Iraq to Afghanistan—a theater that may pose more complex long-term challenges—deployed or soon-to-deploy units will likely continue to request critical capabilities to help them accomplish their missions. Warfighters currently rely on several processes, such as the Army, Marine Corps, and joint urgent needs processes, to request such critical capabilities.

The Army's urgent needs process was established in 1987 but has been expanded since the beginning of the Global War on Terrorism and currently receives an average of almost 300 requests per month. The Marine Corps established its process in 2003. In 2002, Congress directed the Secretary of Defense to create a process to rapidly meet the urgent needs of combatant commands and the Joint Chiefs of Staff.¹ In 2004, the Office of the Secretary of Defense (OSD) established the Joint Rapid Acquisition Cell (JRAC)² to overcome institutional barriers and provide timely, effective support to facilitate meeting the urgent material and logistics requirements which combatant commanders certify as operationally critical. Until 2008, OSD directed that the JRAC report to the Secretary of Defense, through the Under Secretary of Defense for

¹ The Bob Stump National Defense Authorization Act for Fiscal Year 2003, Pub. L. No. 107-314, Sec. 806 (2002).

² Until November 2004, JRAC was known as the Joint Rapid Action Cell.

Acquisition, Technology and Logistics (AT&L) and the Under Secretary of Defense (Comptroller), for monitoring and tracking joint urgent needs, facilitating the identification and resolution of issues, and providing regular status reports to the Secretary and Deputy Secretary of Defense. Since 2008, the Under Secretary realigned the JRAC within the Office of the Director for Defense Research and Engineering (DDR&E) and the cell resides currently under the Director, Rapid Fielding.

Congress provides funding for joint urgent needs related to countering improvised explosive devices through the Joint Improvised Explosive Device Defeat Organization (JIEDDO), to which it has appropriated nearly \$16 billion through fiscal year 2009. In our prior work, we have raised concerns about JIEDDO's management and operations and found that the organization lacks full visibility over all counter-IED initiatives throughout DOD, faces difficulties with transitioning its counter-IED initiatives to the military services, and lacks criteria for counter-IED training initiatives it will fund which affects its training investment decisions. We have recommended that DOD improve its visibility over all DOD's counter-IED efforts, work with the military services to develop a complete transition plan for initiatives, and define criteria for funding training initiatives.³

The possibility of similar issues involving DOD's process for meeting joint urgent needs that are not necessarily related to IEDs has raised congressional concerns about making similar resource investments in the JRAC at this time. In October 2008, Congress directed DOD to commission a study to assess the effectiveness of the department's processes for the generation of urgent operational need requirements, and the acquisition processes used to fulfill such requirements.⁴ In July 2009, the Defense Science Board issued its report and made several findings regarding organizational, funding, acquisition, and oversight issues. In addition to our work on JIEDDO, we have also reported on challenges in the Army's and Marine Corps' processes to address urgent force protection needs,

³ GAO, Warfighter Support: Actions Needed to Improve Visibility and Coordination of DOD's Counter-Improvised Explosive Device Efforts, GAO-10-95 (Washington, D.C.: Oct. 29, 2009); and Warfighter Support: Challenges Confronting DOD's Ability to Coordinate and Oversee Its Counter-Improvised Explosive Devices Efforts, GAO-10-186T (Washington, D.C.: Oct. 29, 2009).

⁴ Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. No. 110-417, Sec. 801 (2008).

such as truck armor.⁵ Further, we reported on DOD's challenges to field Mine Resistant Ambush Protected (MRAP) vehicles.⁶

In light of Congress' continuing interest in the joint and military services' urgent needs processes to address requests for force protection capabilities, you asked us to review DOD's processes. Our objectives for this review were to determine 1) the extent to which DOD has a means to assess the effectiveness of its urgent needs processes and 2) what challenges, if any, have affected the overall responsiveness of DOD's urgent needs processes.

To conduct this review, we visited forces conducting operations in the U.S. Central Command's theater of operations and gathered information on how they identify, document, and submit urgent needs to their chain of command, and on the fielding and assessment of solutions in the theater. We reviewed existing policy and guidance applicable to joint, Army, and Marine Corps urgent needs processes, and compared them to our standards for internal control in the federal government. We analyzed joint, Army, and Marine Corps data management systems in order to review the data collected on the time frames between decision points and to determine the responsiveness of each process in providing solutions to urgent warfighter needs. While our assessment of databases and systems used to process urgent needs requests showed that some data elements were accurate and supported by sufficient documentation, we found that other items for reporting specific urgent needs requests were incomplete, and not sufficiently reliable for reporting specific results here, or to support accurate, useful management reports related to overall results. As a result, we conducted our own case study reviews to assess DOD's responsiveness to urgent needs for a select sample of requests. We used data elements from the information systems that we had determined were sufficiently reliable to support the selection of case study candidates from the universe of joint, Army, and Marine Corps urgent needs requests. We selected a nonprobability sample of 23 cases—11 joint, 6 Army, and 6 Marine Corps—for review based on criteria that included the variety of

⁵ GAO, Defense Logistics: Several Factors Limited the Production and Installation of Army Truck Armor During Current Wartime Operations, GAO-06-160 (Washington, D.C.: Mar. 22, 2006); and Defense Logistics: Lack of a Synchronized Approach between the Marine Corps and Army Affected the Timely Production and Installation of Marine Corps Truck Armor, GAO-06-274 (Washington, D.C.: June 22, 2006).

⁶ GAO, *Rapid Acquisition of Mine Resistant Ambush Protected Vehicles*, GAO-08-884R (Washington, D.C.: July 15, 2008).

needs, high visibility and priority of the needs, and needs submitted in more than one process. For each case study, we interviewed responsible officials at the appropriate joint or service organizations and collected key documentation related to seven phases of the process we identified: initiation of a request from a warfighting unit, endorsement of a need by theater command, validation by command-level leadership, approval of a solution at the headquarters level, identification and execution of a funding strategy, awarding of a contract, and production and initial fielding of urgent need solutions. We interviewed DOD and military service officials who are responsible for or are participants in the urgent needs processes, and we collected guidance and documentation on each process and the associated milestones and decision points. Although the Navy and Air Force each have their own urgent needs processes, the Army and Marine Corps have been the principle providers of U.S. ground forces conducting operations in Iraq and Afghanistan and their respective processes as well as the joint process have received the majority of warfighter urgent needs requests. Therefore, we have focused our review on those three processes. We conducted this performance audit from June 2008 through March 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

DOD has taken steps to create urgent needs processes that are more responsive to urgent warfighter requests than its traditional acquisition procedures but is unable to fully assess how well the urgent needs processes are addressing critical deficiencies or to measure the effectiveness of solutions fielded in the theater because it has not established an effective management framework for those processes. GAO's *Standards for Internal Control in the Federal Government* provide a framework for managing agencies' operations through detailed policies, procedures, and practices capable of offering reasonable assurance that the objectives of the agency are being achieved.⁷ While DOD has developed policies and procedures to implement its urgent needs processes, DOD's guidance is fragmented and outdated. The Secretary of

⁷ GAO, Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

Defense, the Deputy Secretary of Defense, the Under Secretary of Defense (AT&L), and the Joint Chiefs of Staff have each issued guidance providing policies and procedures related to urgent needs processes. However, the guidance has not been updated since its creation, although significant changes in the urgent needs process have occurred since the guidance was issued. In addition, we found this guidance lacking in four areas:

- First, guidance for the joint urgent needs process does not clearly define the roles and responsibilities of the OSD, the Joint Chiefs of Staff, and the military services in implementing, monitoring, and evaluating all phases of those processes.
- Second, guidance for the joint process does not define or incorporate a statutory rapid acquisition authority that allows the waiver of various laws, policies, directives, and regulations that would impede the rapid acquisition and deployment of some needed equipment.
- Third, guidance for the joint and Army processes does not include standards for collecting and managing data, resulting in data management systems that lack comprehensive, reliable information; are unable to track some key process milestones; and are incapable of producing accurate reports for management review, process improvements, and oversight. Our review of DOD's urgent needs data found that they could not be used to determine when solutions were funded, acquired, or fielded to theater.
- Fourth, the joint urgent needs process does not include a formal method for joint decision makers to receive feedback on how well fielded solutions met urgent needs. Army officials monitor the performance of fielded solutions in response to its warfighters' urgent need requests—including those joint urgent needs that the Army sponsors—and the Marine Corps is also working to establish a similar process. While the Army makes its information available to joint decision makers, the information is Army-centric and does not provide DOD, JRAC, or Joint Chiefs of Staff with feedback assessing the extent to which the solutions met the joint urgent needs in the theater. In one case, DOD fielded a solution to a joint need for an airborne counter-improvised explosive device, Angel Fire, for more than 18 months, although it did not meet the warfighters' needs.

In addition, we found that DOD's acquisition policy makes no reference to urgent needs or how program managers should respond to these needs. Finally, the Army has issued updated guidance for its urgent needs process that provides more detail regarding roles and responsibilities, but the Army lacks standard operating procedures for its headquarters officials to follow when processing urgent needs requests, and does not distinguish how different types of requests for solutions should be processed. Because DOD lacks comprehensive and updated guidance for its urgent needs processes, it does not have the tools it needs to fully assess how well its processes are working to address critical warfighter needs, to manage their performance, to ensure the efficient use of resources, and to make decisions regarding the long-term sustainment of a fielded combatant command capability.

In conducting field work in Iraq as well as 23 case studies, we found that with the exception of one system all the solutions to our case studies were fielded within 2 years of being endorsed by a theater command. However, we identified several challenges that hinder DOD's ability to respond to urgent warfighter needs as quickly as possible.

- First, not all personnel involved in the initial development and review of urgent needs documentation receive adequate training, which can extend the amount of time required to draft and submit urgent needs requests, thereby extending the initiation phases of the joint and Army processes. The Strategic Plan for Transforming DOD Training states that deploying personnel should receive priority for training and be responsive to the needs of the Combatant Commanders across the full spectrum of operations.⁸ We found that while the Army requires selected officers to attend training on how to address requirements and identify resources for Army forces, officers at the brigade level responsible for drafting and submitting Army and joint urgent needs requests and those at the division level responsible for reviewing the requests prior to submission for headquarters approval are not likely to receive such training. As a result, once in theater, Army officers often face difficulties drafting, submitting, and reviewing the volume of urgent needs requests, which, according to Army officials, can be over 200 per month.
- Second, funding has not always been available when needed to acquire and field solutions to joint urgent needs in part because OSD has not given any one organization primary responsibility for determining when to implement the department's statutory rapid acquisition authority or

⁸ Office of the Under Secretary of Defense (Personnel and Readiness), *Strategic Plan for Transforming DOD Training* (Feb. 5, 2009).

to execute timely funding decisions. Our prior work has demonstrated that strong leadership from OSD over resource control is critical to overcoming the deeply entrenched nature of the department's financial management challenges.⁹ In 11 of our 23 case studies—7 joint, 3 Army, and 1 Marine Corps—obtaining funding was a challenge that increased the amount of time needed to field solutions to the theater. In a representative case, an effort to field urgently needed communications equipment to warfighters in Afghanistan took 474 days—of which 131 days elapsed while JRAC resolved which service would fund the solution. Congress provided OSD with a rapid acquisition authority specifically for funding solutions to urgent needs, but OSD has used this authority only four times since fiscal year 2005. OSD's guidance for implementing the authority puts it in the position of responding to requests from DOD components, and JRAC officials told us that the services have shown little interest in requesting that OSD use the authority, effectively taking OSD out of the decision-making process. As a result, OSD may not have used its rapid acquisition authority to satisfy as many urgent needs as it otherwise could have. In addition to its rapid acquisition authority, OSD has the authority to reprogram funds for purposes other than those specified by Congress at the time of the appropriation, within certain dollar thresholds. However, in the absence of a high-level authority with primary responsibility for executing such reprogramming or transfer decisions, JRAC has faced challenges consistently securing cooperation from the services or other components to make funds available to field joint urgent needs. Our prior work has cited the establishment of a senior executive council as a best practice to facilitate leadership over decision making and conflict resolution.¹⁰ Without a departmentwide approach to addressing its funding challenges, DOD will continue to struggle to field timely solutions to problems that create risk to warfighter lives or mission failure.

Finally, we found that attempts to meet urgent needs with immature technologies or with solutions that are technologically complex can lead to longer time frames for fielding solutions to urgent needs. For example, the Combined Joint Task Force–82 in Afghanistan endorsed a request in

⁹ GAO, Defense Infrastructure: High-Level Leadership Needed to Help Communities Address Challenges Caused by DOD-Related Growth, GAO-08-665 (Washington, D.C.: June 17, 2008).

¹⁰ GAO, Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations, GAO-03-669 (Washington, D.C.: July 2003).

October 2007 for a mounted explosive device detection system capable of detecting devices that were buried underground. However, 435 days passed before JIEDDO began initially fielding a solution because additional time was required to develop the experimental Husky Mounted Detection System. As with other roles and responsibilities we noted above, DOD guidance is unclear about who is responsible for determining whether technologically complex solutions fall within the scope of DOD's urgent needs processes.

To help ensure that DOD's urgent needs processes achieve their objectives and are managed effectively, we are making six recommendations for OSD, together with the Joint Chiefs of Staff and the military services, to improve guidance, data management, and feedback mechanisms. To address challenges at the initiation phase of the services' and joint urgent needs processes, we are also making a recommendation for the Army to update its training regimen for officers who initiate and review urgent needs requests. Finally, to more rapidly fund and field responses to urgent needs request, we are making two additional recommendations for OSD to designate an entity with primary responsibility for recommending use of OSD's rapid acquisition authority and to establish an executive council to make timely funding decisions on urgent need requests. In written comments on a draft of this report, DOD concurred with four of our recommendations and partially concurred with five other recommendations. DOD's comments are reprinted in appendix III.

Background

DOD's Established System for Weapon System Acquisition	DOD's strategy for planning, executing, and funding its weapon system acquisition programs relies on three principal decision-making systems. First, the Joint Capabilities Integration and Development System (JCIDS) is a requirements system used to assess gaps in warfighting capabilities and recommend solutions to resolve those gaps. Second, the Defense Acquisition System is used to manage the development and procurement of weapon systems and other equipment. Third, the Planning, Programming, Budgeting, and Execution process is used to allocate resources and is intended to provide a framework from which the department can articulate its strategy; identify force size, structure, and needed equipment; set program priorities; allocate resources to individual programs; and assess program performance. All three of these systems can incur lengthy time frames. For example, the requirements system can take
	an average of up to 10 months to validate a need. The acquisition system

	involves large budgets and generally meets materiel warfighter needs in 2 or more years, with some systems taking decades to develop and procure. The budgeting process is calendar driven, taking nearly 2 years from planning to the beginning of budget execution. We have previously reported on challenges the department faces within each of these systems. ¹¹
DOD Procedures for Rapidly Acquiring and Fielding Equipment to the Theater	 Each of the military services has established processes to address urgent warfighter needs. Our review focuses primarily on the following: The Army established its Operational Needs Statement process in 1987 to provide a way for unit commanders to identify urgent needs for new materiel or new capabilities.¹² The Office of the Deputy Chief of Staff G3/5/7 oversees the process. Prior to the wars in Afghanistan and Iraq, the Army received about 20 requests per year. From September 2006 to February 2010 the Army's database shows 6,712 Operational Needs Statements containing 21,864 urgent needs requests that have been or are being processed to support operations in those two theaters. The Army's process supports deployed units, deploying units, and units conducting their assigned missions, and responds to a variety of urgent needs, from new capabilities to shortfalls of existing equipment in theater, to requests for training equipment for mobilizing units in the United States. Operational field commanders also use the Army's process to document the urgent need for a materiel solution to correct a deficiency or to improve a capability that impacts upon mission accomplishment. In September 2006, the Equipment Common Operating Picture, an automated processing tool for Army urgent needs, became operational. This data management tool is a classified, Web-based application for processing urgent needs from the unit submitting the request through all phases of the process. According to the user's guide, the tool was designed to simplify requests, consolidate existing sources of information, and significantly speed the approval process while providing situational awareness to all involved in a request.

¹¹ GAO, *Defense Acquisitions: Charting a Course for Lasting Reform*, GAO-09-663T (Washington, D.C.: Apr. 30, 2009).

¹² Headquarters, Department of the Army, Army Regulation 71-9, *Warfighting Capabilities Determination* (Dec. 28, 2009), in conjunction with several Army memoranda, collectively provide the guidance for the urgent needs process.

 The Marine Corps created its Urgent Universal Needs Statement process in November 2003 to meet the immediate operational needs of deployed forces or forces preparing to deploy. The Marine Corps Combat Development Command oversees this process. The command establishes guidance and direction, and provides oversight to ensure solutions are effectively and efficiently delivered to the warfighter.¹³ The Marine Corps received 574 requests through the process between December 2001 and November 2009. In August 2007, the Marine Corps' Virtual Universal Urgent Needs Statement data management system for processing urgent needs requests became operational. The Corps developed this system as a result of a Lean Six Sigma continuous improvement initiative to replace the manually updated Combat Development Tracking System.

In addition to the military services' urgent needs processes. The Bob Stump National Defense Authorization Act for Fiscal Year 2003 (the Fiscal Year 2003 NDAA) directed the Secretary of Defense to create a process to rapidly meet the urgent needs of combatant commands and the Joint Chiefs of Staff. Specifically, Section 806 of the act required the Secretary of Defense to prescribe procedures for the rapid acquisition and deployment of items that are currently under development by DOD or available from the commercial sector, and that are urgently needed to react to an enemy threat or to respond to significant and urgent safety situations.¹⁴ According to the legislation, the procedures should include a process for demonstrating, rapidly acquiring, and deploying items that meet the needs communicated by the combatant commanders and the Joint Chiefs of Staff. In September 2004, the Deputy Secretary of Defense directed the Under Secretary of Defense (AT&L) and the Under Secretary of Defense (Comptroller) to create the Joint Rapid Action Cell (JRAC), later renamed the Joint Rapid Acquisition Cell, to facilitate meeting the urgent material and logistics requirements which combatant commanders certify as operationally critical. Subsequently, in November 2004, the Deputy Secretary of Defense provided guidance on the procedures, roles, and responsibilities of the JRAC and on the identification and validation of urgent operational needs. The Deputy Secretary's memo defines urgent operational needs as urgent, combatant commander-prioritized

¹³ The most recent guidance for the process can be found in the Department of the Navy, Marine Corps Order 3900.17, *The Marine Corps Urgent Needs Process (UNP) and the Urgent Universal Need Statement (Urgent UNS)* (Oct. 17, 2008).

¹⁴ Pub. L. No. 107-314, Sec. 806(a) (2002).

operational needs that, if left unfilled, could result in loss of life and/or prevent the successful completion of a near-term military mission. The memo defines immediate warfighter needs as urgent operational needs requiring a timely materiel or nonmateriel solution in 120 days or less that, if left unfilled, could result in loss of life and/or prevent the successful completion of a near-term military mission. An executive director leads JRAC and reports to the Director, Rapid Fielding, within DDR&E and under the Office of the Under Secretary of Defense (AT&L). JRAC's Core Group consists of full-time professional staff and part-time senior executives and military officers from the offices of the Under Secretary of Defense (Comptroller), DOD General Counsel, and Chairman of the Joint Chiefs of Staff. An Advisory Group supports the Core Group and includes pertinent Under or Assistant Secretaries based on the specific need.

Just weeks before the Deputy Secretary issued the November 2004 guidance, the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (the Fiscal Year 2005 NDAA) was enacted. ¹⁵ It amended section 806 of the Fiscal Year 2003 NDAA by providing the Secretary of Defense with a rapid acquisition authority to respond to combat emergencies. Under that authority, when the Secretary of Defense, without delegation, determines in writing that equipment is urgently needed to eliminate a combat capability deficiency that has resulted in combat fatalities, the Secretary is to use procedures developed under this section to accomplish the rapid acquisition and deployment of the needed equipment. The amendment states that whenever the Secretary makes the above determination, the Secretary shall designate a senior official to ensure that the needed equipment is acquired and deployed as quickly as possible, with a goal of awarding a contract within 15 days. Also, under the amendment, the Secretary is to authorize the senior official to waive certain provisions of law, policy, directive, or regulation that would unnecessarily impede the rapid acquisition and deployment of the needed equipment.¹⁶ The amendment also stated the "authority of this section may not be used to acquire equipment in an amount aggregating more than \$100,000,000 during any fiscal year." In addition, the amendment stated that "[f]or acquisitions of equipment under this section during the fiscal

¹⁵ Pub. L. No. 108-375, Sec. 811 (2004).

¹⁶ The senior official would be authorized to waive any provision of law, policy, directive, or regulation addressing (a) the establishment of the requirement for the equipment; (b) the research, development, test, and evaluation of the equipment; or (c) the solicitation and selection of sources, and the award of the contract for the procurement of the equipment.

year in which the Secretary makes the determination [that equipment is urgently needed to eliminate a combat capability deficiency that has resulted in combat fatalities] with respect to such equipment, the Secretary may use any funds available to the Department of Defense for that fiscal year."

The Chairman of the Joint Chiefs of Staff (CJCS) issued an instruction in July 2005 establishing policy and procedures to facilitate the assessment, validation, sourcing, resourcing, and fielding of operationally driven urgent, combatant command needs during the same fiscal year that a request is made.¹⁷ According to the instruction, combatant commanders involved in ongoing operations identify joint urgent needs as life- or combat mission-threatening needs based on unforeseen military requirements that must be resolved in days, weeks, or months. Under the instruction, a joint urgent need must be considered inherently joint in nature; for example, the need is theaterwide and/or spans multiple military services. Joint urgent needs must also fall outside of DOD's established guidance for weapon systems acquisition and the military services' established urgent operational needs processes. JRAC has applied its guidance to process joint urgent needs meeting these criteria. The instruction delegates shared oversight responsibility of the process to the Joint Staff J-8 Director for Force Structure, Resources and Assessment; the Under Secretary of Defense (Comptroller) Deputy Comptroller for Program and Budget; and JRAC within the Office of the Under Secretary of Defense (AT&L). Data for joint urgent needs are managed through the CENTCOM Requirements Information Manager database system, which the command added to a preexisting Web site it managed in 2005. The database includes 283 joint urgent needs requests from August 2004 through February 2010.

Urgent Needs Requests Across DOD Progress Through Similar Decision Points

The Army, Marine Corps, and joint urgent needs processes have some distinctions in guidance, terminology, and data systems; however they share similar decision points. Although each of these urgent needs processes is distinct, we identified seven broad phases that we used to track the progression of each request over time and to compare performance across the Army's Operational Needs Statement process, the

¹⁷ Chairman of the Joint Chiefs of Staff Instruction 3470.01, *Rapid Validation and Resourcing of Joint Urgent Operational Needs (JUONS) In The Year of Execution* (July 15, 2005).

Marine Corps' Urgent Universal Needs Statement process, and the Joint Urgent Operational Needs processes. These phases are: initiation, theater endorsement, command validation, headquarters approval, funding, contract award, and initial fielding. Urgent needs requests that result in fielded solutions typically move through the process as follows:

- Initiation: Any of the three urgent needs processes can begin when either a warfighter in the theater of operations or an official at the theaterwide or combatant command level identifies a need and an officer with a rank of Colonel or higher submits the request into the relevant Army, Marine Corps, or joint process. The request could be for either a known, specific piece of equipment or for an unknown materiel or nonmateriel solution based on a description of a capability gap.
- Theater Endorsement: Theater command leadership reviews, endorses, and forwards a request for component or combatant command validation. For example, a joint urgent needs request from a warfighter in Iraq would be reviewed and endorsed by the theater commands such as Multi National Force-West, Multi-National Corps-Iraq, or Multi National Force-Iraq.
- Command Validation: Endorsed urgent needs requests from Iraq or Afghanistan are elevated to the appropriate commandwide leadership—U.S. Central Command, U.S. Army Forces Central, or U.S. Marine Corps Central Command— for validation or rejection.
- Headquarters Approval: Validated Army urgent needs requests are sent to the Office of the Deputy Chief of Staff for the Army G3/5/7 directorate, while Marine Corps urgent needs are sent to the Marine Corps Requirements Oversight Council for its headquarters approval. The combatant commander sends joint urgent needs to the Joint Chiefs of Staff, who send the need to JRAC concurrently in order to alert it of the impending request. Upon headquarters approval, JRAC assigns the requests for capabilities related to countering improvised explosive devices to JIEDDO. For all other joint urgent needs, JRAC designates a military service to sponsor the procurement and fielding of a solution.
- Funding: The military service or joint sponsor applies funds to the program office to begin the procurement of approved solutions. When funds are not already available, the services may obtain funding for an urgent need through the annual budget process, by reprogramming funds from other programs during the current fiscal year, or by requesting the Secretary of Defense to invoke the department's rapid acquisition authority. For joint urgent needs requests, JRAC may assist

	 in identifying available funding as needed. In previous years, sponsors have also requested funding for urgent needs through the wartime supplemental appropriation. Contract Award: The appropriate military service or joint program office develops and executes an acquisition strategy in order to procut the solution. Among other options, a new contract may be awarded using competitive procedures or as a sole source, as provided in the 	
	using competitive procedures or as a sole source, as provided in the Federal Acquisition Regulation (FAR), or an existing contract could be amended or modified. ¹⁸ The rapid acquisition authority may be available for the acquisition and deployment of some equipment.	
	• Production and Initial Fielding: The program office manages the production and fielding of solutions to the theater. Some solutions may be readily available from current DOD inventory or from commercial vendors, while others may require modifications to existing equipment or substantial efforts to research, develop, and produce new technologies.	
	Combatant commanders have sometimes made strategic or tactical changes that eliminate the need for a solution. Also, an urgent needs request could be addressed by existing equipment that was previously unavailable until changes in the combatant commander's plans and priorities resulted in the availability of the equipment in the theater. In addition, a joint urgent needs request that meets the criteria of another urgent needs process may be rerouted; for example, counter-IED capability gaps may be redirected to JIEDDO for resolution.	
Funding For Urgent Needs Was Formerly Made Available Through the Iraq Freedom Fund	Beginning in fiscal year 2003, Congress began appropriating funds to the Iraq Freedom Fund. ¹⁹ Over 4 years, from fiscal year 2005 to fiscal year 2008, OSD provided approximately \$442.54 million from the Iraq Freedom Fund to DOD components seeking to fund solutions to joint urgent needs, as shown in table 1.	

¹⁸ FAR Subpart 6.3.

¹⁹ The Iraq Freedom Fund was a Department of Defense account providing funds for "additional expenses for ongoing military operations in Iraq, and those operations authorized by Pub. L. No. 107-40 (2001)." Pub. L. No. 108-11 (2003).

Table 1: Iraq Freedom Funds Used to Fund Joint Urgent Need Solutions, Fiscal Years 2005 through 2009

Dollars in million							
Fiscal year	2005	2006	2007	2008	2009	2010	Total
Iraq Freedom Funds	\$157.08	\$115.66	\$136.60	\$ 33.20	\$ 0	\$ 0	\$442.54

Source: Joint Rapid Acquisition Cell.

In fiscal years 2005-2008, JRAC administered funds appropriated to the Iraq Freedom Fund to assist sponsors in funding solutions to 31, or about 30 percent of an estimated 102 approved joint urgent needs not related to countering improvised explosive devices.²⁰ Beginning in fiscal year 2008, funding for joint urgent needs began to decline from less than \$34 million to nothing in fiscal years 2009 and 2010. When funds are not provided by one of the services or other DOD components, after the department's annual budget has been approved, OSD can fund urgent needs, among other ways, by invoking the rapid acquisition authority granted by Congress and/or by utilizing the department's existing authority to reprogram or transfer.

DOD's Urgent Needs Processes Provide Solutions to Emerging Battlefield Threats but DOD Is Unable to Fully Assess the Effectiveness of Those Processes or of Fielded Solutions Although DOD has taken steps to create urgent needs processes that are more responsive to urgent warfighter requests than its traditional acquisition procedures, DOD is unable to fully assess how well the urgent needs processes are addressing critical deficiencies or to measure the effectiveness of solutions fielded in the theater because it has not established an effective management framework for those processes. GAO's *Standards for Internal Control in the Federal Government* provides a general framework for management control of agencies' operations. ²¹ In implementing this framework, management is responsible for developing detailed policies, procedures, and practices to fit their agency's operations and to ensure that those controls are built into and are an integral part of operations. Internal control, which is synonymous with management control, helps government program managers achieve desired results. However, we found that DOD's guidance for its joint

²⁰ JRAC forwards to JIEDDO approved countering improvised explosive devices joint urgent needs that fall within JIEDDO's rule set for accepting joint urgent needs, as outlined in JIEDDOI 5000.1, *Joint Improvised Explosive Device Defeat (JIEDD) Capability* Approval and Management Process (JCAAMP) (Nov. 9, 2007).

²¹ GAO, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

	urgent needs processes is fragmented and outdated, in addition to lacking other important internal controls. As a result, the department does not have the tools it needs to fully assess how well its processes are working to address critical warfighter needs, to manage their performance, to ensure the efficient use of resources, and to make decisions regarding the long-term sustainment of a fielded combatant command capability.
DOD's Guidance for the Joint Urgent Needs Process Is Fragmented and Outdated	Existing guidance for the joint urgent needs process is fragmented among several documents and is outdated, which is inconsistent with federal internal control standards that prescribe the establishment of a clearly defined organizational structure that provides a framework to achieve agency objectives. We found that guidance for DOD's urgent needs processes is widely dispersed among several memoranda from the Secretary of Defense, the Deputy Secretary of Defense, and the Under Secretary of Defense (AT&L), and an instruction from the Chairman of the Joint Chiefs of Staff. For example, OSD's guidance describing how joint urgent needs should be processed is contained in memoranda issued in September and November 2004, and March 2005. In addition, the Chairman of the Joint Chiefs of Staff issued an instruction in July 2005 establishing the policies and procedures for warfighters in the theater and combatant commanders to identify, review, and approve joint urgent needs. ²² As a result, the guidance does not frame a cohesive common operating picture that explains how the process should function.
	JRAC. However, OSD has not released additional guidance or amended the current guidance to address this provision, and JRAC continues to operate

²² CJCSI 3470.01 (July 15, 2005).

and facilitate the urgent needs process, more than 5 years after the guidance was issued.

According to GAO's Internal Control Management and Evaluation Tool, one of the steps management can take to ensure consistency with internal controls is to periodically evaluate the organization structure and make changes as necessary in response to changing conditions.²³ Neither the November 2004 memo nor the Chairman's instruction have been updated to incorporate guidance regarding how the rapid acquisition authority is to be implemented.²⁴ Among other things, the operational guidance for the joint urgent needs process could delineate for potential requestors the advantages of using the authority, the circumstances under which a request for the use of the authority should be contemplated, what factors might persuade the Secretary that a given request is a good candidate for the use of the authority, as well as how and when the use of waivers would be appropriate under the rapid acquisition authority. This kind of information could be useful to officials assigned the responsibility of processing urgent need requests and finding funds for those requests.

In addition, the Deputy Secretary of Defense memo defines immediate warfighter needs as urgent operational needs requiring a timely solution within 120 days or less. According to JRAC officials, because they have found it difficult to complete all phases of the joint process and field a solution in 120 days, in practice, they have modified this time frame by extending it to between 120 days to 2 years. The modification of this time frame occurred informally, and has not been documented in guidance. Also, it remains unclear whether OSD approval is required to change the time frame or whether authority is delegated to JRAC to make this change, which affects the standard for timeliness in meeting urgent warfighter needs. Additionally, the November 2004 Deputy Secretary of Defense memorandum defines differently the terms urgent operational need and

²³ GAO, Internal Control Management and Evaluation Tool, GAO-01-1008G (Washington, D.C.: August 2001).

²⁴ In a January 25, 2005, memo, the Secretary of Defense notified department components of the existence of rapid acquisition authority. The memo explains that requests for use of the authority should be submitted to JRAC and directs requestors to follow the process and format outlined in the Deputy Secretary of Defense's November 2004 "Meeting Immediate Warfighter Needs" memo. Requestors are left to infer from such direction that they are to submit requests for the use of rapid acquisition authority using the format and following the process for requesting that an urgent operational need or an immediate warfighter need be validated.

	immediate warfighter need. Officials relate that, in practice, there is no longer a distinction between the two and both have been subsumed in the term joint urgent operational need, and are treated as one and the same. JRAC staff completed a Lean Six Sigma study of the joint urgent needs process. According to JRAC officials, they plan to use the findings of that study to guide improvements to the process. However, because this effort is still ongoing, it is unclear to what extent any actions taken as a result of this study will address the issues we have identified. As a result of its current organizational structure and lack of comprehensive, updated guidance, DOD cannot be assured that the objectives of the joint urgent needs process are being achieved as effectively as possible.
DOD's Guidance Does Not Clearly Define Roles and Responsibilities	Urgent needs guidance for the joint process does not clearly define the roles and responsibilities of OSD, the Joint Chiefs of Staff, and the military services in implementing, monitoring, and evaluating all phases. Federal internal control standards call for clearly established areas of authority, responsibility, and appropriate lines of reporting for federal programs. For example, the Chairman of the Joint Chiefs of Staff instruction directed the creation of the Budget Office Director's Board within the Joint Staff to adjudicate funding during the same fiscal year that a request is made for solutions for joint urgent needs. According to the Chairman's instruction, the board is responsible for reviewing and approving recommendations to fund joint urgent needs, and to direct the reprogramming of funding from military services' or agencies' budgets to do so. ²⁵ However, this board has never convened, and JRAC has assumed responsibility for identifying funding to procure solutions to joint needs. The November 2004 Deputy Secretary of Defense memorandum states that the JRAC is to assist in resolving issues impeding the resolution of joint urgent needs, but the memorandum does not give JRAC the authority or responsibility for identifying funding for solutions. Rather, the guidance states that the military services, defense agencies, and combatant commands are responsible for funding solutions.

²⁵ CJCSI 3470.01 (July 15, 2005).

	technology or capability. The instruction further states that the acceleration of a new technology in progress or the minor modification of an existing system to adapt to a new or similar mission is within the scope of solutions to joint urgent needs. However, the November 2004 memorandum that governs the process after the Joint Chiefs of Staff approves the need does not prescribe such a limitation on the scope of solutions. According to JRAC officials, they have nonetheless received approved joint urgent needs where the proposed solutions are currently on hold due to their technological complexity. In the absence of clearly defined roles and responsibilities, the department faces difficulty in ensuring that the joint process is implemented efficiently and effectively and in identifying the appropriate personnel who are accountable for operations, stewardship of resources, and achieving results.
DOD Guidance for the Joint Process Does Not Describe the Rapid Acquisition Authority	With the approval of the Secretary of Defense, military services that sponsor solutions to joint urgent needs may use the rapid acquisition authority to expedite the acquisition and fielding of solutions. However, this authority is not defined or incorporated in DOD's guidance for the joint urgent needs process. Internal control standards cite the importance of policies and procedures that enforce management's directives, and become integral to an agency's accountability for stewardship of government resources and achieving effective results. ²⁶ Once joint urgent needs are approved by the Joint Staff and passed on to JRAC for disposition, JRAC assigns military services to sponsor the acquisition and fielding of solutions to address those needs. Upon the Secretary of Defense's approval, the military services may use the rapid acquisition authority created by the Fiscal Year 2005 NDAA. ²⁷ That legislation states that the Secretary of Defense is to use procedures developed under the authority of that legislation to rapidly acquire and deploy urgently needed equipment to eliminate a combat deficiency that has resulted in combat fatalities and, if necessary, to waive laws, policies, directives, or regulations addressing the solicitation and selection of sources and the award of the contract, in order to rapidly acquire and deploy the equipment. As a result of DOD not including the rapid acquisition authority in its guidance, program managers may not be aware of all procedures available to them for fielding solutions quickly to the theater.

²⁶ GAO, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

 $^{^{\}rm 27}$ Pub. L. No. 107-314, Sec. 806 (2002); Pub. L. No. 108-375, Sec. 811 (2004).

DOD's Guidance for the Urgent Needs Processes Does Not Include Standards for Collecting and Managing Data

The online data management systems of the joint and Army urgent needs processes lack comprehensive, complete, and reliable information on the achievement of key process phases, as well as the ability to generate reports to track key dates and activities because DOD guidance has not established standards for the collection and management of urgent needs data. GAO's Standards for Internal Control cites the significance of accurately documenting events and creating and maintaining records as evidence of the execution of agency activities.²⁸ In addition, those standards call for the proper classification of transactions and events that includes appropriate organization and formatting of information from which reports and statements are prepared. Relevant, reliable, and timely communications and effective information technology management are critical to achieving useful, reliable, and continuous recording and communication of information. However, the milestone data located in the joint and Army databases are often incomplete and unreliable. Although both joint and Army systems generally contain documentation to support completion of milestones at the early phases of the processes such as theater command endorsement and headquarters leadership approval, once a request is delegated to the acquisition community for procurement and fielding, visibility into subsequent actions is largely lost. For example, the joint system rarely contains detailed information and support documentation regarding the funding, contract award, or production and fielding of solutions. Additionally, the Army database does not contain information regarding acquisition milestones following the approval of a funding strategy. As a result, data limitations can prevent managers and decision makers of the urgent needs processes from assessing the overall responsiveness and effectiveness of their processes.

Further, Army policy instructs system managers to close out requests 120 days after the scheduled fielding date if no information regarding actual fielding is received. This may result in the closure of some requests without confirmation of whether or not solutions were actually fielded. Although the joint system contains the most detailed qualitative data of any of the three systems we reviewed, the dates cited for specific milestones do not reflect the dates on which those milestones were achieved, and instead reflect the dates the milestones were recorded in the joint system's electronic record. Consequently, the dates regarding the funding, acquisition, and fielding of solutions are vague or inaccurate, and

²⁸ GAO, Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

	the database usually lacks documentation to support the dates listed. Additionally, the joint and Army systems lack a capability to produce either management summary reports or complete historical information regarding the completion of phases, which prevents DOD from measuring responsiveness over time and initiating process improvements. Furthermore, managers of the Army, Marine Corps, and joint urgent needs processes lack visibility into other urgent needs data systems across the department, which limits their ability to determine if possible solutions to their urgent needs might have already been developed through other processes. Finally, none of the data systems we reviewed include information regarding the effectiveness of fielded solutions. As a result, DOD process managers are unable to identify potentially systemic problems that could otherwise be mitigated by process improvements and updates.
	The Joint Chiefs of Staff and JRAC are exploring information-sharing concepts and data exchange capabilities among DOD's urgent needs data systems with the modification of DOD's Knowledge Management Database System to improve visibility into urgent needs requests across the department. However, these improvements are in the very early stages, and according to DOD officials it is uncertain when these efforts will be completed. Therefore, DOD's urgent needs database systems will continue to lack various characteristics and capabilities that would enable process managers to better assess the performance of their processes in responding to warfighter requests.
DOD's Guidance Does Not Include a Formal Method for Providing Feedback on How Well Fielded Solutions Are Meeting Warfighter Needs	The joint urgent needs process does not include a formal method for joint decision makers to receive feedback on how well fielded solutions have met the urgent needs for which they were requested. The Army assesses the performance of solutions that are fielded through its urgent needs process as well as those solutions from the joint process that the Army sponsors, and the Marine Corps is working to develop a similar performance assessment process. However neither service's assessment process includes a mechanism for providing actionable performance feedback to joint decision makers. Internal control standards emphasize the importance of routine feedback and performance monitoring when assessing process effectiveness, and they direct agencies to assess the quality of performance over time. Such assessments can occur during normal operations and include regular management and supervisory activities.

While the Army makes information from its assessment process available to joint decision makers, the information is narrowly focused on issues specific to Army personnel and processes, and as such does not provide DOD, JRAC, or Joint Chiefs of Staff with feedback assessing the extent to which those solutions met the joint urgent needs of the combatant command or whether given solutions should be sustained for the long term and acquired in the future through DOD's established requirements, budgeting, and acquisition process. We have previously reported that the department's established requirements process, JCIDS, has not met its objectives to identify and prioritize warfighting needs from a joint capability perspective.²⁹ In 2008, we reported that capabilities continue to be driven primarily by the individual services and that DOD may be losing opportunities to improve joint warfighting capabilities. In responding to our 2008 report, DOD stated that identifying and prioritizing joint capabilities occurs through multiple processes within and outside JCIDS, including the joint urgent needs process. However, without a joint warfighter perspective on performance, there is not sufficient information to adequately assess whether a capability should transition to an acquisition program, particularly when the sponsoring service would like to phase out or terminate support of the capability.

Joint Chiefs of Staff officials recognize the need for performance feedback on joint solutions; however, its previous attempt to establish a process for collecting performance feedback was unsuccessful. In 2007, the Joint Chiefs of Staff attempted to craft a feedback loop as part of an update to the Chairman's instruction for joint urgent needs. The draft revision failed to obtain DOD-wide approval and was canceled—in part due to disagreement over the feedback process outlined in the draft instruction. According to Joint Staff and JRAC officials, the combatant commands contended that their resources were focused on planning and managing contingency operations, and that providing feedback was a military service responsibility under Title 10. Conversely, according to officials the military services believed that since solutions addressed joint urgent needs, feedback should be provided by the user, the combatant command. Nevertheless, in 2008, the Joint Staff reinitiated its effort to revise the Chairman's instruction and establish a feedback mechanism for joint urgent needs solutions. The draft revision was in coordination within the department at the time of our report.

²⁹ GAO, Defense Acquisitions: DOD's Requirements Determination Process Has Not Been Effective in Prioritizing Joint Capabilities, GAO-08-1060 (Washington, D.C.: Sept. 2008).

In May 2009, the Deputy Secretary of Defense directed U.S. Central Command to establish a joint requirements liaison office as a pilot program within its Afghanistan joint task force to assist in processing Army and joint urgent needs statements. At the time of our report the program had not begun operations, and it was unclear whether it would collect performance feedback on joint solutions as part of its operations. Without adequate feedback information from the theater that addresses how well fielded solutions address the risks to warfighters and to their missions and whether solutions will be necessary for the future, DOD cannot assess the performance of the joint urgent needs process in meeting immediate and future warfighter needs. Feedback provided by commanders in the field would better enable Joint Staff and military service officials to determine if solutions are effective, and whether they need to be sustained, adopted as a formal acquisition program, or suspended. In one case, DOD fielded a solution to a joint need for an airborne counter-improvised explosive device for more than 18 months, although it did not meet the warfighters' needs. Joint officials stated that the service did not track the operational effectiveness of the solution, called Angel Fire, and failed to provide feedback after initial fielding. The Angel Fire system provided a daytime-only solution, and did not meet the warfighter's request for a 24-hour surveillance capability. The warfighter then rescinded the urgent needs request in December 2008 and the Angel Fire aircraft were scheduled for removal from the theater to the United States. Internal controls prescribe that ongoing monitoring should occur in the course of operations to support timely actions when problems occur or require follow-up. Feedback information can help prevent the inefficient use of resources when participants spend time and funding on a solution that is ineffective.

DOD Has Not Integrated Its Joint Urgent Needs Procedures in its Departmentwide Policies We also found that DOD's acquisition policy makes no reference to urgent needs or how program managers should respond to these needs. The department's acquisition policy is articulated in two principal documents: DoD Directive 5000.01³⁰ which describes management principles and mandatory policies and procedures for managing all acquisition programs, and DoD Instruction 5000.02³¹ which describes the operation of the

³⁰ Department of Defense Directive 5000.01, *The Defense Acquisition System* (Nov. 20, 2007).

³¹ Department of Defense Instruction 5000.02, *Operation of the Defense Acquisition System* (Dec. 8, 2008).

Defense Acquisition System. The Defense Acquisition Guidebook, published by DOD, complements these two policy documents and provides best business practices for the acquisition community. According to the Guidebook, the objective of the Defense Acquisition System is to rapidly acquire quality products that satisfy user needs with measurable improvements to mission capability at a fair and reasonable price, and that the fundamental principles and procedures that the department follows in achieving those objectives are described in DoD Directive 5000.01 and DoD Instruction 5000.02. However, we reviewed these documents and found no discussions about or references to the joint urgent needs process. As a result of DOD's acquisition policy not referencing to urgent needs guidance, program managers may be unaware of the range of options that may be available for responding to urgent warfighter needs and be unable to assess when use of the urgent needs process may be appropriate.

Army Guidance for Its Urgent Needs Process Lacks Several Elements

Until very recently, Army Regulation 71-9, the guidance for force development and materiel requirements that governs the Army urgent needs process, had not been updated, predating Operation Iraqi Freedom and Operation Enduring Freedom. To support these operations, the Army expanded the scope of its urgent needs process in late 2003 beyond providing solutions to address capability gaps identified by the warfighter as an urgent need to including requests for items already available to units deploying for nonstandard missions. For example, an artillery unit deploying as an infantry unit will need fewer howitzers, but will need a greater number of armored vehicles. Other equipment may be necessary for counter-insurgency operations, but these items are not included in the unit's authorized list of equipment known as its Modified Table of Organization and Equipment.

Before the conflicts in Iraq and Afghanistan, Army headquarters staff processed less than 10 urgent needs requests per year, but this figure escalated significantly in the build-up to the invasion of Iraq and has continued to increase to about 290 per month in 2009. The volume of requests and the speed of change have strained the Army's urgent needs process. During our review, we found that Army Regulation 71-9 was ambiguous regarding time frames for approving urgent needs requests, did not sufficiently define roles and responsibilities, and did not sufficiently recognize or distinguish between how urgent needs requests for new warfighter capabilities should be processed from more routine requests for equipment that is readily available. In a 2007 report, the Army Audit Agency also addressed these deficiencies and recommended corrective actions. $^{\scriptscriptstyle 3\!2}$

	The Army issued updated guidance for its urgent needs process on December 28, 2009, as we were completing our report. Headquarters staff now has a goal to provide an "initial response" within 14 days of receiving a request, and in total there is a 120-day goal for reviewing requests, but that goal can be changed to 30 days where "the urgency of warfighter needs dictate a more rapid response." ³³ While the updated guidance does provide more detail regarding roles and responsibilities, the Army still lacks standard operating procedures for Army headquarters officials to follow when processing urgent needs requests. Furthermore, while the updated guidance recognizes the dual use of the urgent needs process to address capability gaps and requests for items already available to units deploying for nonstandard missions, it does not distinguish how these different types of requests for solutions should be processed. Consequently, Army leadership continues to lack a means of assuring that its process is meeting warfighter needs as efficiently and effectively as possible and is consistent with internal control standards.
Challenges Associated with Training and Funding Can Prolong the Fielding of Solutions to Meet Urgent Warfighter Needs	During our field work in Iraq as well as our analysis of 23 urgent needs case studies, we found several challenges that hinder DOD's ability to respond to urgent warfighter needs as quickly as possible. We reviewed the joint, Army, and Marine Corps urgent needs processes across each of their seven phases and found that, with the exception of the Active Denial System, the urgent needs in all of our case studies were met by the initial fielding of solutions within 2 years of theater endorsement—which is within JRAC's modified time frame. The highest potential for extended response times occurred in the initiation and funding phases due to insufficient training, the lack of timely funding decisions, and other factors. Our case study analysis also demonstrated that attempts to meet

³² U.S. Army Audit Agency, Army's Operational Needs Statement Process: Office of the Deputy Chief of Staff, G-3/5/7, Audit Report A-2008-0014-ALA (Alexandria, Va.: Nov. 13, 2007).

³³ The Army Training and Doctrine Command (TRADOC) is required to review all urgent needs requests for implications of needed change to current or future Doctrine, Organization, Training, Materiel, Leadership and education, Personnel and Facilities (DOTMLPF) or policy, with a written response to headquarters staff coordinating the urgent needs request. The 120-day goal applies to headquarters' and TRADOC's review combined, not to providing a definitive response to an urgent needs request.

	urgent needs with immature technologies or with solutions that are technologically complex can lead to longer time frames for fielding solutions to urgent needs.
Not All Personnel Involved in the Urgent Needs Process Receive Adequate Training	Army personnel who utilize the joint and Army urgent needs processes do not receive adequate training on how to select which process to use to request a solution for an urgent need and how to submit and review requests. To acquire needed equipment, units may submit requests for theater-provided equipment or pursue new capabilities through the Army's rapid equipping force process which equips operational commanders with commercial off-the-shelf and existing solutions, or the Army's Tank- automotive and Armaments Command's weapons loan program, in addition to one of the three urgent needs processes. According to Army theater command officials, some warfighters who need to request a critical capability do not know how to select the process most appropriate for their situation, and officers responsible for reviewing and processing the documentation in the theater do not receive adequate training on how the processes should function, which may result in inefficiencies and delays in fielding solutions to critical needs. In addition, the Army has expanded the scope of its urgent needs process beyond the requests for new solutions to address capability gaps, to address equipment shortfalls resulting from units deploying in nonstandard roles. For example, an artillery unit may be deployed to perform a force protection mission, requiring a different mix of equipment than what is authorized to carry out its artillery mission. As we have previously reported, units are currently being deployed in nonstandard roles, and this has caused challenges across the force, in part because deploying units in nonstandard roles often encounter unanticipated equipment needs. ³⁴ According to Army requirements officials, the result has been a dramatic increase in the volume of urgent needs process However the Army has not increased the number of staff available from prewar levels to provide support at headquarters despite the rising volume of requests. With the expansion of the scope of the urgent needs process,
	the Army found an increasing number of invalid requests because users do

³⁴ GAO, *Military Readiness: Joint* Policy Needed to Better Manage the Training and Use of Certain Forces to Meet Operational Demands, GAO-08-670 (Washington, D.C.: May 30, 2008).

not understand what type of equipment can be requested through this process. According to Army requirements officials, about 97 percent of the Army urgent needs statements are requests for the reallocation of equipment already available. They estimated over 557,000 pieces of equipment have been requested through the Army process alone. Further, theater command officials stated that the increased number of requests has also contributed to processing backlogs of urgent needs in theater, when the requests might have been more quickly addressed by theaterprovided equipment or by the weapons loan program. Army officials stated that prior to deployment, replacement personnel are informed that a user's guide and help desk are available for the Army's Equipment Common Operating Picture data system used to process Army urgent needs requests. Theater command officials said uncertainty over how to address needs often results in officers submitting a larger number of urgent needs requests early in a unit's deployment. This uncertainty, combined with confusion regarding the different sources and processes available to address capability gaps or equipment shortfalls, can result in the inefficient use of resources and prolonged amounts of time needed to request and receive critical capabilities.

According to DOD's strategic plan for transforming training, deploying personnel should receive priority for training and be responsive to the needs of the combatant commander across the full spectrum of operations. ³⁵ The prevailing principle of this strategic plan states that no one should experience a task in a real-world operation without having previously experienced that task in training or education. However, during our field work in Iraq we found that the requirements officers who prepare urgent needs requests at the brigade level—where most urgent needs requests originate—are not well trained in the processes.³⁶ Marine Corps officials told us that they provide insufficient predeployment training on preparing and reviewing urgent needs documentation for their own and joint processes, and Army officials told us that Army requirements officers responsible for drafting and submitting urgent needs requests at the brigade level do not receive formal training on these processes prior to

³⁵ Office of the Under Secretary of Defense (Personnel and Readiness), *Strategic Plan for Transforming DOD Training* (Feb. 5, 2009).

³⁶ For purposes of this report, we have used the term "requirements officers" to denote officers at the tactical level who, in addition to their specialized training, are assigned the responsibility for locating equipment and other necessary items, and arranging logistical support for their own tactical-level units such as brigades and/or battalions.

deployment. According to theater command officials, requirements officers deploying overseas must learn the process on the job. Frequent rotations of force management officers at the division level responsible for reviewing brigade-level requests further increase the likelihood of extended time frames for approving urgent needs and fielding solutions, as the already steep learning curve recurs each time a new reviewing official is deployed into the theater. We found that lack of knowledge about how and under what circumstances to prepare an urgent needs request, especially among recently deployed personnel, may cause reviewing officers to initially reject requests. In turn, some reviewing officers, who themselves have not received adequate training, may reject urgent needs applications based on personal preferences. As a result, reviewers may receive multiple resubmissions of requests related to the same urgent need, increasing the overall amount of time needed to field solutions to the theater. Although information that would have allowed us to determine what factors contributed to the time frames for processing urgent needs in the theater was unavailable, in the 13 case studies for which we were able to obtain documentation, we observed that the time between the creation of a joint urgent need document and theater command-level endorsement varied widely from as few as 6 days to as many as 446 days.

Moreover, senior force management officers in theater at the division level or higher who are responsible for reviewing and processing urgent needs requests may have received limited exposure to the urgent needs process as part of force management training. ³⁷ In some cases, force management officers in theater, who are trained in the organization and execution of requirements determination, force structuring, and combat development, are employed in the urgent needs review process either on a part-time or full-time basis. However, the formal urgent needs process training they receive is limited to an hour-and-a-half introductory segment within a 14week course. In addition, officials responsible for the force management training course stated that the course focuses on duties performed in the United States, rather than those that will be required as part of a deployed task force. Further, the division-level training segment on the urgent needs process has only been included in the course since 2005 and officers who

³⁷ For purposes of this report, we have used the term "force management officers" to denote officers at the operations level (as part of a division, task force, or command staff) assigned responsibility for reviewing requests from the tactical level (brigades or battalions) for equipment, other necessary items, and/or logistical support. Force management officers may also generate requests at the operations level and may or may not be officially designated as FA-50 Force Management Officers.

completed the 14-week course prior to 2005 are exempt from repeating it. According to Army training officials, no provision has been made to update force management officers on the urgent needs elements of the course or to train them on the joint urgent needs process. As a result, most force management officers arriving in theater to review and process urgent needs requests at the division level or higher, like their counterparts at the brigade level, must learn about reviewing and processing urgent needs on the job, and likewise this pattern tends to repeat itself with each rotation of new forces to the theater.

The previous commander of the Multi-National Forces-Iraq recognized in 2008 that warfighters in the theater needed assistance in requesting critical capabilities. On September 16, 2008, he wrote a memorandum to the Deputy Secretary of Defense that recommended the establishment of a joint requirements liaison office in theater to assist the warfighter in identifying capability or equipment shortfalls and in preparing Army and joint urgent needs statements. On April 20, 2009, the Deputy Secretary of Defense responded by directing the Commander, U.S. Central Command; in coordination with the Chairman, Joint Chiefs of Staff; Under Secretaries of Defense (for Personnel and Readiness, and Acquisition, Technology, and Logistics); and the Commander, U.S. Forces-Afghanistan, to create a pilot joint requirements liaison program in Afghanistan to assist in the identification of capability and equipment needs via the military services' and joint urgent needs processes. Officials in theater said that these liaison offices would function at the division level or higher; however, since most urgent needs requests are generated at lower levels, the joint requirements liaison office will not eliminate the need to address the lack of training at both the division and brigade levels. We have reported in the past that military personnel have received limited or no training on key operational functions—such as using and managing deployed contractors—as part of their predeployment training or professional military education.³⁸ Similarly, improved training on the appropriate use of the urgent needs process and how to craft urgent needs documentation can improve the overall timeliness of addressing capability gaps and delivering solutions to help ensure that warfighters receive critical capabilities as quickly as possible.

³⁸GAO, Military Operations: High-Level DOD Action Needed to Address Long-standing Problems with Management and Oversight of Contractors Supporting Deployed Forces, GAO-07-145 (Washington, D.C.: Dec. 18, 2006).

Funding Has Not Always Been Available to Field Urgent Needs Solutions in Part Because OSD Has Not Taken Actions to Ensure Timely Funding Decisions

After urgent needs requests have been approved by service headquarters or by the Joint Chiefs of Staff, the funding needed to field solutions to those needs has not always been provided in a timely manner. Although urgent needs can be funded in a variety of ways, the funding phase for some urgent needs requests—through the joint process in particular—is often lengthy. This is due in part because OSD has not designated any one organization with primary responsibility for determining when to implement the department's statutory rapid acquisition authority or to execute other timely funding decisions.

In 11 of our 23 case studies—7 joint, 3 Army, and 1 Marine Corps obtaining funding was a challenge that increased the amount of time needed to field solutions to the theater.³⁹ In a representative example from our case studies (which comprised a nonprobability sample, and thus are not representative of urgent needs requests as a whole), it took 474 days to field communications equipment to warfighters in Afghanistan after the request was endorsed by theater command. During that time, JRAC delayed assigning a sponsor for that joint urgent need for 131 days because it was unable to resolve which service would fund the solution. JRAC officials told us that, although the services and components assigned to sponsor joint urgent needs solutions have never refused to fill that role, assigned sponsors sometimes allow requests to wait—up to 2 years—until the next budget cycle. In one of the more extreme cases we found, it took 509 days for the Army to field a solution to a joint urgent need for mobile explosive scanning equipment. Within that time, the Army took 293 days after the solution was approved by the Joint Chiefs of Staff to reprogram the necessary funding and an additional 4 months to award a contract for the equipment. In another joint case, it took almost a year after theater endorsement to field an aerial surveillance capability known as Angel Fire. Of that time, approximately 5 months was spent awaiting funding—in addition to 2 months the Marine Corps spent pursuing its own funding strategy prior to approval of the joint request. The Marine Corps began efforts to fund Angel Fire in July 2006, with the intent of seeking full funding from JIEDDO. However, a Deputy Secretary of Defense decision prevented JIEDDO from funding the purchase of platforms, such as vehicles or aircraft, so this urgent need request was split into two--\$19.5 million for the development of surveillance sensors and platform

³⁹ As will be discussed later in this report, in 7 of these 11 cases, technical complexity was also a challenge. Technical complexity was the major challenge to DOD's ability to field timely solutions in 7 other cases. For details on all 23 case studies see app. II.

integration submitted through the joint process and approximately \$15 million for aircraft and services through the Marine Corps process. Funding of approximately \$34.5 million was finally arranged in February 2007.

The Deputy Secretary of Defense assigned JRAC the responsibility of helping to resolve issues that could prevent timely and effective warfighting support but did not give JRAC the authority to allocate funding for solutions. As a general rule, JRAC forwards approved solutions aimed at countering IEDs to JIEDDO,⁴⁰ which receives funding through its own direct appropriation.⁴¹ According to JRAC officials, 123 or approximately 55 percent of the estimated 225 joint urgent needs requests it has received since 2004 have been related to IEDs. JRAC delegates the other 45 percent of approved joint solutions for critical needs, such as intelligence surveillance and recognizance, biometerics, communications, and force protection, to the military services, geographic combatant commands such as U.S. Central Command, the U.S. Special Operations Command, or other DOD components who sponsor the funding and fielding of solutions. In addition to the department's annual budget process and congressional appropriations dedicated to efforts to counter IEDs, DOD may rapidly fund non-counter IED joint urgent needs by invoking the rapid acquisition authority granted by Congress, by using the department's authority to reprogram funds except as otherwise precluded by law, or by using any applicable statutory authority to transfer funds from another appropriation. OSD has, however, allowed the military services or other DOD components to make most of the decisions about when to initiate these funding options.

OSD has not frequently used the rapid acquisition authority that Congress made available specifically for rapidly fulfilling warfighters' operational needs. In amending the Fiscal Year 2003 NDAA, the Fiscal Year 2005 NDAA provided the Secretary of Defense a rapid acquisition authority. ⁴² Under this authority, OSD can use any funds available to the Department

OSD Has Not Actively Pursued

the Use of Its Rapid Acquisition

Authority

⁴⁰ Joint IED Defeat Organization Instruction, Joint Improvised Explosive Device Defeat (JIEDD) Capability Approval and Acquisition Management Process (JCAAMP), JIEDDOI 5000.01 (Nov. 9, 2007).

⁴¹ For example, Department of Defense Appropriations Act 2007, Pub. L. No. 109-289, 120 Stat. 1303 (2006); Department of Defense Appropriations Act 2010, Pub. L. No. 111-32, 123 Stat. 1868 (2009).

⁴² Pub. L. No. 108-375, Sec. 811 (2004).

of Defense for that fiscal year to accomplish the rapid acquisition and deployment of equipment that is urgently needed to eliminate a combat capability deficiency that has resulted in combat fatalities.⁴³

Our review of the Secretary of Defense's use of rapid acquisition authority over the past 5 years shows that DOD has used that authority four times to obligate \$170 million for three projects, as shown in table 2. ⁴⁴

Table 2: Urgent Needs Funding through OSD's Rapid Acquisition Authority, 2005-2009

Years	Authority used (in Millions)	Capability	Service sponsor	Source of funding
2005	\$10	Scorpion®	Army	Procurement
2006	18	CREW⁵	Navy	JIEDDO
2007	0			
2008	94	Sky Warrior [°]	Army	Procurement
2009	48	Sky Warrior	Army	Procurement
Total	\$170			

Source: GAO analysis of DOD data.

^aScorpion jammer is a handheld capability that counteracts remote-controlled explosive devices. ^bCounter Remote Control Improvised Explosive Device (RCIED) Electronic Warfare (CREW) systems are electronic jammers designed to prevent the initiation of remote controlled IEDs.

[°]Sky Warrior is an unmanned aerial vehicle with intelligence, surveillance, reconnaissance, and tactical strike capabilities.

OSD plays a reactive, rather than proactive, role in the use of its rapid acquisition authority, while many approved urgent needs requests aimed specifically at preventing combat fatalities wait for funding. Rather than identifying cases eligible for funding through the rapid acquisition authority at a high level, the Office of the Secretary of Defense issued an implementing memorandum for its rapid acquisition authority that directed JRAC to recommend cases for the use of this authority to the Under Secretary of Defense (AT&L), based on requests from the military departments, Joint Chiefs of Staff, Combatant Commands, Under Secretaries of Defense, and other OSD directorates, agencies, and activities. Consequently, the services are in a position to limit the number

⁴³ The authority may not be used to acquire equipment in an amount aggregating more than \$100,000,000 in any fiscal year.

⁴⁴ Rapid acquisition authority was twice used for the Sky Warrior urgent need request.

of funding requests for urgent needs that reach OSD. Moreover, JRAC officials we spoke with said that the services have shown little interest in requesting the use of rapid acquisition authority to begin funding joint urgent needs because the acquisition strategy and funding of existing programs could be disrupted, preferring instead either to reprogram funds themselves or, in most cases, to await funding through DOD's annual budget for overseas contingency operations.⁴⁵ As a result, OSD is effectively taken out of the process of deciding which urgent needs request should be considered for funding through the rapid acquisition authority. As previously noted, obtaining initial funding was the primary challenge to rapidly fielding solutions for 11 of the 23 cases we studied. By not employing its rapid acquisition authority more frequently, OSD may not have enabled the acquisition of as many urgent needs solutions as it otherwise could have.

In a December 2007 action memorandum requesting the support of OSD and the Joint Chiefs of Staff in stabilizing JRAC's leadership, staffing, and funding, the Deputy Commander of U.S. Central Command noted that, at that time—over 2 months into fiscal year 2008—the Command was aware of 38 joint urgent needs from fiscal year 2007 that remained unresolved because of funding shortages. Further, the Deputy Commander predicted that JRAC would be unable to address urgent warfighting needs that had already been submitted or were emerging in fiscal year 2008.

To help resolve funding shortages, the Deputy Commander recommended in 2007 that OSD and the Joint Staff provide JRAC with, among other things, executive leadership and funds to support the combatant commands and the warfighter. Our prior work has demonstrated that, given the long-standing and deeply entrenched nature of the department's financial management challenges, combined with the numerous competing DOD organizations—each operating with varying, often parochial views and incentives—strong leadership from the Secretary of Defense over

⁴⁵ Beginning with the fiscal year 2009 supplemental request in April 2009, the administration now refers to funds for the wars in Iraq and Afghanistan as Overseas Contingency Operations funds instead of Global War on Terrorism funds.

resource control is critical.⁴⁶ Without greater high-level participation in the decision-making process over when to invoke, or not to invoke, its rapid acquisition authority, OSD will continue to play a reactive, rather than proactive, role in the timely use of DOD resources to meet urgent warfighter needs.

Apart from the Secretary's rapid acquisition authority, DOD has a reprogramming authority, but the military services are reluctant to reprogram funds from their respective budgets to fund solutions to joint urgent needs, and OSD has not exercised its authority to do so. The Secretary of Defense-and in some cases the military departments and defense agencies—have the authority to reprogram funds for purposes other than those originally specified by Congress without prior congressional approval as long as the reprogrammed amount remains below established dollar thresholds. Reprogrammed funds may be used to initiate a new procurement program, subprogram, or modification as long as the estimated cost is less than \$20 million for the first 3 years. DOD may also use reprogrammed funds to start a new research, development, testing, and evaluation program, project, or subproject if the estimated cost for the first 3 years is less than \$10 million. In cases where the amount of funding needed exceeds established thresholds, DOD may seek congressional approval. In fiscal year 2009, for example, JRAC-as facilitator of the urgent needs process, including funding-reviewed and worked with Joint Staff, the military services, JIEDDO, and the combatant commands to prioritize urgent needs DOD-wide. This effort resulted in a congressionally approved end-of-year reprogramming action of \$624 million from Army and Defense-Wide Operation and Maintenance accounts that could be reapplied to the Other Procurement, Army procurement account to obtain force protection capabilities for warfighters in Afghanistan.

However, in the absence of a high-level authority with primary responsibility to execute such reprogramming or transfer decisions, JRAC has faced challenges consistently securing cooperation from the services

OSD Has Not Provided Leadership Over Reprogramming Appropriated Funds to Meet Joint Urgent Needs

⁴⁶ GAO, Defense Infrastructure: High-Level Leadership Needed to Help Communities Address Challenges Caused by DOD-Related Growth, GAO-08-665 (Washington, D.C.: June 17, 2008); High Risk Series: An Update, GAO-09-271 (Washington, D.C.: January 2009); Defense Acquisitions: Charting A Course for Lasting Reform, GAO-09-663T (Washington, D.C.: Apr. 30, 2009); and Defense Transformation: Sustaining Progress Requires Continuity of Leadership and an Integrated Approach, GAO-08-462T (Washington, D.C.: Feb. 7, 2008).

or other components to initiate other reprogramming actions to make funds needed to field joint urgent needs available in a timely manner. Military service officials we spoke with said that they are reluctant to use their own funds to initiate acquisition of a joint urgent need without first receiving assurance that funding will be replaced during the next budget cycle. According to those officials, without such assurance, the acquisition strategy of existing programs could be disrupted. Our prior work on interagency collaboration has shown that top-level leadership—such as that provided by OSD and its Deputy or Under Secretaries—is a necessary element for sustaining collaboration among federal agencies, including among DOD components, particularly when effective interagency coordination is needed to better leverage resources. ⁴⁷ This work has also found that midlevel agencies, such as JRAC, can not guide policies at a high enough level to promote effective interagency cooperation.

Although JRAC was initially created with direct reporting responsibility to the Under Secretary of Defense (AT&L), the Under Secretary realigned JRAC in March 2008 to report to the Director of the Rapid Reaction Technology Office, within the Office of the Director for Defense Research and Engineering (DDR&E). In July 2009, JRAC and the Rapid Reaction Technology Office were both realigned under the Director of Rapid Transition to accomplish the responsibilities of DDR&E, which were expanded to include oversight of the Systems Engineering Development Test and Evaluations functions. Currently, the JRAC resides under the Director, Rapid Fielding. According to JRAC officials, the most recent realignment will help the department better anticipate emerging threats and ensure the technology needed to counter urgent threats is mature before the threat fully materializes, as well as improve the synergy between the requirements, acquisition, and research communities. However, JRAC's most difficult challenge, according to its Director, continues to be prioritizing needs and quickly identifying the resources needed to execute a solution, which is the responsibility of the DOD components.

Referring to JRAC as "mission essential" for effective coordination with the services, JIEDDO, and other agencies addressing urgent warfighter needs, the Deputy Commander of U.S. Central Command has called for a

⁴⁷ GAO, *Defense Infra*structure: High-Level Leadership Needed to Help Communities Address Challenges Caused by DOD-Related Growth, GAO-08-665 (Washington, D.C.: June 17, 2008); Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration among *Federal Agencies*, GAO-06-15 (Washington, D.C.: October 2005).

	permanent organizational structure led by a senior leader capable of coordinating, influencing, and directing actions. We and others have found that establishing a senior executive council is a best practice that can provide an implementation team—such as JRAC—access to senior leadership while reinforcing the team's accountability for successfully implementing the program. ⁴⁸ An executive council can set policies, ensure that decisions are made quickly, resolve conflicts that arise, review and approve plans, and monitor and report progress back to top leaders of the organization. Members of such a council, which could include both political and career executives within the organization, would work with the department Secretary, Deputy Secretary, and other high-level appointees to develop a leadership direction and communicate the leadership's position.
	Without a departmentwide approach to addressing its funding challenges, DOD will continue to struggle to field timely solutions to problems that create risk to warfighter lives or mission failure. Further, extended time frames in identifying and securing funding for solutions to joint urgent needs and challenges to JRAC's mission will persist. Conversely, a JRAC with support from an interagency executive council with the means to better leverage funding from across DOD, all under the oversight of top- level DOD officials, would be in an improved position to provide timely solutions to meet the urgent needs of warfighters while assuring effective use of DOD resources.
Technological Immaturity or Complexity of Potential Solutions Can Lead to Longer Response Times	In 14 of 23 case studies we conducted (8 joint, 2 Army, and 4 Marine Corps), technological immaturity or complexity was a factor that led to longer time frames for fielding solutions to urgent needs. In the 8 technologically challenged joint urgent needs cases we found, solutions for 2 requests—both related to the Active Denial System—were never fielded because the capability was technologically immature and could not be adequately sized or adapted for operational use in a wartime environment and under changing theater conditions. Solutions for the remaining 6 technologically challenged joint urgent needs were eventually fielded, but the average response time from theater endorsement to fielding ranged from 320 to 497 days with an average of 393 days. In one of the more protracted cases, the Combined Joint Task Force–82 in

⁴⁸ GAO, Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations, GAO-03-669 (Washington, D.C.: July 2003).

Afghanistan endorsed a request on October 20, 2007, for an improvised explosive device detection system capable of detecting devices that were buried underground. However, following JRAC's request that JIEDDO accept responsibility for providing a solution, 497 days passed before JIEDDO began initially fielding a solution because additional time was required to develop the experimental Husky Mounted Detection System. In a recent DOD Inspector General report, the Inspector General determined that JIEDDO decided to produce the system in large numbers before determining its operational effectiveness and suitability.⁴⁹ Nevertheless, while these cases exceeded the original 120-day fielding target expressed in both Joint Chiefs of Staff and OSD guidance, they fall within the 2-year time frame used by JRAC and the Joint Chiefs of Staff.

Guidance for the Army process does not address the technological complexity or maturity of a potential solution to an urgent need. Guidance for the Marine Corps process states that capability gaps and solutions to urgent needs are not restricted to commercially available equipment or technologies and may require the rapid development of new capabilities. Conversely, when Congress directed the Secretary of Defense to prescribe procedures for the rapid acquisition and deployment of urgently needed items in the Fiscal Year 2003 NDAA, it specified that those items should be either currently under development by DOD or already available from the commercial sector. Further, DOD guidance on the scope of its joint urgent needs process states that urgent operational solutions should not involve the development of a new technology or capability. However, the acceleration of an Advanced Concept Technology Demonstration or the minor modification of an existing system to adapt to a new or similar mission is within the scope of the joint process.⁵⁰

According to JRAC and military service sponsors for solutions to joint urgent needs, requests are becoming increasingly more technologically complex. As of June 2, 2009, JRAC indicated that approximately 20 joint urgent needs were sufficiently impacted by technological development concerns that their projected fielding date is uncertain. For example, one

⁴⁹ Inspector General, United States Department of Defense, DOD Countermine and Improvised Explosive Device Defeat Systems Contracts – Husky Mounted Detection System, D-2010-032 (Dec. 31, 2009).

⁵⁰ The Advanced Concept Technology Demonstration (ACTD) program was started by DOD as a way to get new technologies that meet critical military needs into the hands of users faster and for less cost. The Advanced Concept Technology Demonstration program is currently known as the "Joint Capabilities Technology Demonstration" program.

urgent need request asked for explosive ordinance disposal suits and helmets equipped with night vision capability. The Multi-National Force Iraq submitted the request in May 2005. Initially, the Army worked with the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflicts to develop a prototype to meet the warfighter's need, but this effort proved unsuccessful. In March 2007, U.S. Central Command consolidated the initial urgent need with two additional urgent needs requests it had received from the theater for bomb suit helmets with night vision capability. In April 2007, the Joint Chiefs of Staff and JRAC validated and approved the urgent need request and assigned it to JIEDDO, which has thus far been unable to develop a successful prototype.

We have reported on the department's success in fielding MRAPs in response to an urgent need, and stated that, among several factors contributing to the success of the program were that 1) DOD kept the requirements simple, clear, and flexible and did not dictate a single acceptable solution, and 2) the department made sure that only mature technologies and stable designs were used by setting a very short and inflexible schedule.⁵¹ In addition, the Defense Science Board reported recently that any rapid response to an urgent need must be based on proven technology and robust manufacturing processes because attempts to squeeze new technology development into an urgent time frame create risks for delays and ultimately may not adequately address an existing capability gap. The board stated in its report that, in order to achieve initial deployment of a solution in weeks or months, technology must be sufficiently mature and likely filled by commercial or government off-theshelf products, or foreign government sources. Further, the board stated that needs that cannot be met with mature technology should be handed to the defense science and technology community as a high priority for further development. Sponsors for joint solutions we spoke with expressed concerns that the maturity of the technology associated with approved urgent needs solutions is often overstated, ultimately requiring further integration, development, and testing before the solutions can be successfully acquired and produced. The board advocated a triage process to differentiate between different urgent needs and determine whether an

⁵¹ GAO, *Defense Acquisitions: Rapid Acquisition of MRAP Vehicles*, GAO-10-155T (Washington, D.C.: Oct. 8, 2009). MRAP production began in February 2007 with one vendor producing 10 vehicles. By March 2008—a little more than a year after the contracts were awarded—6,935 vehicles had been produced.

urgent need should be addressed through expedited acquisition procedures or the department's traditional acquisition system.

Both of the services' processes include procedures for reviewing whether a potential solution that requires the development of a new technology should be sustained for the long term, across the service, as a formal acquisition program. Army and Marine Corps officials involved in their respective urgent needs processes stated that they prefer urgent needs requests that cite capability gaps rather than specific solutions in order to provide the warfighter with flexibility to utilize creative solutions that may be inexpensive and readily available but unknown to the warfighter. CJCSI 3470.01 is unclear about who should be responsible for applying the technological maturity criteria, and based on our case studies it remains unclear who is responsible during the review, endorsement, and approval phases to apply the criteria, remove those urgent needs that fall outside of the scope of the process, and recommend a different approach.⁵² Based on the results of our case studies, we found that attempts to meet urgent needs with technologically complex or immature technologies risk prolonging the fielding of solutions, and could result in fielding a capability too late to effectively address rapidly changing theater conditions. As we state earlier in this report, DOD lacks clearly defined roles and responsibilities for managing DOD's urgent needs processes in general. As a result, the department faces difficulty in ensuring that the joint process is implemented efficiently and effectively and in identifying the appropriate personnel who are accountable for operations, stewardship of resources, and achieving results.

Conclusions

Due to rapidly changing battlefield threats in Iraq and Afghanistan, Congress has recognized DOD's need to be more nimble in its response to warfighter requests for urgently needed capabilities than the department's usual acquisitions process allows. Similarly, DOD's leadership has recognized the importance of rapidly procuring solutions to meet warfighter needs during contingency operations. Although the establishment of the Army, Marine Corps, and joint urgent needs processes improved capabilities available to the warfighter, without

⁵² The instruction states that "they [solutions] should not involve the development of a new technology or capability; however the acceleration of an Advanced Concept Technology Demonstration (ACTD) or minor modification of an existing system to adapt to a new or similar mission is within the scope of the JUON validation and resourcing process." CJCSI 3470.01, Encls. A, para. 3.e. (July 15, 2005).

improvements to the management framework to incorporate additional internal control standards, DOD risks fielding solutions that are either too late to do good or that do not successfully meet warfighter needs. In the absence of consolidated and updated departmentwide guidance permanently establishing its joint urgent needs process, and clearly delineated roles, responsibilities, and authorities of various stakeholders, the department will continue to face challenges implementing the process, monitoring the process to ensure efficiency and effectiveness in each of its phases, and evaluating results. In addition, unless DOD's joint urgent needs guidance and acquisition policy clearly communicate the availability of the rapid acquisition authority that the services and the JRAC can use to meet urgent needs, the services could continue to miss opportunities to quickly field urgently needed solutions to the theater of operations and inadvertently increase costs by unnecessarily prolonging the acquisition process. Furthermore, without more comprehensive, complete, and reliable data that can be used to accurately track and document key process milestones, as well as to create reports for management review, DOD will continue to lack the ability to oversee and track the progress of individual requests or to determine which phases of the process, if any, might need adjustments to prevent unnecessary delays. Finally, a formal mechanism for soliciting and collecting feedback from servicemembers in theater is essential for determining how well fielded solutions are meeting warfighter requests as well as ensuring that the resources invested in the urgent needs process are achieving the desired results.

For the Army, Marine Corps, and joint urgent needs processes, challenges in the initiation and funding phases, in particular, can significantly increase the number of days-or weeks, or months-that elapse between the time a warfighter submits an urgent request and the time a solution is fielded. When the personnel responsible for documenting and reviewing urgent needs requests do not receive needed training before arriving in the theater of operations, they can become guickly overwhelmed by the volume of requests, leading to backlogs, errors, and delays. Unless DOD takes steps to ensure that both unit requirements officers and senior force management officers responsible for processing urgent needs requests receive training on appropriate uses of the service and joint processes, as well as how to craft related documentation, before they arrive in theater, warfighter requests are likely to continue to face delays early in those processes. More consistent predeployment training would be an important step toward ensuring that warfighters receive critical capabilities as quickly as possible. Moreover, in the absence of OSD leadership on recommending when to use the rapid acquisition authority Congress provided the department specifically for the purpose of funding solutions

	to urgent needs, some requests that have been validated as urgent may continue to experience increasing time frames during the funding phase of the process. Until OSD begins to play a proactive, rather than a reactive role in the use of its rapid acquisition authority, urgent requests that have been assigned to one of the services or components for funding are likely to continue to compete with longer-term service programs and, in some cases, wait until the next annual budget process to be funded from the base budget for the next fiscal year. Similarly, without a means to secure cooperation from the services and other DOD components to reprogram and transfer funds to meet joint urgent needs, JRAC will continue to face challenges in providing timely solutions.
Recommendations for Executive Action	 We recommend that the Secretary of Defense take the following nine actions: To improve the department's ability to fully assess how well the urgent needs processes are addressing critical warfighter deficiencies and to measure the effectiveness of solutions fielded in the theater, we recommend that the Secretary of Defense, in conjunction with the Chairman, Joint Chiefs of Staff, combatant commands, military services, and other DOD components, as necessary, take the following actions to permanently establish the joint urgent needs process and to improve consistency with federal internal control standards: Clearly define the roles and responsibilities of the Office of the Secretary of Defense, Joint Chiefs of Staff guidance, to identify who is accountable for implementation, monitoring, and evaluation of all phases of the process—including applying the technological maturity criteria. Include rapid acquisition authority procedures available to officials responsible for meeting joint urgent need requests. Develop and implement standards for accurately tracing and documenting key process milestones such as funding, acquisition, fielding, and assessment, and for updating data management systems to create activity reports to facilitate management review and external oversight of the process. Develop an established, formal feedback mechanism or channel, for the military services to provide feedback to the Joint Chiefs of Staff and JRAC on how well fielded solutions met urgent needs.

To better inform DOD personnel of the options for acquiring capabilities to meet warfighters' needs, we recommend that the Secretary of Defense amend DOD Directive 5000.01 and DOD Instruction 5000.02 to reflect that officials responsible for acquisition of urgently needed equipment may need to consider using joint urgent processes, including rapid acquisition authority.

In addition, we recommend that the Secretary direct the Secretary of the Army to amend the urgent needs process guidance in Army Regulation 71-9 to include distinct performance standards that distinguish how different types of urgent needs, such as nonstandard mission equipment shortages and new capabilities, should be processed, and to develop and implement standard operating procedures for headquarters officials to use when processing urgent needs requests.

To better address training challenges the department faces in preventing process delays and improving its ability to more quickly field solutions to the theater, we recommend that the Secretary of Defense direct the Secretary of the Army to update training procedures to include instruction for unit requirements officers regarding the development of joint and Army urgent need statements in order to ensure that these personnel are prepared to effectively draft urgent requirement documents upon arrival in theater.

To more rapidly field urgent needs solutions aimed at eliminating deficiencies that have resulted in combat fatalities, we recommend that the Secretary of Defense amend its implementing memorandum for the department's rapid acquisition authority to designate an OSD entity, such as the Under Secretary of Defense for AT&L, with primary responsibility for recommending to the Secretary of Defense when to implement the department's statutory rapid acquisition authority—as provided in Pub. L. No. 108-375—as urgent needs are validated by the Joint Staff.

To expedite the funding needed to field approved solutions to joint urgent needs, we recommend that the Secretary of Defense create an executive council to include the Deputy Under Secretary of Defense (Comptroller), the Director of JRAC, the Comptrollers of each of the military services, and other stakeholders as needed, and appoint a chair for the purpose of making timely funding decisions as urgent needs are validated by the Joint Staff.

Agency Comments and Our Evaluation	In written comments on a draft of this report, DOD concurred with four of our recommendations and partially concurred with five other recommendations. Technical comments were provided separately and incorporated as appropriate. The department's written comments are reprinted in appendix III.
	DOD concurred with our recommendation to clearly define roles, responsibilities, and accountability through the issuance of new or updated OSD and Joint Chiefs of Staff guidance. The department stated that it is developing new DOD policy and the Joint Chiefs of Staff is updating the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3470.01 <i>Rapid Validation and Resourcing of Joint Urgent Operational</i> <i>Needs (JUONS) in the Year of Execution</i> , to clearly define roles and responsibilities of all DOD components.
	DOD concurred with our recommendation to include rapid acquisition authority procedures available to officials responsible for meeting joint urgent need requests in the issuance of new or updated OSD and Joint Chiefs of Staff guidance. In its response, the department noted that it is developing additional DOD policy to facilitate the use of rapid acquisition authority and has issued guidance to Service Acquisition Executives to ensure the use of rapid acquisition authority is considered when necessary to address urgent needs. While we agree that the proposed action is a good step towards addressing our recommendation, we also believe, as we recommended, that DOD should include these procedures in the new urgent needs policy it is also developing in order to better inform program managers of all procedures available to them for fielding solutions quickly to the theater and to follow internal control standards that cite the importance of policies and procedures that enforce management's directives and integrate accountability for achieving effective results.
	DOD concurred with our recommendations to develop and implement standards for accurately tracing and documenting key process milestones and for updating data management systems; and to develop an established, formal feedback mechanism or channel for the military services to use. The department stated that it is developing new DOD policy and the Joint Chiefs of Staff is updating the Chairman's instruction to establish requirements for oversight and management of the fulfillment of urgent needs from initiation, operational assessment, fielding, and ultimate disposition. DOD stated further that visibility of actions of the DOD components to fulfill urgent needs is expected to be incorporated into new DOD policy and should improve the ability for OSD to provide oversight of the fulfillment of urgent needs and satisfaction of the warfighter's

requirements. We agree that new and updated policy is a good first step to addressing these deficiencies. However, it is not clear from DOD's response if the updated policies will directly establish standards for collecting accurate data and updating data systems, and include a method for obtaining feedback from the warfighter. Unless these components are part of DOD's revised policies, DOD will still fall short of being able to fully oversee and manage the urgent needs processes and will remain inconsistent with internal control standards.

DOD partially agreed with our recommendation to amend DOD Directive 5000.01 and DOD Instruction 5000.02 to reflect that officials responsible for acquisition of urgently needed equipment may need to consider using joint urgent processes, including rapid acquisition authority. The department noted that it is developing new DOD policy to establish responsibilities for oversight and management of the fulfillment of urgent needs and the utilization of rapid acquisition authority. DOD stated further that this policy development is expected to result in a DOD directive that will be separate from the DOD Directive 5000.01 and DOD Instruction 5000.02. While we agree that DOD's effort to develop new policy for the urgent needs process is a positive step, as stated in our report, the DOD acquisition directive and instruction represent the overarching guidance for the Defense Acquisition System. As such, we continue to believe that these documents should also be amended to better inform program managers of the range of options available to respond to urgent warfighter needs.

DOD partially concurred with our recommendation to amend the Army's urgent needs process guidance in Army Regulation 71-9 to include distinct performance standards that distinguish how different types of urgent needs should be processed, and to develop and implement standard operating procedures. The department stated that, in December 2009, the Army updated its regulation and partially addressed our recommendations. DOD stated further that upon issuance of additional DOD policy and an update to the Chairman's instruction, additional changes to the Army regulation and other DOD components policies may be required. We are aware of the Army's update to its regulation and reviewed it prior to issuance of our draft to DOD. Based on our review, we found that the updated regulation did not address the lack of distinct performance standards and standard operating procedures. Therefore, we continue to support our recommendation to further amend the regulation to address these issues.

DOD partially concurred with our recommendation to update the Army's training procedures regarding the development of joint and Army urgent need statements. The department noted that the proposed direction by the Secretary of Defense should be to all military department secretaries as well as the heads of other DOD components because our findings based upon the assessment of the Army's urgent needs processes are applicable across the department. DOD acknowledged that training and improved instructions for all DOD component personnel involved in the generation of urgent needs requirements and their fulfillment would improve the department's ability to respond to the warfighter's urgent needs. The department stated further that it is developing additional DOD policy that will direct DOD components to develop procedures for urgent operational needs and the implementation steps of these procedures will be monitored by OSD to ensure they are accomplished and include the training we recommended. While our evaluation focused specifically on Army practices, we agree that if the Secretary has determined deficiencies in training present a capability gap across DOD in the urgent needs process, updated training procedures for all department personnel involved in the process are appropriate.

DOD partially concurred with our recommendation to amend its implementing memorandum for the department's rapid acquisition authority to designate an OSD entity with primary responsibility for recommending when the authority should be implemented. The department stated that it is developing additional DOD policy to facilitate the use of rapid acquisition authority and has issued guidance to Service Acquisition Executives to ensure the use of rapid acquisition authority is considered when necessary to address urgent needs. DOD noted further that it is continuing to evaluate the need for legislative changes to enhance rapid acquisition authority. While we recognize DOD's efforts to develop additional policy, issue guidance, and evaluate potential legislative changes, we continue to support our recommendation that the Secretary designate an OSD entity to recommend when this authority should be implemented. During our evaluation, we found that unless OSD plays a proactive role in identifying cases eligible for this authority rather than a reactive role, requests for urgent needs may not be funded in a timely manner due to other competing service priorities.

DOD partially concurred with our recommendation to create an executive council to make timely funding decisions as urgent needs are validated by the Joint Staff. The department noted that it is developing additional DOD policy that is expected to clarify processes for funding urgent needs, and intends to use established senior governance councils to achieve the goal of the recommendation rather than establish a new council. We did not evaluate the roles and missions of these existing senior governance councils as to the extent they consistute the appropriate body to address funding solutions for urgent needs. We agree in principle with the intent to utilize existing councils to make timely funding decisions for urgent needs as long as those councils have the authority to directly address our recommendation and their membership includes those offices we cited. The department also recommended we change language in our report from "... as solutions are validated by the Joint Staff to "... as needs are validated by the Joint Staff" because the Joint Staff does not validate solutions but the requirements, or needs. We incorporated this language in our final report.

We are sending copies of this report to interested congressional committees and the Secretary of Defense. This report will be available at no charge on GAO's Web site http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-8365 or by e-mail at SolisW@GAO.GOV. Contact information for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who have made major contributions to this report are listed in appendix IV.

William M. Solis, Director Defense Capabilities and Management

Appendix I: Scope and Methodology

To determine the extent to which the Department of Defense (DOD) has a means to assess the effectiveness of its urgent needs processes we conducted site visits, reviewed key documentation, and interviewed relevant DOD, joint, and military service officials. During this review we focused on urgent wartime needs submitted through the joint, Army, and Marine Corps urgent needs processes as these are the processes most frequently used, and commanders used the Air Force and Navy urgent needs processes much less frequently. Air Force officials stated they had one active request under their urgent needs process when we began our review, and Navy officials stated they had eight active requests under their urgent needs process when we began our review. We visited forces conducting operations in the U.S. Central Command area of responsibility and gathered information on how they identify, document, and submit urgent requests through the urgent needs processes, and on the fielding and assessment of solutions in the theater. We conducted site visits to joint, Army, and Marine Corps offices responsible for the respective urgent needs processes, as well as offices of officials who participate in reviewing urgent needs requests and developing funding strategies and solutions to be fielded. We reviewed existing policy and guidance applicable to joint, Army, and Marine Corps urgent needs processes, and compared them to our standards for internal control in the federal government.¹ We also compared actual practices, tools, and data systems used to manage the joint, Army, and Marine Corps urgent needs processes to our internal control standards. We assessed the reliability of the databases and information systems used to process urgent needs requests by 1) interviewing knowledgeable officials, 2) reviewing data system guidance and procedures when they were available, and 3) conducting limited electronic testing that included comparing values from source documentation with data elements in the data systems. While our assessment of databases and systems used to process urgent needs requests showed that some data elements were accurate and supported by sufficient documentation, we found that other items for reporting specific urgent needs requests were incomplete, and not sufficiently reliable for reporting specific results here, or to support accurate, useful management reports related to overall results. As a result, we determined that we would conduct case studies of selected urgent needs requests to provide insights related to this, and the following objective. We used data elements from the information systems that we had determined were sufficiently reliable

¹ GAO, Standards for Internal Control in the Federal Government, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

to support the selection of case study candidates from the universe of joint, Army, and Marine Corps urgent needs requests.

To determine what challenges, if any, have affected the overall responsiveness of DOD's urgent needs processes we analyzed joint, Army, and Marine Corps data management systems in order to review the data collected on the time frames between decision points and determine how timely and effective each process was for providing solutions to urgent warfighter needs. To conduct this analysis we selected a nonprobability sample of cases to review from a universe of 49 Joint Urgent Operational Needs, 4,054 Army Operational Needs Statements, and 524 Marine Corps Universal Urgent Need Statements. Our selected cases included 11 joint, 6 Army, and 6 Marine Corps for a total of 23 urgent needs cases reviewed. To ensure that the case studies reflect the current DOD urgent response processes as much as possible, we selected cases that were submitted after the latest iteration of updates in each process. We considered urgent needs requests initiated in the Marine Corps process after September 1, 2006; initiated in the Army process after October 1, 2006; and initiated in the joint process after August 1, 2006. We then eliminated 1) requests for which solutions have not been fielded and 2) requests for items that the Army already procures. We selected cases for which solutions have not been produced in order to explore aspects of the process based on their visibility, cost, and scope. We selected cases in order to represent distinct types of needs such as: Command and Control; Force Protection; Intelligence, Surveillance, and Reconnaissance; Counter-Improvised Explosive Device; Logistical Support; and Miscellaneous (such as nonlethal weapons or other items not so easily categorized). We also selected cases where duplication of effort appeared possible, and urgent needs requests that commanders in Iraq or Afghanistan identified as high priority. Assessments of the selected cases were based on a comparison of the time required to achieve key objectives in completing the urgent needs process against stated goals and interviewing knowledgeable officials regarding the relative ease or difficulty in accomplishing these objectives, as well as end users in theater regarding the sufficiency of fielded solutions. In order to allow for comparison across the joint and service urgent needs processes, we constructed a chronology of each urgent need beginning with initiation of the urgent needs process and culminating with the initial fielding of a solution in theater, if applicable. Since each urgent needs process within DOD is distinct and uses differing terms and procedures, we used a consistent approach to demonstrate progression between key events and decision points across time lines from initiation of an urgent need request to initial fielding of a solution However, in collecting data for our case studies, we found that documentation

regarding the initial theater recognition of an urgent need was inconsistent and often unavailable. For further details and the results of our case studies see appendix II.

We interviewed officials from the Department of Defense; the Joint Chiefs of Staff; all four of the military services; two selected combatant commands; and military activities participating in ongoing military operations. The specific offices and military activities we interviewed and obtained information from include the following:

- Office of the Undersecretary of Defense, Acquisition, Technology, and Logistics, Arlington, Va.;
 - Office of the Assistant Deputy Undersecretary of Defense for Innovation & Technology Transition, Arlington, Va.;
 - Joint Rapid Action Cell, Arlington, Va.
 - Rapid Reaction Technology office, Arlington, Va.
- Defense Information Systems Agency, Falls Church, Va.
- U.S. Air Force, Secretary of the Air Force for Acquisition, Roslyn, Va.
- U.S. Army Headquarters, Arlington, Va.;
 - Deputy Chief of Staff, G-3/5/7, Operations
 - Deputy Chief of Staff, G-8, Force Development
 - U.S. Army, 224th Military Intelligence Battalion
 - Office of the Assistant Secretary of the Army (Acquisition, Logistics, and Technology), Crystal City, Va.
- U.S. Army Tank-automotive and Armaments Command, Warren, Mich.
- U.S. Army, 1st Infantry Division, 2nd Brigade, Headquarters, Camp Liberty, Victory Base Complex, Baghdad, Iraq.
- U.S. Army, 18th Airborne Corps, 525th Battlefield Surveillance Brigade, Fort Bragg, N.C.
- U.S. Army, 15th Military Intelligence Battalion, Joint Base Balad, Iraq.
- U.S. Army, Army Requirements and Resourcing Board Council of Colonels.
- U.S. Army, Program Executive Office for Ammunition, Picatinny Arsenal, N.J.
- U.S. Army, Communications Electronics Command, Fort Monmouth, N.J.
- U.S. Marine Corps, Marine Corps Central Command, Tampa, Fla.
- U.S. Marine Corps, Marine Corps Capability Development Command, Quantico, Va.
- U.S. Navy, Office of the Assistant Secretary of the Navy for Research, Development and Acquisition, Rapid Capability Development and Deployment, Arlington, Va.
- U.S. Navy, Office of the Chief of Naval Operations, Requirements Division, Arlington, Va.

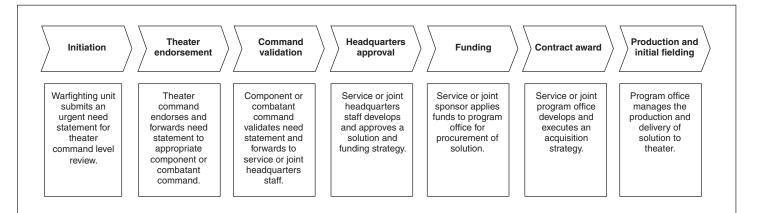
- U.S. Navy, Naval Surface Warfare Center, Dahlgren, Va.
- Office of the Joint Chiefs of Staff, Force Structure, Resources, and Assessment Directorate (J8), Capabilities and Acquisition Division, Arlington, Va.
- Joint Improvised Explosive Device Defeat Organization, Crystal City, Va.
 Joint Non-Lethal Weapons Directorate, Quantico, Va.
- U.S. Central Command, Tampa, Fla.
- Multi-National Corps-Iraq; Camp Victory, Baghdad, Iraq.
- Commander, Multi-National Forces-West, Al Asad Air Base, Anbar Province, Iraq.
- Multi-National Division-Baghdad, Camp Victory, Baghdad, Iraq.
- Multi-National Division-Central, Camp Victory, Baghdad, Iraq.
- Multi-National Corps-Iraq, Science and Technology (MND S&T); Camp Victory, Baghdad, Iraq.
- U.S. Special Operations Command, MacDill Air Force Base, Tampa, Fla.

We conducted this performance audit from June 2008 to March 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Case Studies of Selected Urgent Need Requests

We selected 23 urgent need requests as case studies to illustrate issues that may impact the amount of time required to provide solutions to the warfighter. We reviewed 6 Army, 6 Marine Corps, and 11 joint requests.¹ Although each of these urgent needs processes is distinct, we identified seven broad phases that we used to track the progression of each request over time and to compare performance across the Army's Operational Needs Statement process, the Marine Corps' Urgent Universal Needs Statement process, and the Joint Urgent Operational Needs processes. These phases are: initiation, theater endorsement, command validation, headquarters approval, funding, contract award, and initial fielding. Figure 1 illustrates these phases.

Figure 1: Progression of Urgent Need Request



Source: GAO analysis.

For each of our 23 case studies, we tracked the progress of an urgent need request beginning with the initiation of an urgent needs process and culminating with the initial fielding of a solution, if any. Each of the figures that follow represents the case studies we selected, describing an identified need or capability gap, the proposed solution, and a brief description of challenges, if any, affecting the ability of the urgent needs process(es) in question to rapidly field a response to that request, and a photograph. Although each urgent needs request is unique some of the requests we reviewed were closely related. Where appropriate we

¹ For information on how we selected cases for our study, see app. I.

combined these case studies in our discussion below.² Challenges, if any, to providing a solution for an urgent needs request were identified in discussions with agency officials and supported by our review of the request's progress through each phase of the process. Further information on our methodology can be found in appendix I. Issues associated with funding and technical complexity were the most frequent challenges affecting the response or causing delays.

 $^{^2}$ In some cases, the same urgent need was submitted through more than one of the three urgent needs processes, or the same solution was proposed or provided to meet similar urgent needs. For the purposes of our analysis, and to eliminate redundancy, we have synthesized related case studies, as appropriate, in the figures below. As a result, the number of figures is less than 23.

Figure 2: Improving Command and Control through Secure Satellite Phones (1 case study)



Officer using an Iridium Satellite Telephone

Urgent need

Improve command and control capability at remote locations

Date of theater endorsement: 12/04/2006 Time elapsed until initial fielding: 175 days

Military personnel require a method for communicating with each other in areas without established infrastructure or in case of a breakdown in existing communications capabilities.

Solution

Secure Satellite Communication Handsets (Iridium Phones)

Iridium phones provide secure communications, enabling command and control of military personnel in the absence of established infrastructure and act as an emergency back-up to established communications.

Challenge(s), if any

Lengthy approval and order processes

Case study A Process used: Army

Although Iridium Phones are readily available and units purchase them with their own funds, an Army regulation requires units to submit requests for Iridium satellite telephones through the Army's operational urgent needs process to assure operational security and system integrity and then, after that request has been approved, to initiate an order through the Directorate of Information Management to procure them. However, before the directorate will approve an order for fulfillment, it must independently validate that the unit placing the order has an approved urgent needs request. Requiring an approved urgent needs request and an independent validation of the approved request before filling the order affected the response time for this urgent needs request.

Source: U.S. Air Force (photo).

^aHeadquarters, Department of the Army, Army Regulation 25-1, Information Management: Army Knowledge Management and Information Technology (Washington, D.C.: Dec. 4, 2008)

Figure 3: X-ray Technology for Vehicle Checkpoints (2 case studies)

Case study A

Process used: Army Date of theater endorsement: 6/17/2007 Time elapsed until initial fielding: 501 days

Case study B

Process used: *Joint* Date of theater endorsement: 6/09/2007 Time elapsed until initial fielding: 509 days



Z-backscatter Van at security checkpoint in Iraq

Urgent need

Capability to reveal hidden items or people at checkpoints

The Iraq Multi-National Division-Center requested 12 Z-Backscatter vans through the Army urgent needs process to be used at security checkpoints during counter-insurgency operations. Multi-National Corps- Iraq submitted a separate joint request for 10 additional Z-Backscatter vans in part to support a safe environment for Iraqi elections.

Z-Backscatter Vans

The Z-Backscatter uses X-ray technology mounted on a van chassis. This device produces bright, photo-quality images to reveal the presence of hidden people and/or contraband in vehicles or cargo containers. The Z-Backscatter can also be used to detect explosives, weapons, and drugs. The request for this equipment noted that it was available as a commercial off-the-shelf item.

Challenge(s), if any

Solution

Funding

It took approximately 251 days after the 12 vans were approved for the Army to provide funding and 293 days after the 10 vans were approved through the joint process because these requests—22 vans in total— were combined with requests for 55 other nonintrusive inspection systems. Funding for all 77 items requested was divided into 3 installments from July 2007 through April 2008. Although the Z-Backscatter vans were listed as a high priority by theater commanders, they were funded in the last installment.

Source: GAO (photo).

Figure 4: Protecting Vehicle Occupants from Fires Caused by IEDs (1 Case study)



Process used: *Army* Date of theater endorsement: 08/13/2007 Time elapsed until initial fielding: 521 days (to provide a solution for Humvees—one of 17 vehicle types in this urgent needs request)



Crew compartment fire suppression system with manual activation and battery back-up installed in a HUMVEE

Urgent need

Capability to prevent casualties from vehicle fires

Improvised explosive devices can ignite fuel or tires, causing vehicle fires.

Solution

Tactical vehicle fire protection

Existing High Mobility, Multi-Purpose Wheeled Vehicles (Humvees) have been retrofitted with upgraded fire suppression equipment for their crew compartments, while solutions are being integrated into new vehicles. Many of the refinements necessary have already been adopted, as other efforts continue to address the threat across a variety of vehicle platforms as technology develops.

Challenge(s), if any

Technical complexity, funding

This request applied to over 48,000 vehicles including tracked vehicles, such as Tanks and Bradley Fighting Vehicles, and wheeled vehicles such as Humvees, Route Clearance Vehicles, Heavy Equipment Transporters, Medium Tactical Vehicles, and Palletized Loading Systems (forklifts) to name a few. In addition to the magnitude of the request, the solutions are technically complex. For example, one of the solutions involved providing a fire suppression system for the crew compartments of those vehicles that suppresses or extinguishes any fire present while allowing crew members to safely evacuate. In addition, this system was combined with back-up systems to allow fire suppression equipment to be manually activated despite engine or power failure. Further, it took time for program managers to develop solutions that were not too complex or too varied to sustain in theater. Some solutions (such as the one depicted at left) have already been fielded, but Army officials told us that the request for this capability may take many years to address.

To upgrade existing vehicles, program managers used about \$14 million in funds already appropriated for vehicle maintenance and modifications to modify vehicles already in use. However, more money will be needed to provide fire suppression capabilities for the 17 varieties and almost 49,000 individual vehicles covered in this request.

Source: U.S. Army (photo).

Figure 5: Detecting IEDs Using Existing Mine-Detection Technology (2 case studies)

Case study A

Process used: Army Date of theater endorsement: 10/04/2007 Time elapsed until initial fielding: 454 days

Case study B

Process used: Marine Corps Date of theater endorsement: 6/14/2007 Time elapsed until initial fielding: 581 days



"Husky" Mine Detection Vehicle

Urgent need

Improved force protection from improvised explosive devices

Army forces operating in Afghanistan determined that the emerging threat from IEDs in that theater was from devices whose main charge is triggered by a pressure plate.

Solution

Interim Vehicle Mounted Mine Detector (IVMMD)

The IVMMD or "Husky" was built for the South African National Defense Forces. Designed for a single occupant, the body of the IVMMD is constructed of heavy gauge steel, contoured in a "V" shape to minimize vehicle resistance to an explosion. The front and rear axles are attached to the vehicle by open steel frameworks that offer little resistance to an explosive force.

Challenge(s), if any

Limited production schedule

At the time these urgent needs requests were being fulfilled, production was limited because there was only one manufacturing source for these vehicles, which was operating at full capacity. These vehicles were initially resourced as a commercial off-the-shelf solution, and a contract was in place with the vendor. However, a lack of flexibility in the production schedule contributed to lengthy time lines between contract award and fielding. Officials stated that as demand for this type of vehicle grew, other companies began to manufacture similar V-shaped vehicles.

Figure 6: Ability to Detect Improvised Explosive Devices (1 case study)



Process used: *Joint* Date of theater endorsement: 10/20/2007 Time elapsed until initial fielding: 497 days



Husky-Mounted Detection System

Urgent need

Improved force protection from improvised explosive devices

Army forces in Afghanistan determined an emerging threat from IEDs in that theater was from buried IEDs, whose main charge is triggered by a pressure plate.

Solution

Husky-Mounted Detection System (HMDS)

HMDS is a counter-IED/counter-mine system that can detect underbelly IEDs, pressure plates used to detonate IEDs, and antitank landmines buried in primary and secondary roads. HMDS provides advanced high-performance ground penetrating radar to detect buried threats, including IEDs that are constructed of bulk explosives and pressure plates and provides location marking of the buried threats.

Challenge(s), if any

Technical complexity

Joint forces in Afghanistan requested an improvised explosive device detection system that could be mounted on Husky mine detection vehicles such as those discussed in fig. 4. A joint urgent needs official stated that technical complexity resulted in delays as the proposed solution required time for development, testing, and performance assessment of the experimental HMDS prior to them making a decision to purchase it in large numbers. Testing for the HMDS officially began in March 2008. JIEDDO approved the purchase of 30 systems in September 2008. The first HMDS arrived at Bagram Airfield in Afghanistan in February 2009.

Source: U.S. Army (photo).

Figure 7: Decreasing the Likelihood of Injury to Vehicle Gunners (1 case study)



Humvee with FK-7 installed

Urgent need

Additional protection for crews of up-armored vehicles

Date of theater endorsement: 12/17/2007 Time elapsed until initial fielding: 409 days

This protection was requested to decrease the likelihood of injury to vehicle gunners from small arms fire, rocket-propelled grenades, hand grenades, rocks, extreme weather, and fragmentation resulting from explosions.

Solution

Objective Gunners' Protection Kit and Fragmentation Kit #7

These solutions are the latest in a series of efforts to provide additional protection to crews operating up-armored High Mobility Multi-Purpose Wheeled Vehicles (Humvees).

Challenge(s), if any

Technical complexity

Case study A Process used: Army

This solution includes an Objective Gunner Protection Kit, upgrades to external armor on the roof and sides, a windshield that is releasable from the interior for rapid egress, improved door handles, and a fire suppression system. In addition, the weight of added armor requires adjustments to the suspension and drive-train of the vehicle—including new brakes, an improved suspension, and new tires—and existing armor or other features may need to be removed or altered. One unit we interviewed indicated that it took between 1.5 and 2 weeks to complete the installations. The initial request to provide additional armor for 130 vehicles was increased at the theater endorsement phase of the process to over 15,000 vehicles, and again at the Command validation level to almost 19,000 vehicles to improve existing Humvees and Mine Resistant Ambush-Protected vehicles being used in Iraq and Afghanistan. In October 2008, Army Headquarters approved the purchase of about 10,000 kits. By February 2009, 125 kits had been shipped and installation had begun.

Source: GAO (photo).

Figure 8: Clearing Vegetation with a Trailer-Mounted Flame-Thrower (1 case study)

Case study A

Process used: Army Date of theater endorsement: 02/11/2008 Time elapsed until initial fielding: 504 days



"Ground Torch" being used in Iraq (trailer not pictured)

Urgent need

Capability to remove vegetation to reduce the threat from improvised explosive devices

Units identified the need to clear vegetation from the banks of irrigation channels and other locations to deny insurgents the ability to conceal improvised explosive devices and eliminate hiding places for people who could trigger such devices.

Solution

"Ground Torch" Trailer-Mounted Flame-Thrower

Marine Corps personnel, and some Army units, have used a commercial off-the shelf flame-thrower, used in forestry, for this purpose.

Challenge(s), if any

Funding

An incremental approach was used to fund this solution. The Army's Rapid Equipping Force provided \$68,500 in September 2008 to purchase and test a prototype system. The Army provided another \$500,000 in October 2008. Finally, \$1.3 million was provided from Fiscal Year 2008 Omnibus funding to field and support 10 systems for 1 year. When it became apparent that testing would be successfully completed, a competition was conducted and a contract was awarded in January 2009. Army officials stated that efforts to arrange funding continued through March 2009— almost a year after approval of the urgent needs request. The Army delivered the first two systems to the theater of operations in late June 2009.

Source: U.S. Army (photo).

Figure 9: Providing Support for Ground Troops Through Aerial Surveillance (2 case studies)

Case study A

Process used: Joint Date of theater endorsement: 09/15/2006 Time elapsed until initial fielding (of a partial solution): 357 days

Case study B

Process used: Marine Corps Date of theater endorsement: 09/15/2006 Time elapsed until initial fielding (of a partial solution): 357 days



Angel Fire Platform vehicle

Urgent need

Around-the-clock aerial surveillance

Ground troops requested the ability to detect snipers on rooftops or enemy mortar teams beyond their line of sight, enabling them to respond to such threats in near-real time, and to review recent activity.

Solution

Angel Fire System

Engineers at the Air Force Research Laboratory and the Los Alamos National Laboratory were the early developers of this solution. Angel Fire is designed to provide a wide field of view, and persistent aerial surveillance in support of ground troops at the tactical level. The solution provided was for daytime use only rather than for an around-the-clock capability as requested.

Challenge(s), if any

Funding, technical complexity

In November 2005, the Marine Corps Combat Development Command began pursuing a new aerial surveillance capability that could deploy within 6 months to a year. U.S. Strategic Command and the Office of Under Secretary of Defense for Acquisition Technology and Logistics, Defense Acquisition Challenge program provided initial support to develop the capability. In July 2006— 2 months prior to theater endorsement—the Marine Corps began efforts to deploy Angel Fire, with the intent of seeking full funding from JIEDDO. However, a Deputy Secretary of Defense decision prevented JIEDDO from funding the purchase of platforms, such as vehicles or aircraft, so the urgent need request was split into two requests—one followed the joint process to allow JIEDDO to fund \$19.5 million for the development of surveillance sensors and platform integration, and the other through the Marine Corps process to fund approximately \$15 million for aircraft and services. Funding of approximately \$34.5 million was finally arranged about 6 months later in February 2007.

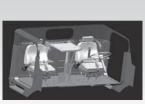
Furthermore, the technical complexity of the Angel Fire system caused the Marine Corps and joint processes to close their urgent needs requests without having received a solution that met the warfighter need. JIEDDO determined as early as December 2006 that it would be unable to meet the need for night-time surveillance because the infrared sensors were too technologically immature. Although the Marine Corps and JIEDDO continued to invest in the program, further studies showed that infrared resolution was too low quality to satisfy the requirement. According to JIEDDO officials, as of March 2009, the four aircraft equipped with daytime sensors, which had been deployed to Iraq, were scheduled to be relocated to the United States, and the Under Secretary of Defense for Intelligence did not recommend deploying Angel Fire to Afghanistan.

Source: U.S. Air Force (photo).

Figure 10: Responding to an Adaptive Enemy by Increasing Vehicle Armor (1 case study)



Process used: *Marine Corps* Date of theater endorsement: 10/05/2006 Time elapsed until initial fielding: 564 days







MTVR with blast protection

Urgent need

Force protection from improvised explosive device

Medium Tactical Vehicles were equipped with rollers attached to the front of vehicles as last-chance mitigation to defeat mines or pressureactivated IEDs by initiating the blast in front of the cab of the vehicle rather than underneath it. This urgent needs request was initiated in anticipation of enemy adapting so that the vehicle cab would still be affected by the blast.

Solution

Medium Tactical Vehicle-Replacement (MTVR) Force Protection from Improvised Explosive Devices

Vehicles with higher clearances and heavier under-carriages were recognized as better protection against the threat.

Challenge(s), if any

Technical complexity

As with any vehicle-related up-armoring effort, the need to provide increased blast protection on MTVRs involved a certain degree of technical complexity. First, the armor protection itself had to be developed to protect servicemen from under-carriage IED blasts. Next, the vehicle variants had to be evaluated to determine if redesigning the vehicle to accommodate additional weight on the under-carriage was necessary. Finally, the solution had to be tested and a method for systematically retrofitting the MTVRs had to be developed. The armor systems eventually approved were integrated kits made of metal/composite panel armor capable of withstanding small arms, IED, and mine blasts as a permanent modification to the vehicle.

An estimated lead time of at least 6 months was required for production. Adding to the complexity of fielding solutions rapidly, the First Marine Expeditionary Force's initial urgent needs request to protect 110 vehicles was later increased to cover every MTVR in theater, with the exception of wrecker variants—approximately 1,050 vehicles. The first 80 blast protection kits were received in theater in April 2008.

Figure 11: Helping Marines Use Biometrics to Identify Individuals (1 case study)

Case study A

Process used: Marine Corps Date of theater endorsement: 05/25/2007 Time elapsed until initial fielding: 177 days



Individual performing identity verification with an Iris scanner

Urgent need

Assistance in using biometric identification equipment

Biometric tools have been helping Marines to positively identify persons of interest or high-value individuals for several years. However, Marines required additional support at the battalion level to effectively and consistently operate systems such as the biometric automated tool kit because units may not have been sufficiently staffed or trained to use these technically complex tools in a manner consistent with their concept of operations.

Solution

Biometric Support Personnel

Provide contract personnel to work as network and database administrators, subject matter experts, and trainers for Marines and unit staff members, and to provide recommendations on the effective use of biometric systems.

Challenge(s), if any

No significant issues were identified

Technical complexity did not significantly delay the ability of the Marine Corps' urgent needs process to respond to this request.

In May 2007, Multi-National Forces West in Iraq initiated an urgent needs request for 17 contract personnel to work as network and database administrators for the biometric systems. In August 2007, Marine Corps Systems Command awarded a contract for supplies and services to support the Biometric Automated Tool Kit, including providing biometric system administrators. The biometric system administrators arrived in theater in November 2007.

Figure 12: Improving Tactical Radio Communications Involving Both Audio and Data (1 case study)



Process used: Marine Corps Date of theater endorsement: 06/26/2007 Time elapsed until initial fielding: 314 days



PRC 150 Remote Interface

Urgent need

Remote radio operation support for newer equipment

Marines rely heavily on tactical radio communications. In Iraq, divisions used "antenna hills" as remote radio signal relays to and from combat operations centers. This prevented enemy forces from using electronic emissions to target Marines. However, newer radios, capable of transmitting data as well as audio, could not be relayed in this manner.

Solution

Portable Radio Communications Remote Interface (PRC-150 Remote Control)

Although officials indicate that, ideally, an urgent needs request should cite a capability gap, in this case, the warfighter identified a specific item—Harris RF 5800-RC111 remote control devices. These devices can provide full remote control capability for compatible radios and accommodate a variety of data link options when combined with commercial off-the-shelf equipment.

Challenge(s), if any

Technical complexity

Technical complexity exists in any effort to remotely relay electronic signals. This is particularly true when developing a rugged system capable of surviving extreme temperatures and a marine environment. In this case, the requested capabilities also included high-speed data transmission, which had not been available with earlier remote radios. There was only one known system available that could provide the capability requested, but a longer lead time was required to manufacture components, such as chips and circuit boards, and to perform testing.

Figure 13: Improving the Ability to See Clearly Under a Variety of Conditions Using Vision Enhancement Technology (1 case study)



Individual Weapon Night Sight-Thermal

Urgent need

Improved ground-based threat recognition and targeting capability

Forces wanted the ability to better detect and recognize targets under varying conditions. Marine Corps Systems Command had been working for several months to develop such a capability before a draft urgent needs request was prepared for the Marine Corps' urgent needs process.

Individual Weapon Night Sight-Thermal

Case study A

Process used: Marine Corps

Date of theater endorsement: 11/18/2006 Time elapsed until initial fielding: 621 days

The Individual Weapon Night Sight-Thermal is an in-line clip-on thermal sight designed to detect and recognize targets and threats at 300 meters without affecting the sight picture in all lighting conditions, including total darkness, and atmospheric obscurants such as smoke and fog. Because thermal optics are not subject to background light "wash-out", they are ideal for use in both day and night lighting conditions.

Solution

Challenge(s), if any

Technical complexity, contracting delays

The solution called for the device to be used in two modes: 1) hand held—to search for hostile persons, false walls, weapons and ammo caches, and IED indicators and 2) as a rifle clip-on for target engagement. Production and performance issues, such as achieving the needed sight resolution and modifications to improve reliability in the field, needed to be resolved and prototypes tested before any design for a large-volume production of sights could be approved. After initial fielding began in July 2008, field-tested units were sent back for a design change. In addition, tactics, techniques, and procedures had to be developed along with the solution, and a program of instruction was needed to teach Marines how to program the sight, acquire targets, and recognize activities associated with IEDs. Marine Corps officials stated that feedback on the usefulness of the sights has been mixed.

Rapid acquisition authority was not used, and nine separate companies responded to the request for proposal. The source selection for a contractor took almost 10 months. A contract for 2,192 systems was awarded in November 2007. Moreover, the contractor had difficulty obtaining a key component used in making sights, vision enhancement chips, which were in short supply, due in part to competition with a higher-priority urgent need. By March 2009, only 528 thermal sights had been delivered to Iraq and a few hundred had been sent to training facilities in the United States. By April 2009, the Commander, Marine Forces, Central Command directed 873 thermal sights to be shipped to Afghanistan, and those sights had been delivered.

Figure 14: Resupplying Troops Under Dangerous Conditions through High-Tech Air Drops (2 case studies)

Case study A

Process used: *Joint* Date of theater endorsement: 02/22/2006 Time elapsed until initial fielding: 335 days

Case study B

Process used: *Joint* Date of theater endorsement: 12/20/2006 Time elapsed until initial fielding: 320 days



Joint Precision Air Drop System

Urgent need

Resupply capability if traditional methods cannot be used

Mountainous terrain, poor roads, bad weather, and enemy forces can hinder standard airdrop or ground-based resupply missions to units in remote parts of Afghanistan. Precision-guided air drops were needed to expand coalition Forward Operating Bases into remote and austere environments.

The Army and the Air Force were both interested in this solution.

Solution

Joint Precision Air Drop System (JPADS)

The "Screamer" JPADS system with a payload capacity of up to 2200 pounds with a standoff range of 14 Km could be fielded quickly as an interim solution, and had a history of success. However, officials stated it was not supportable or sustainable over time.

The "Firefly" JPADS system is capable of delivering a payload of up to 2,100 pounds with twice the standoff distance, twice the time aloft, improved accuracy, and could be set for automatic or directionally controlled landings. The Firefly was selected for longer-term development.

Challenge(s), if any

Funding, technical complexity

Some delays occurred as Army headquarters refused to fund the capability and returned the request to the Commander, U.S. Army Central Command, recommending that it be resubmitted through the Joint urgent needs process. Although the original proposal for 50 "Screamer" systems estimated a cost of \$4.5 million, due to the critical nature of the need and the desire to have the solution in theater prior to the onset of winter, CENTCOM released \$2 million from supplemental funds for 12 systems 9 months after the request was initiated. Four months later, the Air Force agreed to supply \$2.5 million for the remaining 38 "Screamer" systems. However, technical complexity, including issues related to testing and final modifications, prevented the "Screamers" from being deployed as quickly as desired.

In March 2007, the joint process awarded another contract for development and testing of "Firefly" JPADS systems. In July 2007, the Army's Rapid Equipping Force arranged for \$5 million to fund the first Firefly order under the March 2007 contract. However, funds needed for the remaining 105 Firefly systems—later taken from the fiscal year 2008 supplemental appropriation—were not received by the program manager until August 2008. As of June 2009, 200 Firefly systems had been delivered to Afghanistan.

Source: U.S. Air Force (photo).

Figure 15: Discouraging Adversaries or Crowds by Using Electromagnetic Radiation (2 case studies)

Case study A

Process used: *Joint* Date of theater endorsement: 11/12/2006 Time elapsed until initial fielding: *Not fielded* Request rescinded: 01/24/2008

Case study B

Process used: *Joint* Date of theater endorsement: 06/03/2007 Time elapsed until initial fielding: *Not fielded* Request rescinded: 04/14/2008



Active Denial System 2

Urgent Need

Capability to engage potential adversaries at distances in a safe, effective, and nonlethal manner and nonlethal capability to quell violence among detainees

The first requests arose from the desire of Marines to disperse crowds or repel attackers without using lethal force.

The second need request originated from the Camp Bucca Detention Center in Iraq.

Solution

Active Denial System 2

No commercial solution existed for these requests, but DOD was developing the Active Denial System (ADS). ADS is a nonlethal counter-personnel, directed-energy weapon that causes an intense, temporary burning sensation on the skin. ADS can purportedly provide troops with the ability to compel potential adversaries to either cease threatening behavior or leave, from distances well beyond small arms range and in a safe, effective, and nonlethal manner. ADS was briefed to JRAC in February 2007 with ADS 2 presented as a viable alternative. ADS 2 was demonstrated in October 2007 and selected as the potential solution.

Challenge(s), If Any

Technical complexity, requests withdrawn

The Marine Corps considered the components of Active Denial System 2—including the system's gyrotron, waveguides, super-conducting magnets, antenna, and other major subsystems—too complex to allow extensive field repair, and combat damage to the antenna could create a logistics problem because storage and replacement of such large items is difficult. Further, Marine Corps officials stated that, if the system were deployed, its mobility could be limited due to its weight and size. Therefore, the Marine Corps rescinded its request a little over a year after it was initiated.

Although the U.S. Central Command Chief of Staff endorsed the urgent need for a nonlethal crowd control capability at the detention center, DOD did not want to use this system in a detention facility, until it had first been used and evaluated in an operational setting. U.S. Central Command rescinded its urgent need request in April 2008. However, the system is being maintained in a ready condition in the event an operational need arises.

Source: U.S. Air Force (photo).

^aADS-2 was being developed as part of an advanced concept technology demonstration.

Figure 16: Providing Advanced Video Surveillance Technology to the Theater (1 case study)



Process Used: *Joint* Date of Theater Endorsement: 08/04/2007 Time Elapsed Until Initial Fielding: 375 days



Rapidly Configured Camera Control Station for RDISS

Urgent Need

Video Surveillance Equipment for Forward Operating Bases

The Army's Rapid Equipping Force—a group within the Army that equips commanders with off-the-shelf technology to speed delivery of capabilities to the warfighter—created this capability. Army officials told us that urgent needs request are often based on equipment offerings proposed by the group. As a result, this request specified a material solution rather than simply describing a capability gap. Combined Joint Task Force 82 (CJTF-82) initiated this joint urgent needs request.

Solution

Rapid Deployment Integrated Surveillance System (RDISS)

The Rapid Deployment Integrated Surveillance System (RDISS) is one part of the Base Expeditionary Targeting and Surveillance System- Combined (BETSS-C) portfolio. The BETSS-C portfolio is intended to provide warfighters with the ability to maintain enhanced situational awareness on the battlefield.

Challenge(s), If Any

Technical complexity, Funding

Program managers stated that requirement determination for the BETSS-C was the most complex aspect of developing the solution and that ascertaining CENTCOM requirements was an iterative, time consuming process. Once identified, the requirement specified the integration of a variety of systems into a single compatible "system of systems," which involved reconfiguring multiple software systems into compatible packages. The request also covered a vast number of locations and different mixes of system components for each location, which further complicated efforts to quickly develop a solution.

In addition, multiple offices within DOD and the Army had to coordinate to develop a funding strategy and field the solution. The estimated cost for the BETSS-C portfolio was roughly \$1.5 billion, of which \$8 million was estimated for RDISS). The program managers told us that they attempted to obtain funding for the entire BETSS-C program from the Army in early 2007, but the Army declined. In February 2008, JIEDDO agreed to provide the \$8 million needed to satisfy this urgent needs request. The first system was fielded to theater in August of 2008.

Source: U.S. Army (photo).

Figure 17: Making Secure Satellite Communications Available from More Locations (1 case study)



Process used: *Joint* Date of theater endorsement: 08/06/2007 Time elapsed until initial fielding: 428 days



SNAP VSAT satellite dish in use in Iraq

Urgent need

Portable satellite communications terminals for voice and data exchanges

The Commander, Multi-National Corps Iraq requested additional portable satellite communications terminals for classified voice and data exchanges at remote border crossing points, joint security stations, and combat outposts in remote locations.

Solution

NIPR Access Point Portable Very Small Aperture Terminal (SNAP VSAT)

SNAP VSATs use commercial off-the-shelf equipment to provide secure beyond line-of-sight communications.

Challenge(s), if any

Funding, manufacturing delay

In October 2007, JRAC and the Army agreed to a funding strategy for the SNAP VSAT system in which JRAC would administer the transfer of approximately \$3 million from the Iraq Freedom Fund to the Army, which in turn would use the funds to award a contract for the system. The Army would then place additional SNAP VSAT orders against the contract to satisfy the urgent need, once it received additional funding for the system in the Army's Global War On Terrorism (GWOT) supplemental. However, JRAC was unable to affect the Iraq Freedom Fund transfer to the Army until February 2008, due to changes in personnel and a lack of influence, according to JRAC officials. Moreover, after receiving the \$3 million transfer from the Iraq Freedom Fund, the Army did not award a contract for the SNAP VSAT until July 2008, the same month that it received its GWOT supplemental funding.

In addition, program officials stated that hardened travel cases for the systems purchased under this contract had to be custom made to protect the equipment amid harsh combat environments. This resulted in slight delays when compared to other off-the-shelf items. As a result, the SNAP VSAT systems purchased under the contract resulting from this request arrived in theater 14 months after the request was initiated.

Source: GAO (photo).

Figure 18: Improving Battlefield Communications Through Adaptive Satellite Technology (1 case study)



Process used: *Joint* Date of theater endorsement: *11/08/2007* Time elapsed until initial fielding: *474 days*



Depiction of Distributed Tactical Communications System being used in the field

Urgent need

Over-the-horizon, on-the-move, beyond-line-of-sight communications

Warfighters in Afghanistan identified the need for improved communications because the current communication handset devices did not operate adequately in the mountainous terrain.

Solution

Distributed Tactical Communication System (DCTS)

To develop tactical commercial satellite communications for warfighters in any terrain and in any location on earth, in a cost-effective manner, providing push-to-talk, one-to-many communications to facilitate tactical actions and command-and-control, the Navy planned to leverage commercial off-the-shelf technology. A collaborative agreement allowed DOD to participate in industry-funded development of the DCTS. One general officer referred to the result as "the most significant tactical communications improvement developed and fielded during the Global War on Terror."

Challenge(s), if any

Technical complexity, funding

The solution to this urgent needs required developing a technology that was previously unavailable. The program manager told us that work would have taken longer without the urgent needs process. Limited testing of handsets in and out of the continental United States began in November 2008.

The Marine Corps Warfighting Lab began developing this capability in 2001, but acquiring funding within DOD has been a challenge. JRAC delayed assigning a sponsor for a joint urgent need for communication equipment for 131 days because it was unable to resolve which service would fund the solution. After assigning a sponsor, JRAC administered the transfer of approximately \$14.5 million from the Iraq Freedom Fund to rapidly acquire 20 prototype handsets and to expedite low-rate production. As the usefulness of the solution was recognized, the initial request for 20 handsets was increased to 500. The Army has since provided additional funds of about \$15 million. Total funding to date has been about \$30 million, but officials state additional funding will be needed beyond 2010.

Source: U.S. Navy (photo).

Figure 19: Ability to Provide Improved Force Protection from Improvised Explosive Devices (1 case study)



Process used: *Joint* Date of theater endorsement: 11/26/2007 Time elapsed until initial fielding: 253 days



Parked "Razorback" Boom Mower with mower head stowed

Urgent need

Improved force protection from improvised explosive devices

U.S. forces in Iraq identified dense vegetation along roadways as potentially concealing IEDs and insurgents. DOD officials stated other methods to address this threat, such as chemical defoliation, are no longer viable due to policies prohibiting the use of chemicals.

Solution

"Razorback" Boom Mowers

The Razorback is a commercially available mower assembly that can be mounted to forklifts or front-end loaders. The configuration chosen by the military involves mounting the mower on a boom fitted to a 5-ton capacity cargo truck modified with an armor protection kit, suitable tires, anti-lock brakes, air conditioning, and chemical-resistant paint. The Razorback can cut vegetation alongside roads and on steep side slopes near canals.

Challenge(s), if any

Solution did not fully meet the need

Multiple contract modifications were executed for the development, integration, and sustainment of Razorback systems, and testing revealed many safety concerns. However, the Army awarded the principal contract for 29 Razorback systems, for \$2.35 million, in June 2008. The first Razorbacks were shipped to theater in August 2008.

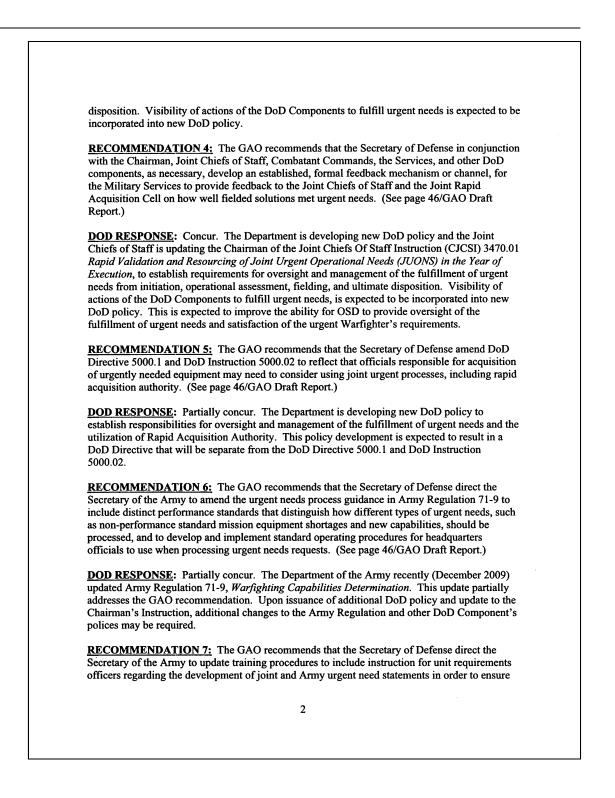
However, soldiers who operated the truck told us that they had performed two missions with the Razorback in the 2 months since delivery and completion of training. On one mission, the boom was not long enough to reach the area needing to be mowed without risking getting the heavy truck stuck in the soft ground. On the other mission, standing water prevented mowing because the truck could not be used in standing water. The soldiers were also uncomfortable with the slow speed—only 2 miles per hour—at which the Razorback must move while operating. Soldiers told us that they could easily and effectively perform their route clearance missions without the Razorback mower.

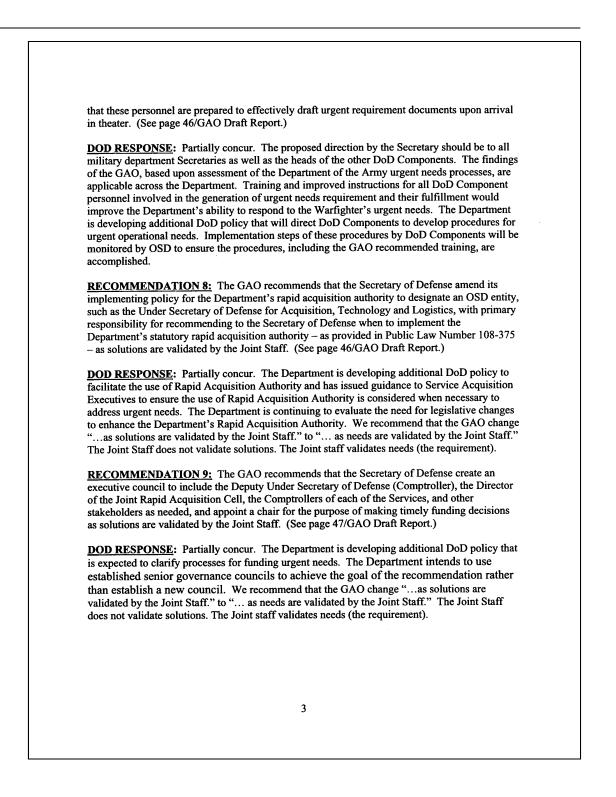
Source: GAO (photo).

Appendix III: Comments from the Department of Defense

OFFICE OF THE UNDER SECRETARY OF DEFENSE 3000 DEFENSE PENTAGON WASHINGTON, DC 20301-3000 AND LOGISTICS April 6, 2010 Mr. William Solis Director, Defense Capabilities and Management U.S. Government Accountability Office 441 G Strect, N.W. Washington, DC 20548 Dear Mr. Solis: This is the Department of Defense (DoD) response to the GAO draft report 10-460, "WARFIGHTER SUPPORT: Improvements to DoD's Urgent Needs Processes Would Enhance Oversight and Expedite Efforts To Meet Critical Warfighter Needs," dated March 5, 2010 (GAO Code 351236). Detailed comments on the report recommendations are enclosed. The Department has initiated multiple actions to address the recommendations of the GAO. During the extended review by the GAO the Department completed other studies that, along with the dialogue with the GAO, directly contributed to actions to improve the Department's ability to respond to the Warfighter's Urgent Needs. Updated policy is expected to be issued that will address many of the specific recommendations of the GAO. The Department appreciates the opportunity to comment on the draft report. Technical comments were provided separately for your consideration. Should you have any questions, please contact Mr. William Beasley, William Beasley@osd.mil, 703-692-5722. Sincerely, Thomas P. Dec Director, Joint Rapid Acquisition Cell Enclosure: As stated

 GAO Draft Report Dated March 5, 2010 GAO-10-460 (GAO CODE 351236) "WARFIGHTER SUPPORT: IMPROVEMENTS TO DOD'S URGENT NEEDS PROCESSES WOULD ENHANCE OVERSIGHT AND EXPEDITE EFFORTS TO MEET CRITICAL WARFIGHTER NEEDS" DEPARTMENT OF DEFENSE COMMENTS TO THE GAO RECOMMENDATIONS RECOMMENDATION 1: The GAO recommends that the Secretary of Defense in conj with the Chairman, Joint Chiefs of Staff, Combatant Commands, Military Services, and of DoD components, as necessary, clearly define the roles and responsibilities of the Office of Secretary of Defense(OSD), Joint Chiefs of Staff, the Services and other DoD components necessary, through the issuance of new or updated OSD and Joint Chiefs of Staff guidance identify who is accountable for implementation, monitoring, and evaluation of all phases of process – including applying the technological maturity criteria. (See page 45/GAO Draft Report.) DOD RESPONSE: Concur. The Department is developing new DoD policy and the Join Chiefs of Staff is updating Chairman of the Joint Chiefs Of Staff Instruction (CJCSI) 3470 <i>Rapid Validation and Resourcing of Joint Urgent Operational Needs (JUONS) in the Year Execution</i>, to clearly define roles and responsibilities of all DoD Components. RECOMMENDATION 2: The GAO recommends that the Secretary of Defense in conj with the Chairman, Joint Chiefs of Staff, Combatant Commands, the Services, and other Defense components, as necessary, include rapid acquisition authority procedures available to office 	
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responsible for meeting joint urgent need requests. (See page 45/GAO Draft Report.)	oD
DOD RESPONSE: Concur. The Department is developing additional DoD policy to fact the use of Rapid Acquisition Authority and has issued guidance to Service Acquisition Executives to ensure the use of Rapid Acquisition Authority is considered when necessary address urgent needs.	
RECOMMENDATION 3: The GAO recommends that the Secretary of Defense in conj with the Chairman, Joint Chiefs of Staff, Combatant Commands, the Services, and other E components, as necessary, develop and implement standards for accurately tracing and documenting key process milestones such as funding, acquisition, fielding, and assessmen for updating data management systems to create activity reports to facilitate management and external oversight of the process. (See page 45/GAO Draft Report.)	oD , and
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Appendix IV: GAO Contact and Acknowledgments

GAO Contact	For further information please contact William Solis, (202) 512-8365 or solisw@gao.gov.
Acknowledgments	In addition to the contact named above, Cary B. Russell (Assistant Director), Susan Ditto, Larry Junek, Ron La Due Lake, Lonnie McAllister, Jason Pogacnik, Paulina T. Reaves, Matthew Tabbert, and John E. Trubey made key contributions to this report.

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