Advance Questions for Heidi Shyu, Nominee to be Assistant Secretary of the Army for Acquisition, Logistics, and Technology

Defense Reforms

The Goldwater-Nichols Department of Defense Reorganization Act of 1986 and the Special Operations reforms have strengthened the warfighting readiness of our Armed Forces. They have enhanced civilian control and clearly delineated the operational chain of command and the responsibilities and authorities of the combatant commanders, and the role of the Chairman of the Joint Chiefs of Staff. They have also clarified the responsibility of the Military Departments to recruit, organize, train, equip, and maintain forces for assignment to the combatant commanders.

Do you see the need for modifications of any Goldwater-Nichols Act provisions?

This milestone legislation is now more than 20 years old and has served our nation well. I believe that the framework established by Goldwater-Nichols has significantly improved inter-service and joint relationships and promoted the effective execution of responsibilities. It is appropriate for the Department, working with the Congress, to continually assess the law in light of improving capabilities, evolving threats, and changing organizational dynamics. Although I am currently unaware of any reason to amend Goldwater-Nichols, if confirmed, I hope to have an opportunity to assess whether the challenges posed by today's security environment require amendments to the legislation.

If so, what areas do you believe might be appropriate to address in these modifications?

As noted above, I have no specific proposals to modify Goldwater-Nichols. As with any legislation of this magnitude, however, I believe it may be appropriate to review past experience with the legislation with a view toward identifying any areas in which it can be improved upon, if any, and then consider with the Congress whether the Act should be revised.

Do you see the need for any change in the roles of the civilian and military leadership of the Department of the Army regarding the requirements definition, resource allocation, and acquisition processes?

I have no specific proposals regarding the roles and assigned missions at this time. If confirmed, I welcome the opportunity to review roles of the civilian and military participants in these processes, as appropriate, with a view toward identifying areas that can be improved upon.

What do you believe should be the appropriate role of the service chiefs in the requirements, acquisition, and resource-allocation process?

Section 861 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 formally recognized the important role of the service chiefs in specified acquisition-related functions of the military departments, including the development of requirements relating to the defense acquisition system and the coordination of measures to control requirements creep. In addition, the service chiefs' collaboration in the resource allocation process is very important.

What do you believe should be the appropriate role of the combatant commanders in the requirements, acquisition, and resource-allocation processes?

In my view, the existing war fighting responsibilities of combatant commanders and their role as described in the Defense Department Reorganization Act of 1986 is appropriate. I support language in the Weapon Systems Acquisition Reform Act mandating that the input of combatant commanders be considered in the development of joint requirements.

Do you see the need for any changes in the structure or operations of the Joint Requirements Oversight Council (JROC)?

Based upon my experience as the Principal Deputy, I see no current basis for recommending changes to the structure or operations of the Joint Requirements Oversight Council (JROC). I fully support provisions in the Weapon Systems Acquisition Reform Act mandating consideration of cost, schedule and performance tradeoffs by the JROC in establishing warfighter requirements.

Duties

Section 3016(b)(5)(A) of title 10, United States Code, states that the principal duties of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASAALT) shall be the overall supervision of acquisition, technology, and logistics matters of the Department of the Army.

What is your understanding of the duties and functions of the ASAALT?

The ASA(ALT) is one of five Assistant Secretaries of the Army. The principal duty of the ASA(ALT) is the overall supervision of acquisition, logistics, and technology matters within the Department of the Army. The ASA(ALT) serves, when delegated, as the Army Acquisition Executive and the Army's Senior Procurement Executive, and also as the Science Advisor to the Secretary and the senior research and development official for the Department of the Army. The ASA(ALT) appoints, manages, and evaluates Program Executive Officers and direct-reporting program managers, while also managing the Army Acquisition Corps and the Army Acquisition Workforce. The ASA(ALT) executes

the DA procurement and contracting functions, including exercising the authorities of the agency head for contracting, procurement, and acquisition matters pursuant to laws and regulations, the delegation of contracting authority; and the designation of contracting activities. He or she is responsible for setting the strategic direction and ensuring execution of policies, plans and programs relating to Army acquisition, logistics, technology, procurement, the industrial base, materiel-related security cooperation (including security assistance and armaments cooperation) and the Army's responsibilities within the Department of Defense Chemical Demilitarization program.

What recommendations, if any, do you have for changes in the duties and functions of the ASAALT, as set forth in section 3016(b)(5)(A) of title 10, United States Code, or in Department of Defense regulations pertaining to functions of the ASAALT?

I have no specific recommendations at this time. If confirmed, however, I look forward to the opportunity to serve in the position before recommending any potential changes in the duties and functions of the ASA (ALT).

What background and experience do you possess that you believe qualifies you to perform these duties?

As the Principal Deputy Assistant Secretary of the Army (Acquisition, Logistics and Technology), I have first-hand experience in assisting in the oversight and supervision of Army acquisition programs, procurement, logistics, sustainment and scientific and technology initiatives within the Army.

Prior to serving in the Department of the Army, I developed a wide-range of expertise in the development of defense weapon systems. Most recently, I worked as the Vice President of Technology Strategy for Space and Airborne Systems at Raytheon. In this capacity, I developed technology strategy for a variety of sensors and systems. Previously, I held several senior leadership positions at Raytheon, including Corporate Vice President of Technology and Research, Vice President and Technical Director of Space and Airborne Systems, Vice President of Unmanned and Reconnaissance Systems, Senior Director of Unmanned Combat Vehicles, Senior Director of Raytheon's Joint Strike Fighter (JSF) efforts, and Director of JSF Integrated Radar/Electronic Warfare Sensors. As Director of JSF Antenna Technologies at Raytheon, I was responsible for the development of lightweight, low-cost, Tile Active Electronically Scanned Antenna technologies. I also served as the Laboratory Manager for Electromagnetic Systems at Raytheon.

In addition, I have worked as a Project Manager at Litton Industries and was the Principal Engineer for the Joint STARS Self Defense Study at Grumman. Previously, I began my career as an engineer at the Hughes Aircraft Company.

From 2000 to 2010, I served as a member of the Air Force Scientific Advisory Board, including tenure as Vice Chairman from 2003 to 2005 and as Chairman from 2005 to 2008.

I hold a Bachelor of Science Degree in Mathematics from the University of New Brunswick in Canada, a Master of Science Degree in Mathematics from the University of Toronto, Master of Science Degree in System Science (Electrical Engineering) from the University of California, Los Angeles (UCLA), and the Engineer Degree from UCLA. I am also a graduate of the UCLA Executive Management Course and the University of Chicago Business Leadership Program. These combined experiences and responsibilities have prepared me to serve in the position, if confirmed.

What background or experience do you have in the acquisition of major weapon systems?

As the Principal Deputy Assistant Secretary of the Army (Acquisition, Logistics and Technology), I assisted efforts to oversee the acquisition of weapon systems, equipment and services for the United States Army.

I have worked as the Vice President of Technology Strategy for Space and Airborne Systems at Raytheon, developing the technology strategy for a variety of sensor and radar development programs. Previously, I held several senior leadership positions at Raytheon, including Vice President of Technology and Research, Vice President and Technical Director of Space and Airborne Systems, Vice President of Unmanned and Reconnaissance Systems, Senior Director of Unmanned Combat Vehicles, Senior Director of Joint Strike Fighter (JSF), and Director of JSF Integrated Radar/Electronic Warfare Sensors. As Director of JSF Antenna Technologies at Raytheon, I was responsible for the development of lightweight, low-cost, Tile Active Electronically Scanned Antenna technologies. I also served as the Laboratory Manager for Electromagnetic Systems at Raytheon. I have worked on numerous major weapons systems during my career such as F/A-18, F-15, JSF, U-2, and Global Hawk.

Assuming you are confirmed, what duties and functions do you expect that the Secretary of Defense and the Secretary of the Army would prescribe for you?

If confirmed, I would expect that I would be held accountable for the Army's acquisition, logistics and technology efforts.

Relationships

In carrying out your duties, what would be your relationship with:

The Secretary of the Army

If confirmed, I will support the Secretary of Army's priorities in acquisition, logistics and technology.

The Under Secretary of the Army

If confirmed, I will support the Under Secretary of the Army, both in his role as the Under Secretary and in his role as Chief Management Officer.

The Chief of Staff of the Army

If confirmed, I will work with the Chief of Staff of the Army to ensure that our soldiers receive world class equipment and support to perform their missions within available resources.

The Under Secretary of Defense for Acquisition, Technology, and Logistics

If confirmed, I will work with the USD(AT&L) in connection with Army acquisition, logistics and technology programs, and I will support the USD (AT&L) in the discharge of his responsibility to supervise Department of Defense acquisition. I assume that my duties as Army Acquisition Executive will bring me into close working contact with the USD(ATL), and I am confident that our collaboration will be very beneficial for the Army and DOD.

The Director of Cost Assessment and Program Evaluation

If confirmed, I will work with the Director of Cost Assessment and Program Evaluation in support of efforts to provide the Department with independent analysis and resourcing assessments for weapons systems programs.

The Director of Operational Test and Evaluation

If confirmed, I will work with the Director of Operational Test and Evaluation to ensure appropriate operational testing oversight for Army acquisition programs.

The Director of Defense Pricing

If confirmed, I will work with the Director of Defense Pricing to ensure implementation of effective, best-value procurement strategies in Army acquisition programs.

The Director of Procurement and Acquisition Policy

If confirmed, I will work with the Director of Procurement and Acquisition Policy to ensure appropriate oversight for Army acquisition programs, procurement and contracting.

The Director of Program Assessment and Root Cause Analysis

If confirmed, I will work with the Director of Program Assessment and Root Cause Analysis to ensure proper oversight of Army Major Defense Acquisition Programs (MDAPs) and compliance with applicable statutory reporting requirements.

The Assistant Secretary of Defense for Research and Engineering

If confirmed, I will work with the Assistant Secretary of Defense for Research and Engineering to rapidly field technologies and capabilities in support of ongoing operations and to ensure the Army and the nation maintain a strong technical and engineering foundation to reduce the cost, acquisition time, and risk of our major defense acquisition programs.

The Deputy Assistant Secretary for Systems Engineering

If confirmed, I will rely on the expertise and advice of the Deputy Assistant Secretary for Systems Engineering and encourage his early involvement in support of Army acquisition programs. Moreover, if confirmed, I would consider the Deputy Assistant Secretary's independent assessments and recommendations in decisions relating to Major Defense Acquisition Programs.

The Deputy Assistant Secretary for Developmental Test and Evaluation

If confirmed, I will work with the Deputy Assistant Secretary for Developmental Test and Evaluation on oversight of developmental testing and evaluation activities within Army acquisition programs.

The Joint Requirements Oversight Council

If confirmed, I will work with the Joint Requirements and Oversight Council in support of its missions related to the development and prioritization of joint military requirements.

The Service Acquisition Executives of the other Military Departments

If confirmed, I will collaborate with the other Service Acquisition Executives to share information regarding relevant acquisition programs, to seek opportunities to improve acquisition processes, and to support the policies and practices of the Department.

The Commander of the Defense Contract Management Command

If confirmed, I will work with the Director of the Defense Contract Management Agency to ensure effective administration of Army contracts.

The General Counsel of the Army

If confirmed, I will work with the Army General Counsel to ensure all actions within the Office of the ASA(ALT) comport with law, regulation and policy.

The Auditor General of the Army

If confirmed, I will work with the Auditor General of the Army in connection with Army acquisition, logistics and technology programs.

The Principal Military Deputy to the Assistant Secretary of the Army for Acquisition, Technology, and Logistics

If confirmed, I will work with the Principal Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology to ensure that appropriate oversight and direction is provided to the Army acquisition workforce and Army acquisition programs, policies, procedures and contracting efforts.

Major Challenges and Problems

In your view, what are the major challenges that will confront the ASAALT?

I believe the principal challenges facing the ASA(ALT) consist of equipping the Army through reset and modernization efforts at a time of declining budgetary resources.

Assuming you are confirmed, what plans do you have for addressing these challenges?

If confirmed, I will work closely with senior Department of the Army officials, as well as the Office of the Secretary of Defense, to address these challenges and meet the acquisition priorities of the Secretary of the Army. Meeting these challenges will require close and continuous collaboration between organizations responsible for requirements generation, programming and budgeting, and acquisition program management to ensure the delivery of affordable, timely and effective equipment to the Army. I would maintain emphasis on enhancing the acquisition workforce and on adopting sound business practices to ensure that the Army achieves the maximum benefit from its scarce fiscal resources.

What do you consider to be the most serious problems in the management of acquisition functions in the Army?

I believe that uncertainty regarding the extent of the current decline in Army budgets presents a significant challenge in planning and executing current and future planned investments in weapon systems and equipment.

What management actions and timetables would you establish to address these problems?

If confirmed, I will rapidly work with Army leadership to carefully plan and execute modernization and equipping efforts that meet warfighter needs on an affordable, timely and effective basis.

Major Weapon System Acquisition

Do you believe that the Army's current investment budget for major systems is affordable given historic cost growth in major systems, costs of current operations, projected increases in end strength, and asset recapitalization?

I believe that current investments in major weapon systems are affordable and the Army has recently undertaken significant efforts to avert the leading causes of cost growth in past major programs. Moreover, the Army has carefully balanced competing demands for declining resources, to include support for ongoing operations, asset recapitalization and support for Soldiers in the current budget submission.

If confirmed, how do you plan to address this issue?

If confirmed, I would work to develop and execute sound and affordable acquisition strategies in close collaboration with the requirements and resourcing organizations within the Army to ensure that cost growth is prevented to the fullest extent possible. Moreover, I would work with the Army leadership to ensure that the Army's investment in major weapons systems programs remains sustainable.

What would be the impact of a decision by the Army to reduce purchases of major systems because of affordability issues?

In addition to the possible impacts on and fielding schedules for equipment in support of the warfighter, a reduction in the manner described above may result in an increase in the unit price of capabilities, thereby impacting planned acquisition strategies. Such increases in unit cost may also result in cost breaches under the Nunn-McCurdy legislation. Lastly, such reductions may have adverse effects on the key industrial base suppliers.

Nearly half of DOD's major defense acquisition programs have exceeded the so-called "Nunn-McCurdy" cost growth standards established in section 2433 of title 10, United States Code, to identify seriously troubled programs. Section 206 of the Weapon Systems Acquisition Reform Act of 2009 (WSARA) tightened the standards for addressing such programs.

What steps if any would you take, if confirmed, to address out-of-control cost growth on the Army's major defense acquisition programs?

It is my understanding that cost growth in many Army programs resulted from the instability of requirements, combined with a reliance on immature technologies, which contributed to a high degree of risk in associated cost growth. If confirmed, I would place an emphasis on acquisition strategies that anticipate and mitigate the causes for such risk in major defense acquisition programs. Moreover, I would work closely with the organizations responsible for requirements generation to ensure that cost informed trade-offs in system requirements are fully explored to reduce risk and ensure that programs remain affordable.

What steps if any do you believe that the Army should consider taking in the case of major defense acquisition programs that exceed the critical cost growth thresholds established in the "Nunn-McCurdy" provision?

If confirmed, I will monitor program cost to minimize Nunn-McCurdy breaches. Where a program experiences a "critical" Nunn-McCurdy breach, I would insist on strict compliance with all statutory and regulatory requirements associated with the Nunn-McCurdy reporting process. In programs involving critical breaches traced to root causes other than planned reductions in procurement quantities, I would insist on fully understanding, addressing and preventing the specific causes of cost growth in future programs.

Do you believe that the office of the ASAALT, as currently structured, has the organization and resources necessary to effectively oversee the management of these major defense acquisition programs? If not, how would you address this problem?

I believe that the Army acquisition community is appropriately structured and resourced. If I am confirmed, I intend to conduct an assessment to ensure that the Office of the ASA(ALT) is structured and adequately resourced to effectively oversee the management of Army acquisition, logistics and technology efforts in the future.

Do you see the need for any changes to the Nunn-McCurdy provision, as revised by section 206?

I am aware that section 831 of the National Defense Authorization Act for Fiscal Year 2012 provided some additional flexibility in this area. At the present time I do not see a need for broader amendments the Nunn-McCurdy provision. However, if confirmed; I will have an opportunity to assess whether the challenges posed by compliance with the statutory requirements triggered by unit cost growth associated with planned reductions in procurement quantities require amendments to the legislation.

What principles will guide your thinking on whether to recommend terminating a program that has experienced "critical" cost growth under Nunn-McCurdy?

It is my view that a decision on whether to recommend terminating a program that has experienced critical cost growth under Nunn-McCurdy must be made on a case by case basis, by taking into account the specific causes of cost growth in individual programs. This assessment should include whether the program is delivering capabilities essential to national security, consideration of alternatives that can provide comparable capability at less cost, whether the cost and schedule estimates are sound, and program management.

Systems Engineering

One of the premises for WSARA was that the best way to improve acquisition outcomes is to place acquisition programs on a sounder footing from the outset by addressing program shortcomings in the early phases of the acquisition process. The Defense Science Board Task Force on Developmental Test and Evaluation reported in May 2008 that "the single most important step necessary" to address high rates of failure on defense acquisition programs is "to ensure programs are formulated to execute a viable systems engineering strategy from the beginning."

Do you believe that the Army has the systems engineering and developmental testing organizations, resources, and capabilities needed to ensure that there is a sound basis for key requirements, acquisition, and budget decisions on major defense acquisition programs?

I believe that the Army currently has the required organizations, resources and capabilities to ensure that requirements, acquisition and budget decisions on major defense acquisition programs are sound. Since WSARA was enacted, the Army has placed significant emphasis on systems engineering in the development of major acquisition programs, to include the formulation of acquisition strategies tailored to identify and address systems engineering challenges early in major programs. WSARA also placed a renewed emphasis on developmental testing, focusing on the maturation of technologies and effective use of developmental testing to prevent issues arising in operational tests. The Army has implemented this statutory guidance and given systems engineering and developmental testing a high priority in its acquisition programs.

What is your assessment of the Army's implementation to date of section 102 of WSARA, regarding systems engineering?

In my view, the Army has implemented the requirements under section 102, which call for development of systems engineering plans in major defense acquisition programs under the oversight of the Deputy Assistant Secretary of Defense for Systems Engineering. Since WSARA was enacted, the Army has established the Office of the Chief Systems Engineer to provide the Army's leadership and materiel developers with the necessary engineering/architectural products to manage and shape the Army's materiel portfolio, to ensure a System Engineering discipline across the Materiel developer community throughout the acquisition life cycle. This Chief Systems Engineer's responsibilities also include the cultivation of System Engineering capabilities within the Army through education, engineering policy, guidelines and adoption of best industry practices.

Additionally, the Army has established a Directorate of Systems of Systems Integration, designed to improve reliability, availability, maintainability, and sustainability of Army equipment through rigorous system of systems assessment and analysis.

What additional steps will you take, if confirmed, to implement this provision?

If confirmed, I would continue to expand efforts to improve systems engineering throughout the lifecycle of Army acquisition programs. Particularly as the Army undertakes modernization of networked and interoperable weapon systems and equipment, systems engineering oversight and expertise would be given significant emphasis.

Do you believe that the nation as a whole is producing enough systems engineers and designers and giving them sufficient experience working on engineering and design projects to ensure that the Army can access an experienced and technically trained systems engineering and design workforce?

As a nation, we are short of systems engineers, and I believe we must continue to attract, train and utilize talented systems engineers – both within the private sector and the government workforce. I am encouraged by the expansion of systems engineering training offered in our colleges and universities, but the Army must continue to develop and acquire this type of critical expertise.

If not, what do you recommend should be done to address the shortfall?

If confirmed, I would work closely with other stakeholders within the Department to expand the Army's efforts to recruit and retain a skilled systems engineering workforce and work to leverage the expertise at universities and other federally funded institutions where appropriate.

Technological Maturity

Over the last several years, the Government Accountability Office (GAO) has reported that private sector programs are more successful than DOD programs because they consistently require that new technologies achieve a high level of maturity before such technologies may be incorporated into product development programs. Section 104 of WSARA addresses this issue by tightening technological maturity requirements for major defense acquisition programs.

How important is it, in your view, for the Army to mature its technologies with research and development funds before these technologies are incorporated into product development programs?

In my view, the Army must continue to address the maturity of technologies incorporated within development programs in order to avert a leading cause of cost growth. Whether the technologies are matured using government research and development funds, or through the private sector, I believe it is critically important to accurately gauge their maturity level prior to initiation of the Engineering and Manufacturing Development program.

What steps if any would you take, if confirmed, to ensure that the key components and technologies to be incorporated into major acquisition programs meet the Army's technological maturity goals?

If confirmed, I will ensure that all technologies are peer reviewed for maturity before they transition to a program of record and I would ensure compliance with guidance regarding technological maturity standards issued by the Assistant Secretary of Defense for Research and Engineering pursuant to Section 104 of WSARA.

Do you believe that the Army has the organizations, resources and capabilities necessary to assess effectively the maturity of technologies that are critical to the development of major weapon systems that the Army procures?

I believe the Army does.

If not, how should the Army address these deficiencies?

If confirmed, I would work to ensure that the Army adequately and consistently applies standards for assessing technological maturity used within the Department.

Do you believe that the Army should make greater use of prototypes, including competitive prototypes, to ensure that acquisition programs reach an appropriate level of technological maturity, design maturity, and manufacturing readiness before receiving Milestone approval?

In my view, the Army should generally make greater use of prototypes in acquisition programs, to include competitive prototypes as required under WSARA, if these strategies contribute to the effective reduction of cost and schedule risk. These and other risk-mitigation strategies should be tailored to meet the needs of individual acquisition programs.

If so, what steps do you believe the Army should take to increase its use of such prototypes?

If confirmed, I will continue to emphasize its importance and work to ensure that adequate resources are made available to support prototyping, as appropriate.

The Army budget for fiscal year 2012 included \$10 million for a Technology Maturation Initiative. The Army has requested \$25 million for this initiative in fiscal year 2013.

What is your understanding of the purpose of the Technology Maturation Initiative?

My understanding is that the Technology Maturation Initiative provides a mechanism for expediting technology transition from the laboratory to operational use. The Army is using this initiative to mature promising technologies and sub-systems to Technology Readiness Levels (TRL) greater than 6, while conducting some competitive prototyping activities for key emerging systems prior to Milestone B. I believe this initiative will help reduce technical risk in future acquisition programs, increase transition opportunities for innovative technology-based solutions, and ultimately reduce cost in acquisition programs.

I understand that investments under this program are selected according to established criteria that consider the potential to accelerate technology transition, the prospect of cost and risk reduction associated with technology development and the project's potential for integration within an Army acquisition program. Each funded project is closely monitored to ensure that it is on track to deliver products on time and within budget.

What steps will you take, if confirmed, to ensure that funding provided for the Technology Maturation Initiative is used in the most effective manner possible to promote the objectives of the initiative?

If confirmed, I will work to ensure that Technology Maturation Initiative funding is allocated only to those efforts that have high potential for addressing capability needs and transitioning mature technologies to programs of record. I would continue to require that candidate programs receive careful vetting and that projects are selected according to established criteria that further the initiative's goals. Also, if confirmed, I would continue to require that efforts funded under the Technology Maturation Initiative receive close oversight by my office.

Section 2366b of title 10, U.S. Code, requires the Milestone Decision Authority for a major defense acquisition program to certify that critical technologies have reached an appropriate level of maturity before Milestone B approval.

What steps if any will you take, if confirmed, to make sure that the Army complies with the requirements of section 2366b?

If confirmed, I will ensure the Army conducts Technology Readiness Assessments (TRA) to document that technologies have reached an appropriate level of maturity before

receiving Milestone B approval. I will also ensure that processes, tools and resources are in place to meet the all requirements of section 2366a.

What is your view of the recommendation of the Defense Science Board Task Force on the Manufacturing Technology Program that program managers should be required to make use of the Manufacturing Readiness Level tool on all programs?

In my view, the readiness of manufacturing processes plays a significant role in the cost, schedule and production performance of the Army's development efforts. Understanding and ensuring a system's readiness for manufacturing is essential to success. While Manufacturing Readiness Levels may provide a tangible measure of maturity in manufacturing processes, such metrics must weigh the maturity of the system's design – particularly in the early stages of development, when designs have not yet fully matured – in order to provide a useful indication of risk.

Beyond addressing technological maturity issues in acquisition programs, what other steps should the Army take to increase accountability and discipline in the acquisition process?

If confirmed, I would utilize milestone decision and other program reviews to emphasize accountability and discipline within the process. In addition, I would work closely with the Office of the Secretary of Defense to continue implementation of "should cost" benchmarks – bottom up assessments of what a program should cost – in addition to affordability targets under the Department's Better Buying Power initiative to impose rigor and discipline in our performance. Overall, I would work to instill a culture of cost-consciousness across the acquisition workforce.

Excessive Concurrency

Some of the Army's largest and most troubled acquisition programs appear to have suffered significantly from excessive concurrency – the effort to produce a weapon system, even as it is still being designed.

What impact do you believe that such excessive concurrency has on our efforts to produce major weapon systems on schedule and on budget?

In my view, a high degree of concurrency – commencement of production while design is ongoing – contributes significant risk to weapon systems programs, particularly if the concurrency is attributable to evolving requirements in the late phases of development. This type of risk is likely to result in significant cost growth in major acquisition programs.

What steps will you take, if confirmed, to address this issue?

If confirmed, I would work diligently with affected stakeholders, to include the requirements generation community, to minimize concurrency and associated risk in Army acquisition programs.

Unrealistic Cost, Schedule and Performance Expectations

Many acquisition experts attribute the failure of DOD acquisition programs to a cultural bias that routinely produces overly optimistic cost and schedule estimates and unrealistic performance expectations. Section 101 of WSARA is designed to address this problem by establishing an independent Director of Cost Assessment and Performance Evaluation, who is charged with ensuring the development of realistic and unbiased cost estimates to support the Department's acquisition programs.

Do you agree with the assessment that overly optimistic cost and schedule estimates and unrealistic performance expectations contribute to the failure of major defense acquisition programs?

Yes

If confirmed, how do you expect to work with the Director of the new office to ensure that the Army's cost, schedule and performance estimates are realistic?

The Director, CAPE performs a critical role in the acquisition process by providing independent cost assessment and program evaluation to the Milestone Decision Authority. If confirmed, I will work closely with the Director, CAPE to ensure that cost, schedule and performance estimates are performed early, independently validated, and managed throughout a program's life cycle.

Section 201 of WSARA seeks to address this problem by promoting early consideration of trade-offs among cost, schedule, and performance objectives in major defense acquisition programs.

Do you believe that early communication between the acquisition, budget and requirements communities in the Army can help ensure more realistic cost, schedule and performance expectations?

I do. Greater collaboration between the program management, requirements and resourcing communities is essential to the development of a realistic and realizable program. This collaboration must take place early and throughout the development of new capabilities in order to maintain affordability and meet warfighter requirements on a timely and effective basis.

If so, what steps if any would you take, if confirmed, to ensure such communication?

If confirmed, I will work with the Army's requirements and resourcing stakeholders to collectively maintain affordable and achievable weapon system programs by identifying requirements tradeoffs and instituting sound acquisition strategies consistent with available resources.

The Department of Defense has increasingly turned to incremental acquisition and spiral development approaches in an effort to make cost, schedule and performance expectations more realistic and achievable.

Do you believe that incremental acquisition and spiral development can help improve the performance of the Army's major acquisition programs?

In my view, incremental acquisition strategies are effective; particularly where rapidly evolving technologies are involved or rapid fielding is needed to meet operational need.

What risks do you see in the Army's use of incremental acquisition and spiral development?

In pursuing incremental acquisition, an open architecture needs to be established to enable incorporation of next-generation technologies. In addition, growth margins must be accommodated in the architecture to enable rapid insertion.

In your view, has the Army's approach to incremental acquisition and spiral development been successful? Why or why not?

I believe the Army's approach has been successful in the conduct of recent major weapon systems. For example, the Ground Combat Vehicle program strategy was designed with prioritized requirements as part of an incremental strategy for development of an improved infantry fighting vehicle. This approach provides industry with significant flexibility in developing designs that meet the Army's cost and schedule targets. Similarly, the Army has had success implementing incremental strategies in development of tactical network.

What steps if any do you believe are needed to ensure that the requirements process, budget process, and testing regime can accommodate incremental acquisition and spiral development approaches?

If confirmed, I would work closely with the Army requirements, resourcing and testing communities to develop and execute incremental acquisition strategies, where appropriate.

How should the Army ensure that the incremental acquisition and spiral development programs have appropriate baselines against which to measure performance?

I believe that appropriate baselines must be developed in close collaboration with the warfighter to ensure that the capability provided by each increment, and its cost, is well understood.

Time-Certain Development

The Defense Acquisition Performance Assessment (DAPA) panel recommended in 2006 that the Department set fixed durations for program phases, including a requirement for the delivery of the first unit of a major weapon system to operational forces within six years of the Milestone A decision. The DAPA panel believed that durations for program phases could be limited by ensuring appropriate levels of technological maturity, defined riskreduction horizons, and program execution criteria, while allowing for the use of spiral development or block upgrades for enhancements in capability or increased requirements over time. Proponents of this approach, called time-certain development, have highlighted its potential for helping ensure that "evolutionary" (or "knowledge-based") acquisition strategies are used to develop major systems by forcing more manageable commitments to discrete increments of capability and stabilize funding by making costs and schedules more predictable.

What is your view of the DAPA panel's recommendation?

If confirmed, I look forward to the opportunity to assess the merits of the DAPA panel's recommendation within the conduct of acquisition programs in the Army's portfolio.

What is your view of time-certain development as an acquisition strategy for major weapons systems development programs?

In my view, the use of set or fixed durations for each phase of the acquisition cycle may preclude tailored acquisition strategies.

What steps if any would you take, if confirmed, to implement time-certain development strategies in the future acquisition programs?

If confirmed, I would work closely with affected stakeholders to assess the feasibility of implementing time-certain development strategies, where appropriate.

Performance-Based Payments

In 1995, the Federal Acquisition Regulation was revised to create a new category of payments, known as Performance-Based Payments (PBPs) on fixed price contracts. PBPs are made on the basis of the physical completion of authorized work, rather than the incurrence of seller costs.

In your view, what advantages, if any, can the Army gain by using PBPs more extensively in connection with fixed-price contracts for the development of its major systems?

Where specified program achievements are well-defined, Performance Based Payment strategies, in conjunction with fixed price contracts, may help address risks in technical performance and program schedules in appropriate cases.

Do you believe that PBPs should be the preferred means of providing contract financing under fixed-price contracts for the development of the Army's major systems? Why or why not?

A preference for PBPs within Army fixed price contracts would depend on whether the program has well-defined requirements and a stable design. If confirmed, I would welcome the opportunity to evaluate the utility of PBPs within fixed price contracts used in the Army.

Funding and Requirements Stability

The poor performance of major defense acquisition programs has also been attributed to instability in funding and requirements. In the past, the Department of Defense has attempted to provide greater funding stability through the use of multi-year contracts. More recently, the Department has sought greater requirements stability by instituting Configuration Steering Boards to exercise control over any changes to requirements that would increase program costs.

Do you support the use of Configuration Steering Boards to increase requirements stability on major defense acquisition programs?

I fully support the use of Configuration Steering Boards (CSBs) to address the stability of requirements in major defense acquisition programs. I believe that funding and requirements stability is an essential component of successful acquisition programs. The Army currently employs CSBs on a regular basis to identify opportunities to de-scope requirements contributing to undue cost growth and performance risk in major defense acquisition programs.

What other steps if any would you recommend taking to increase the funding and requirements stability of major defense acquisition programs?

If confirmed, I would work closely with senior officials within the Army and the Office of the Secretary of Defense to continue the use of CSBs in the conduct of Army major weapon systems programs to address the need for requirements and funding stability. Moreover, I would place a significant emphasis on greater collaboration with the requirements generation and resourcing communities to identify and address areas where instability presents challenges in acquisition programs.

Fixed Price-Type Contracts

Recent Congressional and DOD initiatives attempt to reduce technical and performance risks associated with developing and producing major defense acquisition programs so as to minimize the use of cost-reimbursable contracts.

Do you think that the Army should move towards more fixed price-type contracting in developing or procuring major defense acquisition programs? Why or why not?

Use of fixed-price contracts, where appropriate, is a key tenet of the Department's Better Buying Power initiative. In my opinion, the Army should use the type of contract that is best suited for the acquisition program at issue, after considering the complexity and risk associated with technical designs, the speed with which capabilities must be provided to the warfighter, industry's experience in developing and integrating relevant technologies, and the need to maintain technological superiority. If confirmed, I will ensure that Army acquisition strategies reflect sound business judgment in selecting the appropriate contract type.

Under what circumstances, if any, do you believe it would be appropriate for the Army to use a cost-type contract for the production of a major weapon system?

In my view, cost-type contracts may be appropriate in development programs. These include efforts involving significant technical challenges, such as high risk associated with development of unprecedented technologies, significant software development or development of new manufacturing technologies and/or processes. Cost-type contracts may also be appropriate during production where there is operational urgency for the needed capability, or where a lack of experience within the defense industry, the need to maintain technological superiority over peers and adversaries, or where some combination of these and other related factors warrant such a contracting strategy.

Technology Transition

The Department continues to struggle with the transition of new technologies into existing programs of record and major weapons systems and platforms. Further, the Department also has struggled with moving technologies from DOD programs or other sources rapidly into the hands of operational users.

What impediments to technology transition do you see within the Army?

In my view, the successful transition of new technologies to Army programs of record is critical to the long-term success of our acquisition efforts. In my opinion, the most significant impediment to technology transition lies in the lack of coordination among relevant stakeholders necessary to facilitate the transition. While S&T programs often demonstrate technology concepts, they frequently are not mature enough for direct insertion into Programs of Record. Close and continuous coordination between the S&T

organizations, industry, academia, FFRDCs, government laboratories with the Army materiel developers is essential for success.

What steps if any will you take, if confirmed, to enhance the effectiveness of technology transition efforts?

If confirmed, I will work to ensure that technology investment strategies are closely coordinated with warfighter requirements and capabilities developed within the acquisition process in order to transition mature technologies as appropriate. I will also assess appropriate metrics applicable to the S&T community to gauge progress in transition efforts.

What can be done from a budget, policy, and organizational standpoint to facilitate the transition of technologies from science and technology programs and other sources, including small businesses, venture capital funded companies, and other non-traditional defense contractors, into acquisition programs?

If confirmed, I would work closely with the Assistant Secretary of Defense, Research and Engineering, as well as the small business and S&T communities to encourage tighter collaboration with the acquisition community.

Do you believe that the Army's science and technology organizations have the ability and the resources to carry technologies to higher levels of maturity before handing them off to acquisition programs?

I do.

What steps if any do you believe the Army should take to ensure that research programs are sufficiently funded to reduce technical risk in programs so that technological maturity can be demonstrated at the appropriate time?

If confirmed, I will work with all stakeholders to ensure that the Army science and technology effort is resourced to accomplish its mission.

What role do you believe Technology Readiness Levels and Manufacturing Readiness Levels should play in the Army's efforts to enhance effective technology transition and reduce cost and risk in acquisition programs?

In my view, well-defined and consistently applied assessments of technological readiness and manufacturing readiness serve as valuable tools in reducing the cost and risk in Army acquisition programs. Technology Readiness Assessments provide a standardized metric to identify the maturity of new technologies, or existing technologies used in a new or novel fashion. By ensuring that new technologies are at adequate maturity levels with appropriate risk mitigation plans to warrant continued progression through the acquisition process, the Army mitigates the risk of having schedule and cost overruns that can result from having immature technology matured within an acquisition program.

While Manufacturing Readiness Levels may provide a tangible measure of maturity in manufacturing processes, such metrics must weigh the maturity of the system's design – particularly in the early stages of development, when designs have not yet fully matured – in order to provide a useful indication of risk. If confirmed, I will evaluate the effectiveness of formal Manufacturing Readiness Levels in reducing cost and risk in acquisition programs and facilitating technology transition.

What is your view of the Rapid Innovation Program established pursuant to section 1073 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011?

In my view, the Rapid Innovation Fund (RIF) is a valuable mechanism for supporting truly innovative technology solutions that are not funded through the Army's customary structured processes. I believe RIF support can help small and nontraditional businesses realize an increased role in meeting the Army's needs more rapidly and innovatively.

I understand that candidates for funding are solicited through a Broad Agency Announcement (BAA) followed by a careful selection of proposals with a high potential to demonstrate technology enabled capabilities that can be transitioned to either programs of record or rapidly fielded to Soldiers.

What do you see as the major challenges to successful implementation of this program?

I do not anticipate any major challenges, but if confirmed, I would ensure that the selection process is consistently and transparently employed and that oversight of RIF funded projects is diligently maintained to promote the best use of these funds.

What steps will you take, if confirmed, to ensure that funds authorized and appropriated for this program are spent in the most effective manner possible to promote the objectives of the program?

See response above.

Multi-Year Contracts

The statement of managers accompanying Section 811 of the National Defense Authorization Act for Fiscal Year 2008 addresses the requirements for buying major defense systems under multiyear contracts as follows: "The conferees agree that 'substantial savings' under section 2306b(a)(1) of title 10, United States Code, means savings that exceed 10 percent of the total costs of carrying out the program through annual contracts, except that multiyear contracts for major systems providing savings estimated at less than 10 percent should only be considered if the Department presents an exceptionally strong case that the proposal meets the other requirements of section 2306b(a), as amended. The conferees agree with a Government Accountability Office finding that any major system that is at the end of its production line is unlikely to meet these standards and therefore would be a poor candidate for a multiyear procurement contract."

What are your views on multiyear procurements? Under what circumstances do you believe they should be used?

I support the use of multiyear procurements as a potential source of substantial procurement savings in the Army. In my view, multi-year procurements offer improved use of industrial facilities, funding stability, economies of scale and reduced administrative burdens in contracting. This, in turn, enables industry to focus their IR&D to improve manufacturing processes. The decision to pursue multi-year procurements should weigh the stability of system requirements and availability of funding, the maturity of system designs and associated technical and manufacturing risks, and industry's expertise in production processes.

What is your opinion on the level of cost savings that constitute "substantial savings" for purposes of the defense multiyear procurement statute, 10 U.S.C. § 2306b?

It is my understanding that 10 U.S.C. § 2306b does not establish a specific numerical savings threshold below which multi-year procurements would be disfavored. In addition, I am aware of citations to a 10% savings minimum as a reasonable measure of "substantial savings." I agree that multi-year savings must indeed be substantial as compared to annual procurements, and that a 10% benchmark serves as a reasonable indicator of such savings. However, if confirmed, I would not foreclose the option to pursue multi-year procurements achieving a level of savings below 10% in appropriate circumstances on a case-by-case basis.

If confirmed, under what circumstances, if any, do you anticipate that you would support a multiyear contract with expected savings of less than 10 percent?

See response above.

If confirmed, under what circumstances, if any, would you support a multiyear contract for a major system at the end of its production line?

If confirmed, I would pursue multi-year procurements, as appropriate, where such procurement strategies are warranted by the verified identification of substantial savings to the taxpayer. The decision to enter a multi-year procurement on systems nearing the end of production would depend on careful consideration of a variety of factors and the degree of savings to be achieved.

Under what circumstances, if any, do you believe that a multiyear contract should be used for procuring weapons systems that have unsatisfactory program histories, e.g., displaying poor cost, scheduling, or performance outcomes but which might otherwise comply with the requirements of the defense multiyear procurement statute, 10 U.S.C. § 2306b?

The decision to enter a multi-year procurement would depend on careful consideration of a variety of factors, to include program risks and contractor performance, in addition to the degree of savings to be achieved. If confirmed, I would carefully evaluate and assess all such factors in determining whether to pursue multi-year procurements. Unsatisfactory program performance will be a major factor in consideration of whether to pursue a multi-year procurement.

What is the impact of the Department's current budget situation, in your view, on the feasibility and advisability of additional multiyear procurement contracts for major weapon systems?

In my view, declining resources present a significant challenge to the sustained use of multi-year procurements in the Army. Any decision to pursue additional multi-year procurement contracts must carefully weigh the potential risk associated with funding instability with the positional cost savings for the Army.

Under what circumstances, if any, should the Army ever break a multiyear procurement?

In my view, a break in multi-year procurement should be a rare event warranted only under exceptional circumstances, to include an unplanned or sharp reduction in funding, or poor delivery performance by the contractor.

What impact if any does the use of a multi-year contract have, in your view, on the operation and sustainment cost for a weapon system?

In my opinion, multi-year procurements can offer significant savings in the area of operation and sustainment costs of a major weapon system. The funding stability provided by a multi-year contract enables both the prime contractor and their subcontractors to invest to improve their manufacturing processes.

To what extent should the Army consider operation and sustainment costs, and the stability of such costs, before making a decision whether to acquire a major system under a multiyear contract?

In my view, the Army should assess all factors and potential areas of risk in determining whether to pursue savings through multi-year procurements.

The Army's Fiscal Year 2013 budget proposal seeks approval to enter into a new five-year contract for the procurement of CH-47 Chinook helicopters.

What impact would procuring these helicopters under a multiyear contract have on the Army's budgetary flexibility in a period when tight budgets and possible sequestration could require deep budget cuts?

In my view, the proposal to enter into new a five-year contract for CH-47 Chinook helicopters comports fully with the statutory requirements for multi-year procurements and reflects a deliberate assessment of associated risks and projected substantial savings.

Do you believe that it is in the best interests of the Army to restrict its budgetary flexibility in this manner? Why or why not?

Particularly in a resource constrained environment, I support the decision to achieve substantial taxpayer savings. The CH-47 program has a long history of stability and success in meeting warfighter needs.

Continuing Competition and Organizational Conflicts of Interest

Section 202 of WSARA requires DOD to take steps to promote continuing competition (or the option of such competition) throughout the life of major defense acquisition programs.

What is your view on the utility of continuing competition as a tool to achieve longterm innovation and cost savings on major defense acquisition programs?

I fully agree that competition serves as a valuable tool in driving technological innovation, achieving cost savings and reducing schedule in acquisition programs. I support efforts to expand use of competition at key program milestones, consistent with the Department's Better Buying Power initiative.

Do you believe that such continuing competition is a viable option on major defense acquisition programs?

I believe that increased competition is a vital tool for promoting long-term innovation and cost savings in weapon system programs.

If so, what steps if any can and should the Army take to address this issue?

If confirmed, I would ensure that acquisition strategies for Army programs incorporate increased use of competition where ever appropriate.

Section 203 of WSARA requires the use of competitive prototypes for major defense acquisition programs unless the cost of producing such prototypes would exceed the

lifecycle benefits of improved performance and increased technological and design maturity that prototypes would achieve.

Do you support the use of competitive prototypes for major defense acquisition programs?

I do. Competitive prototypes provide a valuable mechanism for identifying and addressing systems integration challenges in complex systems, maturing technologies, identifying potential requirements trades and reducing the overall cost and schedule risk of developmental efforts. I support the use of competitive prototypes at the system and subsystem level where the use of this approach effectively reduces government risk.

Under what circumstances do you believe the use of competitive prototypes is likely to be beneficial?

In my view, competitive prototypes are useful in the technology development phase involving immature technologies, technologies integrated in new ways, or where system requirements need refinement.

Under what circumstances do you believe the cost of such prototypes is likely to outweigh the potential benefits?

There may be instances in which competitive prototypes do not provide a cost-effective means to reduce risk in an acquisition program. Such instances may include programs calling for competition of relatively mature technologies, or cases in which the government acquires the most current versions of rapidly evolving technologies, such as radios or mobile handheld devices. A cost benefit analysis could be used to determine if a prototype is beneficial.

Section 207 of WSARA required the Department to promulgate new regulations to address organizational conflicts of interest on major defense acquisition programs.

Do you agree that organizational conflicts of interest can reduce the quality and value of technical support services provided to the Army and undermine the integrity of the Army's acquisition programs?

Yes

What is your understanding of the steps the Army has taken to implement section 207 and the new regulations?

My understanding is that section 207 of WSARA has been implemented within the Defense Federal Acquisition Regulation Supplement, which is fully applicable to the Army.

What additional steps if any do you believe the Army should take to address organizational conflicts of interest in major defense acquisition programs?

The occurrence and perception of organizational conflicts of interest presents a serious threat to the integrity of the acquisition process. If confirmed, I would ensure that senior Army program and contracting officials remain sensitive to potential OCIs and ensure that they are appropriately addressed. I also would work closely with the Office of the Secretary of Defense and to determine and implement appropriate policies, procedures, and other measures needed to address this concern.

What are your views on the use of system engineering and technical assistance contractors that are affiliated with major defense contractors to provide "independent" advice to the Army on the acquisition of major weapon systems?

I support the applicable statutory and regulatory guidance that governs the use of such contractor personnel. If confirmed, I will work to ensure that Army acquisition programs closely adhere to guidance regarding inherently governmental functions in this area and that programs adhere to applicable rules, regulations and statutes governing organizational conflicts of interest.

What lines do you believe the Army should draw between those acquisition responsibilities that are inherently governmental and those that may be performed by contractors?

If confirmed, I would work closely with other Army senior leaders to execute Departmental guidance regarding the performance of inherently governmental functions in acquisition by the government workforce.

If confirmed, what steps if any would you take to ensure that defense contractors do not misuse their access to sensitive and proprietary information of the Army and other defense contractors?

If confirmed, I would emphasize compliance with and enforcement of applicable rules, policies and laws governing the misuse of sensitive and proprietary information within the Army. Moreover, to the extent that revised or additional measures are required to safeguard sensitive or proprietary information, I would support efforts to strengthen existing policies.

If confirmed, what steps if any would you take to ensure that defense contractors do not unnecessarily limit competition for subcontracts in a manner that would disadvantage the government or potential competitors in the private sector?

If confirmed, I would work to develop or reinforce policies that support competition at the subcontractor level, as appropriate.

Operating and Support Costs

Operating and support (O&S) costs far exceed acquisition costs for most major weapon systems. Yet, DOD has placed far less emphasis on the management of O&S costs than it has on the management of acquisition costs. Section 832 of the National Defense Authorization Act for Fiscal Year 2012 requires the Department to take a series of steps to improve its processes for estimating, managing, and reducing such costs.

What steps will you take, if confirmed, to implement the requirements of section 832 in the Army?

If confirmed, I would fully support implementation of section 832 and associated efforts under the legislation designed to assess, manage and control operation and support (O&S) costs in major weapon system programs. In the conduct of Army acquisition programs, I would ensure that the life cycle cost data required under the legislation is collected and assessed in major weapon systems programs.

Do you believe that the Army has appropriate organizations, capabilities, and procedures in place to monitor and manage O&S costs?

It is my understanding that a large percentage of system lifecycle costs are generally attributable to O&S costs. I believe that the Army has the appropriate organizations, capabilities and procedures in place to monitor and manage O&S costs. To the extent that the Army needs strengthened support in this area, if confirmed, I would work closely with Army leaders to ensure that O&S costs are appropriately addressed.

If not, what steps would you take, if confirmed, to develop such organizations, capabilities, and procedures?

See response above.

Contracting for Services

By most estimates, the Department now spends more for the purchase of services than it does for products (including major weapon systems). After a decade of rapid growth, section 808 of the National Defense Authorization Act for Fiscal Year 2012 placed a cap on DOD spending for contract services.

Do you believe that the Army can do more to reduce spending on contract services?

I believe that the Army has made significant progress in identifying and categorizing service contracts under the Better Buying Power initiative and efforts under the Army's Institutional Army Transformation Commission, while identifying areas of cost growth

and potential reduction. If confirmed, I would work closely with Army leadership to implement and expand these efforts as appropriate.

Do you believe that the current balance between government employees (military and civilian) and contractor employees is in the best interests of the Army?

It is my opinion that a combination of military, government civilians, and contractor employees is necessary. If confirmed, I will work with Army leadership to identify the right mix of resources in the best interest of the Army.

What steps if any would you take, if confirmed, to control the Army's spending on contract services and ensure that the Army complies with the requirements of section 808?

If confirmed, I will work with Army commands and organizations to implement the requirements of section 808 and continue ongoing efforts within the Department to control the growth of spending in this area.

Section 812 of the National Defense Authorization Act for 2007 required the Department of Defense to develop a management structure for the procurement of contract services. Sections 807 and 808 of the National Defense Authorization Act for Fiscal Year 2008 (subsequently codified in section 2330a of title 10, United States Code) require the Department of Defense to develop inventories and conduct management reviews of contracts for services.

Do you believe that the Army has appropriate organizations, capabilities, and procedures in place to manage its service contracts?

I do. Oversight and management of the Army's service contract initiatives falls within the Office of the Assistant Secretary of the Army (Acquisition, Logistics & Technology), which is responsible for execution of detailed plans to identify and harness savings in service contracts and address areas of cost growth through formal oversight.

If not, what steps would you take, if confirmed, to develop such organizations, capabilities, and procedures?

See answer above.

Do you support the use of management reviews, or peer reviews, of major service contracts to identify "best practices" and develop lessons learned?

I do. If confirmed, I will continue to study and support mechanisms that effectively facilitate the identification of best practices and sharing of lessons learned in this area. In addition, I will collaborate with the Air Force and Navy acquisition executives to share lessons learned.

If confirmed, will you fully comply with the requirement of section 2330a?

If confirmed, I will fully comply with the requirements under section 2330a relating to the procurement of services.

Section 863 of the National Defense Authorization Act for Fiscal Year 2011 requires the Department of Defense to establish a process for identifying, assessing, reviewing, and validating requirements for the acquisition of contract services.

What is the status of the Army's efforts to implement the requirements of section 863?

The Army has established a Senior Services Manager (Senior Executive Service position) within the Office of the Assistant Secretary of the Army (Acquisition, Logistics & Technology) to provide policy and oversight of Army services acquisition. In September 2011, the Secretary of the Army approved a Services Optimization Plan that established an organizational structure and processes for oversight and management of services acquisitions that focuses on efficiency, effectiveness and cost reductions.

What steps remain to be taken, and what schedule has the Army established for taking these steps?

The Army is implementing a number of initiatives during Fiscal Years 2012 and 2013. These efforts include annual requirements and execution reviews of services acquisitions in an effort to obtain effective and efficient services at the lowest cost, developing a services business intelligence capability to provide Army leaders end-to-end understanding of services acquisitions requirements, performance and cost, efforts to codify procedures and standards in applicable Army regulations, and working with the Defense Acquisition University to add new services acquisition management practices into training courses.

What additional steps if any would you take, if confirmed, to improve the Army's management of its contracts for services?

If confirmed, I would work closely with Army commands and organizations to identify areas to refine and improve the management of contracts for services, establish metrics and monitor progress.

Contractor Performance of Critical Governmental Functions

Over the last decade, the Department has become progressively more reliant upon contractors to perform functions that were once performed exclusively by government employees. As a result, contractors now play an integral role in areas as diverse as the management and oversight of weapons programs, the development of personnel policies, and the collection and analysis of intelligence. In many cases, contractor employees work in the same offices, serve on the same projects and task forces, and perform many of the same functions as DOD employees.

In your view, has the Army become too reliant on contractors to support the basic functions of the Department?

In my view, the Army must maintain the appropriate mix of military, civilian and contractor support within the acquisition function. If confirmed, I would focus on making any necessary adjustments to ensure that the Army's acquisition workforce possesses and retains critical skills needed to equip Soldiers and reduces dependence on contractors.

Do you believe that the current extensive use of personal services contracts is in the best interest of the Army?

If confirmed, I will work closely with Army leadership to address the extent to which personal services contracts should be used.

What is your view of the appropriate applicability of personal conflict of interest standards and other ethics requirements to contractor employees who perform functions similar to those performed by government employees?

In my opinion, appropriate personal conflict of interest standards and other ethics requirements should be applied to contractor employees when they are performing functions similar to those performed by government employees. It is my understanding that, based on the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, standards and requirements relating to contractor employees who perform acquisition functions closely associated with inherently governmental functions are prescribed in the Federal Acquisition Regulation. If confirmed, I will use the resources of my office to ensure that such standards and requirements are applied as intended. The Army must always be an honest and transparent steward of the taxpayer dollars.

U.S. military operations in Iraq and Afghanistan have relied on contractor support to a greater degree than any previous U.S. military operation. According to widely published reports, the number of U.S. contractor employees in Iraq and Afghanistan has exceeded the number of U.S. military deployed in those countries.

Do you believe that the Army has become too dependent on contractor support for military operations?

In my opinion, contractors provide vital life, safety, and health support to both wartime and peacetime military operations. Their contributions allow military personnel to focus on warfighting operations under established strength levels. I believe that the Army must continue to assess and define the appropriate levels of contractor support in current and future military operations.

What risks do you see in the Army's reliance on such contractor support? What steps do you believe the Army should take to mitigate such risk?

In my view, the use of contractors provides critical support to warfighting operations. This situation presents potential operational risks in future situations where comparable contract support may be unavailable. It also may result in the Government incurring excessive costs for this support. To mitigate these risks, I believe that the Army must emphasize oversight of contractor performance and assess requirements in future operations.

Do you believe the Army is appropriately organized and staffed to effectively manage contractors on the battlefield?

I believe we have made significant progress in growing the acquisition workforce to expand the ranks of trained contract oversight personnel, but much more work remains to be done. In my opinion, it will take time and continued efforts to adequately fill the increased authorizations with properly trained acquisition professionals.

What steps if any do you believe the Army should take to improve its management of contractors on the battlefield?

In my opinion, the Army has made significant strides in developing new Policy, Doctrine, Organizations, Materiel solutions and Training focused on improving Operational Contract Support. It is my opinion that continued Army senior leader emphasis on the full implementation of these initiatives is required.

Contracting Methods

In recent years, the Department of Defense has relied heavily on time-and-materials contracts for the acquisition of services. Under such a contract, the Department pays a set rate per hour for contractor services, rather than paying for specific tasks to be performed. In some cases, contractors have substituted less expensive labor under time-and-materials contracts, while continuing to charge federal agencies the same hourly rates, resulting in effective contractor profits of 25 percent or more.

What is your view of the appropriate use of time-and-materials contracts by the Army?

Time-and-material contracts are the least preferred contract type. They may be appropriate in limited circumstances such as when the requirement cannot be defined and work must start. Once the requirement becomes better defined, however, time-andmaterials contracts should be replaced with fixed-price or cost type contracts.

What steps if any do you believe the Army should take to minimize the abuse of time-and-materials contracts?

If confirmed, I will work to ensure that the Army reviews its contract portfolio on a regular basis to identify those time-and-materials contracts that can be converted to more appropriate contract vehicles. Moreover, I would review existing policies and procedures to ascertain whether supplemental guidance is needed in this area.

Section 852 of the John Warner National Defense Authorization Act for Fiscal Year 2007 requires the Department of Defense to promulgate regulations prohibiting excessive "pass-through" charges on DOD contracts. Pass-through charges are charges added by a contractor for overhead and profit on work performed by one of its subcontractors, to which the contractor provided no added value. In some cases, pass-through charges have more than doubled the cost of services provided to the Department of Defense.

What is your view of the regulations promulgated by the Department of Defense to implement the requirements of section 852?

If confirmed, I would fully support enforcement of the Federal Acquisition Regulation Supplement provisions that governs pass-through charges. In my view, these provisions adequately addresses the need for oversight and control of excessive pass-through charges. As part of ongoing efforts to prioritize affordability within the Department, must ensure that our acquisition and contracting professionals evaluate contractor proposals with an eye towards reduction of excessive pass-through charges.

What additional steps if any do you believe the Army should take to address the problem of excessive pass-through charges?

If confirmed, I would work with Army contracting professionals, the Defense Contract Audit Agency and the Defense Contract Management Agency to ensure that proper measures are in place to address excessive pass-through charges in the acquisition process. I would also work with Army Principal Assistants Responsible for Contracting (PARCs) to ensure that prime contractors are held accountable for the pass-through cost of subcontract performance.

What additional steps if any do you believe the Army should take to address the problem of excessive pass-through charges?

If confirmed, I will review the effect of existing regulations to determine what additional steps, if any, may be necessary.

Better Buying Power

The Department of Defense's Better Buying Power initiative provides acquisition professionals with important guidance on how to achieve greater efficiency, enhanced productivity and affordability in how the Department procures goods and services.

What steps if any will you take, if confirmed, to ensure that the Army's acquisition and contracting professionals implement this guidance, and achieve intended results?

I strongly support full implementation of the Department's Better Buying Power initiative and, if confirmed, will vigorously monitor, emphasize and prioritize ongoing progress in its implementation.

Which elements if any of this guidance do you disagree with and would not expect to fully implement, if confirmed?

There are no tenets of this guidance with which I disagree.

How would you measure how effectively the Army's acquisition and contracting workforce is implementing the tradecraft and best-practices called for under this initiative?

The Army's success in implementing this initiative is reflected in the efficiencies identified and continuously monitored in an ongoing basis within acquisition programs.

What steps would you take, if confirmed, to implement the following elements of the Better Buying Power initiative?

- 1) Sharing the benefits of cash flow
- 2) Targeting non-value-added costs
- 3) Mandating affordability as a requirement
- 4) Eliminating redundancy within warfighting portfolios
- 1) If confirmed, I would continue efforts to implement guidance by the Office of Secretary of Defense regarding cash flow incentives tied to contractor performance in Army acquisition programs.
- 2) If confirmed, I would work closely with the Office of the Secretary of Defense to implement policies, directives and guidance in this area.
- If confirmed, I would continue efforts to prioritize affordability in the development of acquisition strategies for weapon systems and to use cost-informed trade-offs in system development. In addition, affordability targets must now be established at Milestone A decisions.
- 4) If confirmed, I would continue support for the Army's existing use of capability portfolio reviews to assess requirements for existing systems across portfolios and identify areas of redundancy for elimination.

Interagency Contracting

What is your assessment of the risks and benefits associated with the Army's continued extensive use of inter-agency contracts?

In my view, inter-agency contracts can provide efficient and effective methods for meeting Army mission requirements, but their use must carefully balance considerations regarding contract oversight and the incentives created under fee-for-service arrangements.

Do you believe additional authority or measures are needed to hold Army or other agency personnel accountable for their use of inter-agency contracts?

If confirmed, I will review existing Army policies and guidance regarding inter-agency contracts and determine whether additional measures are warranted.

Do you believe contractors have any responsibility for assuring that the work requested by Army personnel is within the scope of their contract?

While compliance with contract terms is a duty shared equally among the parties to any agreement, I believe that the primary responsibility for ensuring that work requested by the Army is within the agreement's scope rests with the Army contracting officer. The contractor has the responsibility to ensure that they can accomplish the tasks defined in the contract within cost and schedule.

Do you believe that the Army's continued heavy reliance on outside agencies to award and manage contracts on its behalf is a sign that the Army has failed to adequately staff its own acquisition system?

I believe that a variety of factors have contributed to the increased use of outside agencies to award and manage contracts, to include operational urgency in meeting warfighter needs and challenges attributable to staffing. The Army has undertaken robust efforts to grow the contracting workforce in response to these underlying issues. Furthermore, in my view, inter-agency contracting should only be used as appropriate and not as an expedient alternative to existing Army contracting processes. If confirmed, I would examine existing processes, manpower and policies to confirm the best response to this development.

Acquisition of Information Technology

Most of the Department's Major Automated Information System (MAIS) acquisitions are substantially over budget and behind schedule. In particular, the Department has run into unanticipated difficulties with virtually every new business system it has tried to field in the last ten years. Section 804 of the National Defense Authorization Act for Fiscal Year 2010 required the Department of Defense to establish a new acquisition process for information technology.

Do you believe that unique problems in the acquisition of business systems require different acquisition strategies or approaches?

I agree that the acquisition of complex business systems calls for consideration of unique strategies and approaches that are different from traditional weapons systems acquisitions.

What steps if any do you believe the Army should take to address these problems?

If confirmed, I would work closely with the Chief Management Officer of the Army, the Army Chief Information Officer and other affected stakeholders to review existing business systems under development and refine existing strategies as appropriate.

If confirmed, how would you work with the Chief Information Officer of the Army to take these steps?

See response above.

Section 818 of the National Defense Authorization Act for Fiscal Year 2012 establishes new requirements for DOD and its contractors to detect and avoid the use of counterfeit electronic parts.

What steps will you take, if confirmed, to implement the requirements of section 818? What schedule will you establish for taking these steps?

A comprehensive response to counterfeit parts requires a joint government and industrywide effort to address and establish effective anti-counterfeit standards. If confirmed, I will work with organizations and leaders across the Department to comply with the requirements under section 818. In carrying out this mandate, the Department is focusing on weapon systems safety, mission assurance, and sensitive/critical parts across the supply chain. The Army has established a centralized reporting capability with industry to share information and to report potential counterfeit incidents and is strengthening its detection, supplier involvement, internal inspections and legal and contractual actions to address this issue. If confirmed, I would continue and reinforce these efforts.

What additional steps do you believe the Army needs to take to address the problem of counterfeit electronic parts?

If confirmed, I would work closely with Army leadership and the Office of Secretary of Defense to evaluate the effectiveness of existing measures and recommend improvements if needed. In addition, I would seek industry's help in strengthening their detection and

monitoring of potential counterfeit parts and establishment of improved quality control processes.

Acquisition Workforce

Do you believe that Army's workforce is large enough and has the skills needed to perform the tasks assigned to it?

I strongly support ongoing initiatives to grow the capacity and capability of the defense acquisition workforce as a means to maximize the effective use of resources in the acquisition of weapon systems. If confirmed, I will maintain a high priority on the success of efforts to improve the size and quality of the acquisition workforce.

In your view, what are the critical skills, capabilities, and tools that the Army's workforce needs for the future? What steps will you take, if confirmed, to ensure that the workforce will, in fact, possess them?

In my view, the list of required critical skills is diverse – ranging from contracting, program management, systems engineering, cost estimating, risk management, and test planning and management, to name a few. If confirmed, I will vigorously support and advance efforts to grow the acquisition workforce and cultivate expertise in all critical areas.

Do you agree that the Army needs a comprehensive human capital plan, including a gap analysis and specific recruiting, retention and training goals, to guide the development of its acquisition workforce?

I agree that a comprehensive human capital plan is useful in evaluating current workforce capabilities and determining future needs and gaps and that extensive planning as been underway since the Department initiated efforts to increase the size of the acquisition workforce.

What steps if any do you think are necessary to ensure that the Army has the ability it needs to attract and retain qualified employees to the acquisition workforce?

I believe it is essential that the Army has effective recruiting and retention tools necessary to attract and retain a highly professional and skilled acquisition workforce. If confirmed, I would further assess this area to determine whether additional measures may be needed.

What are your views regarding assertions that the acquisition workforce is losing its technical and management expertise and is beginning to rely too much on support contractors, FFRDCs, and, in some cases, prime contractors for this expertise?

The Army's current effort to rebuild and reconstitute technical and management expertise in the workforce is in response to past reductions following the end of the Cold War. My view is that high quality technical and management expertise must reside within the Army's workforce in order to accomplish ongoing objectives in executing efficient, affordable, and ultimately successful acquisition programs. If confirmed, I would weigh these considerations in determining the appropriate degree of reliance on FFRDCs and contractors in current and future Army acquisition programs.

What is the appropriate tenure for program managers and program executive officers to ensure continuity in major programs?

The tenure requirements for program managers are based on the Acquisition Category level of the Program and range from three to four years. I also understand that the Army and/or Defense Acquisition Executive have the authority to adjust the tenure requirement based on unique aspects of the program. I believe this policy represents the appropriate balance between program continuity and the professional development of the workforce.

Section 852 of the National Defense Authorization Act for Fiscal Year 2008 established an Acquisition Workforce Development Fund to help the Department of Defense address shortcomings in its acquisition workforce. The fund provides a continuing source of funds for this purpose.

Do you believe that the Acquisition Workforce Development Fund is still needed to ensure that the Army has the right number of employees with the right skills to run its acquisition programs in the most cost effective manner for the taxpayers?

Yes, I believe the Defense Acquisition Workforce Development Fund is essential to carry out current initiatives to grow the capacity and capability of the defense acquisition workforce.

If confirmed, what steps if any will you ensure that the money made available through the Acquisition Workforce Fund is spent in a manner that best meets the needs of the Army and its acquisition workforce?

If confirmed, I will ensure that the Fund is supported by the Army to continue the development of a professional acquisition workforce.

Army Modernization

In general, major Army modernization efforts have not been successful over the past decade. Since the mid-1990's, Army modernization strategies, plans, and investment priorities have evolved under a variety of names from Digitization, to Force XXI, to Army After Next, to Interim Force, to Objective Force, to Future Combat System and Modularity. Instability in funding, either as provided by DOD or Congress, has been cited by the Army and others as a principal cause of program instability. For the most part, however, the Army has benefited from broad DOD and Congressional support for its modernization and readiness programs even when problems with the technical progress and quality of management of those programs have been apparent.

What is your assessment of the Army's modernization record?

The Army's past challenges in modernization efforts are attributable to a variety of factors, which generally include costly, unconstrained and shifting requirements, excessive reliance on immature technologies and technical challenges leading to cost growth and schedule delay. In my view, the Army has drawn valuable lessons from these prior efforts and has instituted significantly improved processes and approaches to modernization in response to this record.

If confirmed, what actions, if any, would you propose to take to achieve a genuinely stable modernization strategy and program for the Army?

If confirmed, I would work in close collaboration with the requirements generation community and the programming and resourcing communities to develop affordable, sustainable and achievable modernization strategies and incorporate lessons learned in prior efforts.

What is your understanding and assessment of the Army's modernization investment strategy?

My understanding is that Army's modernization investment strategy is based on assessments of evolving threats, military requirements, the state of current and planned capabilities and the Army's resources. Despite declining budgets, the Army must conduct modernization efforts to provide affordable, adaptive, flexible and decisive capabilities to Soldiers in response to global responsibilities. Consistent with the Army's strategic review and assessment of modernization needs, I understand that the Army's top modernization priorities include the Network, the Ground Combat Vehicle, the Joint Light Tactical Vehicle and Soldier Systems. If confirmed, I would work to advance affordable, sound and successful modernization strategies consistent with these efforts. In addition, I will collaborate with the requirements community and intelligence community to ensure that the Army's modernization portfolio can address a broad spectrum of emerging threats.

In your view, what trade-offs would most likely have to be taken should budgets fall below or costs grow above what is planned to fund the Army's modernization efforts?

Any decisions regarding proposed trade-offs in the event of unanticipated decline in the budget or cost growth would need to be fully coordinated across the Army and Department. A careful assessment of the Army's priorities, emerging threats, current and projected capabilities, affordability, and industrial base issues will have to be performed.

In the case of unanticipated cost growth in programs, I would work with industry to understand the root causes and implement appropriate mitigation efforts. In addition, I would collaborate with Army and Department stakeholders to determine the best approach for meeting warfighter needs.

Army Weapon System Programs

What is your understanding and assessment of the following research, development, and acquisition programs?

Ground Combat Vehicle.

My understanding is that the Army's current Infantry Fighting Vehicle is reaching the limit of its capacity to receive upgrades proven critical for Soldiers in combat operations. The Ground Combat Vehicle (GCV) is the Army's replacement program for the Infantry Fighting Vehicle and is the centerpiece of the Army's overall combat vehicle modernization strategy. It will be designed to deliver and protect a full nine-man squad with improved survivability, mobility and network integration, which is crucial in combat operations. The current acquisition strategy draws from best practices in acquisition and institutes a variety of measures designed to maintain affordability and reduce program risk in meeting program objectives.

Stryker combat vehicle, including the double-v hull and Stryker mobile gun variants.

In my view, the Stryker combat vehicle is an acquisition program that has proven to be highly successful in Iraq and Afghanistan. Blast deflecting double-v hull improvements have saved lives in Afghanistan and the Army continues to procure vehicles under existing equipping plans. My understanding is that the Army is currently assessing plans to procure additional variants of Stryker vehicles, to include the mobile gun variant.

Joint Light Tactical Vehicle (JTLV).

The Joint Light Tactical Vehicle is a joint service program between the Army and Marine Corps to replace approximately one-third of the Army's existing tactical wheeled vehicle fleet. The JLTV incorporates the strengths of Mine-Resistant, Ambush Protected (MRAP) vehicles and will be capable across a range of military operations and physical environments providing improved mobility and protection to Soldiers.

The Army and Marine Corps strategy in JLTV development reflects sustained efforts in collaboration with the requirements community to maintain an affordable and effective effort.

Armed Aerial Scout Helicopter (AAS).

The Armed Aerial Scout program is needed to meet existing capability gaps in the area of manned armed aerial reconnaissance and find a materiel solution to replace the current fleet of OH-58D Kiowa Warrior (KW) helicopters. The Army is currently studying alternatives to meet the gaps and, consistent with an analysis of alternatives, determine whether to execute a Service Life Extension Program (SLEP) of the entire Kiowa Warrior fleet or pursue a new AAS program

M1 Abrams tank modernization.

The Abrams tank remains the best tank in the world, and the age of the current tank fleet is low – only 2-3 years on average. The Army currently plans to conduct improvements to the Abrams tank in order to increase protection, ensure required mobility, and allow integration of the emerging network on future platforms. These modernization efforts are planned to commence in Fiscal Year 2017.

M2 Bradley infantry fighting vehicle modernization.

The Bradley also has been an integral part of the Army's force structure for decades and requires modernization. The infantry fighting vehicle variant will be replaced by the Army's Ground Combat Vehicle while non-infantry fighting vehicle models will undergo incremental improvements to improve protection, mobility and support integration of the network. These improvements are planned to commence in Fiscal Year 2014.

Warfighter Information Network-Tactical (WIN-T).

The Warfighter Information Network-Tactical (WIN-T) program provides the Army a secure, high-speed, high-capacity networking backbone for mobile, ad-hoc networks in tactical environments. WIN-T is vital to Army modernization efforts to develop and field a network in tactical environments. Fielding of the first increment of WIN-T is currently underway, while WIN-T Increment 2 will undergo planned Initial Operation Test and Evaluation this year at the Army's next Network Integration Event.

Logistics Modernization Program.

This program is part of the ongoing effort to modernize the primary business systems of the Army Materiel Command (AMC) Commodity Commands. This system is currently undergoing fielding within the Army and, if confirmed, I will work closely with AMC to ensure it meets Army needs.

Joint Tactical Radio System (JTRS).

The Joint Tactical Radio System (JTRS) is the Army's program for deployable mobile communications family of radios. It uses Internet Protocol (IP)-based technology to provide a networked exchange of voice, data, and video connectivity from the Commander down to the Soldier and is vital to the Army's efforts to develop the tactical

network. Years of Department investment in JTRS development has resulted in a viable, sustainable and competitive market for software defined radios. JTRS have undergone thorough review to refine requirements and in the case of the Ground Mobile Radio, revise acquisition strategies to support competition among existing, secure non-developmental solutions.

UH-58D Kiowa Warrior safety and life extension program.

The Army is conducting an analysis of alternatives to confirm whether capability gaps within the existing fleet of UH-58D Kiowa Warrior fleet are best addressed through a Service Life Extension Program (SLEP) or a new aircraft.

Ground Combat Vehicle

What steps would you take if confirmed to ensure that the Ground Combat Vehicle (GCV) program is executed affordably is delivered on time and with the required capability?

If confirmed, I would continue the significant efforts undertaken to date in an effort to develop and execute an affordable and achievable GCV acquisition strategy, as appropriate.

What steps would you take, if confirmed, to ensure that this new program comports with the Weapon Systems Acquisition Reform Act (WSARA), particularly the requirements that major defense acquisition programs be supported by realistic cost estimates; reliable risk assessments; and viable acquisition, technology development, and systems engineering strategies at the outset?

If confirmed, I would ensure that the GCV program, and any major defense acquisition program, fully complies with the statutory requirements of WSARA. As appropriate, I would take necessary steps to ensure that compliance is met in connection with program milestone decisions and other reviews.

What steps if any would you take, if confirmed, to ensure that technologies critical to developing the GCV as a system are sufficiently mature prior to the program receives Milestone B approval and enters the Engineering and Manufacturing Development phase of the acquisition process?

If confirmed, I would, as appropriate, fully utilize data derived from the current "threeprong" strategy during the technology development phase of the GCV program – to include designs matured by industry, the update to the GCV Analysis of Alternatives and the assessment of Non-Developmental Vehicles (NDI) to ascertain the state of technological maturity incorporated into designs leading to a Milestone B decision.

What steps would you take if confirmed to ensure that overall risk associated with the development of the GCV is sufficiently reduced to allow for the use of fixed price-type contracts?

If confirmed, I would, as appropriate, continue to work collaboratively with the requirements and resourcing communities to refine requirements to mitigate technological risk and secure stable funding for the program.

<u>Stryker</u>

On January 30th, 2012, you notified Congress of your determination that only one source was qualified and capable of performing manufacturing, sustainment, and recapitalization of the Stryker family of vehicles, resulting in the award of a sole-source procurement contract worth an estimated \$5.1 billion. The supporting justification documents indicated that no other source had "access to the requisite comprehensive technical data or the complex vehicle engineering tasks associated with the Stryker [family of vehicles]."

Does the Army have full and complete access to technical data pertaining to the Stryker family of vehicles? If not, why not?

The Army does not have full and complete access to technical data pertaining to the Stryker Family of Vehicles. The original competitive solicitation did not include a requirement for a Technical Data Package (TDP) and subsequent negotiations with the contractor to obtain a TDP have thus far been unsuccessful.

If confirmed, to what extent would you consider contracting alternatives that might leverage existing government-owned depots to provide competition within scenarios such as this?

If confirmed, I would pursue acquisition strategies that deliver needed capabilities to Soldiers at best value to the government. To the extent that technical data rights owned by the government facilitate greater competition in the acquisition process, I would pursue such strategies in an effort to meet warfighter requirements.

Mine Resistant Ambush Protected (MRAP) Vehicles

If confirmed, what would you propose should be the Army's long term strategy for the utilization and sustainment of its large MRAP vehicle fleet?

If confirmed, I would collaborate with Army stakeholders to determine the appropriate long-term strategy for utilization and sustainment of the MRAP fleet. This assessment would balance sustainment costs for multiple MRAP variants, the utility of vehicles in training operations and their potential use in future operations.

Residual Future Combat Systems (FCS) Lead Systems Integrator Contract

What is your understanding and assessment of the former and restructured elements of the now terminated FCS program?

My understanding is that the Future Combat Systems (FCS) Engineering and Manufacturing Development effort has been cancelled. The Army's remaining efforts are related to formal contract and subcontract termination. In my view, prior to termination, the FCS program faced significant challenges stemming from its heavy reliance on immature technologies, unconstrained requirements and attendant cost growth and schedule delay.

As a result of FCS cancellation and restructure, the Army has harvested some relevant technologies and processes, in addition to valuable lessons learned regarding risk management in major acquisition efforts. I understand that this experience has informed revised approaches to the Army's tactical network development, unmanned technology development, manned ground vehicles, radio development and its modernization strategy in general. In addition, FCS cancellation has led to an increased emphasis on systems engineering, affordable and achievable acquisition strategies, and increased use of soldier feedback in weapon system development.

What is your understanding and assessment of the FCS program's residual LSI management concept and contract?

Termination and closeout activities are underway in connection with the FCS contract and that further efforts under this construct have been terminated.

In your view, what should be the current and future role of the LSI and, if confirmed, what modifications, if any, would you propose to the LSI contract and fee structure; on what timeline?

My understanding is that the Army has discontinued use of d the LSI construct in connection with the cancellation of the FCS program.

M1 Abrams

Congress authorized and appropriated funding not included in the President's fiscal year 2012 budget request to continue upgrading M1 tanks to the M1A2 SEP configuration. A recent RAND analysis indicates that a 2014 shutdown and 2017 restart of the sole M1 tank production line would be less costly than continuing production.

What course of action would you recommend for the program, if confirmed?

The Abrams tank remains the best tank in the world, with a low average fleet age of approximately 2-3 years. I understand that there is no current requirement for additional

tanks at this time and that the Army plans to commence Abrams modernization efforts in FY 2017. Moreover, the Army's business case analysis determined that the costs to shut down and restart the Abrams production line during this period is approximately \$600 million to \$800 million, while the costs to continue production of Abrams at minimum sustaining rates was determined to be approximately \$2.8 billion. RAND Arroyo has undertaken an independent verification of the Army's business case analysis; preliminary results from RAND Arroyo confirm that the Army's assessment of the costs and benefits of the planned production break are valid. If confirmed, I would continue to assess the final results of this independent analysis, anticipated in late April 2012, along with other considerations – to include the health of the combat vehicle industrial base -- in determining a recommended approach to this issue.

Army Enterprise Email

What is your understanding of the basis for the Army's migration to Defense Information Systems Agency (DISA) Enterprise Email?

My understanding is that the Army's decision to adopt a DISA-based e-mail solution was based on a business case analysis weighing both quantifiable and non-quantifiable factors to provide improved capability to users across the Army.

Do you believe that the projected cost savings for this migration are realistic?

In my view, Enterprise Email migration offers the potential for significant cost savings across the Army.

Under what Army Program Executive Office will Enterprise Email be managed?

Enterprise Email will be managed under the Program Executive Office Enterprise Information Systems.

If confirmed, what steps if any would you take to separately develop and contract for information technology services which may already be available and in-use elsewhere within the Department of Defense?

If confirmed, I would work with all affected stakeholders to determine the most effective, secure and best-value materiel solutions to information technology requirements within the Army.

Network Integration Exercise

The Army's attempt to encourage commercial development via the Network Integration Exercise (NIE) represents a new construct for determining what technologies to develop and procure.

Has the Army tied NIE evaluation and/or test results to currently available rapid innovation or equipping programs?

The Army is developing processes to incorporate the lessons learned from the rapid equipping efforts we have undertaken during ten years of war. The NIE is a key part of this effort and enables our Capability Set Management approach. Through Capability Set Management (CSM), we evaluate in an operational environment, and design a suite of systems and equipment to answer the projected requirements of a two-year cycle. Every year, we integrate the next capability set, reflecting any changes or advances in technology. This construct applies lessons learned from existing rapid equipping efforts.

What is the Army's defined acquisition process that follows the NIE?

Following each NIE, the Army examines capabilities evaluated at the NIE, which helps identify capability gaps, inform decisions regarding requirements and help to shape future acquisition efforts. The Army is taking steps to refine the NIE Sources Sought and Request for Proposal process to provide us with a formal process for procuring systems that show promise coming out of the NIE.

Modularity

Modularity refers to the Army's fundamental reconfiguration of the force from a divisionbased to a brigade-based structure. The new modular brigade combat team is supposed to have an increased capability to operate independently based upon increased and embedded combat support capabilities such as military intelligence, reconnaissance, and logistics. Although somewhat smaller in size, the new modular brigades are supposed to be just as or more capable than the divisional brigades they replace because they will have a more capable mix of equipment—such as advanced communications and surveillance equipment. To date, the Army has established over 80 percent of its planned modular units, however, estimates on how long it will take to fully equip this force as required by its design has slipped from 2011 to 2019.

What is your understanding and assessment of the Army's modularity transformation strategy?

It is my understanding that the Army's modular transformation was designed to create a more expeditionary force capable of addressing the full-spectrum of missions in 21st century operations. In support of this transformation, the Army has implemented strategies for the distribution of equipment to modular units in order to provide increased readiness over time. My understanding is that transition to this approach is still underway and will continue to assess evolving force structure levels. If confirmed, I look forward to working with Army leadership to make a full assessment of this strategy.

In your view, what are the greatest equipment and sustainment challenges in realizing the transformation of the Army to the modular design?

Our greatest challenge, I believe, is maintaining a balance between sustaining equipment for the current fight in this fiscal environment, while selectively and incrementally modernizing systems to provide future capabilities.

If confirmed, what actions or changes, if any, would you propose relative to the Army's modular transformation strategy and plans for equipping and sustaining the force?

The Army is currently assessing its modular transformation strategy and plans for equipping and sustaining the force, in light of new defense strategic guidance and budget changes. If confirmed, I would closely examine the transformation strategy to ensure a focus on resources that sustain the current fight, while making critical investments to Army modernization.

Manufacturing Issues

The recent Defense Science Board (DSB) study on the Manufacturing Technology Program made a number of findings and recommendations related to the role of manufacturing research and capabilities in the development and acquisition of defense systems.

Have you reviewed the findings of the DSB Task Force on the Manufacturing Technology Program?

I have not reviewed the specific findings, but I am generally familiar with the recommendations regarding the need to invest in manufacturing technology (ManTech) as a means to reduce risk in acquisition programs.

What recommendations, if any, from the Task Force would you plan to implement if confirmed?

If confirmed, I would carefully assess the findings and recommendations of the DSB Task Force and work closely with the Office of Secretary of Defense to implement measures as appropriate.

What incentives do you plan to use to enhance industry's incorporation and utilization of advanced manufacturing processes developed under the manufacturing technology program?

If confirmed, I would work to identify and implement such incentives as deemed necessary in cases where advanced manufacturing processes are not developed through competition.

Science and Technology

What, in your view, is the role and value of science and technology programs in meeting the Army's transformation goals and in confronting irregular, catastrophic, traditional and disruptive threats?

In my view, the Army's Science and Technology (S&T) investment programs should function as the "seed corn" of future capabilities; facilitating the maturation of new technologies while investing in true leap-ahead capabilities. It is my view that the Army's S&T investment should be informed by evolving threats, the state of foreign technologies, industry research and development, and Army-specific capability needs.

If confirmed, what direction will you provide regarding funding targets and priorities for the Army's long term research efforts?

I believe that it is important to maintain a balanced and responsive science and technology portfolio that complements Department-wide and joint efforts and investment within the defense industry. If confirmed, I would advance a strategy consistent with the parameters outlined above.

What specific metrics would you use, if confirmed, to assess whether the Army is making adequate investments in its basic research programs?

If confirmed, I would assess Army investments in basic research across portfolios to develop leap-ahead capabilities. I would promote the development of metrics to assess future transformational opportunities and measure progress.

Do you feel that there is sufficient coordination between and among the science and technology programs of the military services and defense agencies such as DARPA?

I believe that there is good coordination between DARPA, other defense agencies and the Army. If confirmed, I would expand that level of collaboration as appropriate.

What is the Department's role and responsibility in addressing national issues related to science, technology, engineering, and mathematics education and workforce development?

I believe the Army, which is significantly dependent on science and technology to fulfill its national defense mission, has effective policies and programs in place to help maintain the technical edge our Nation needs to ensure its security and to be globally competitive. It's important to recognize that the Army not only needs to attain and retain the talent today, but also needs to develop a talented future workforce to maintain the technical edge. If confirmed, I plan to continue and strengthen, where necessary, Army educational outreach programs and initiatives.

What steps if any would you take to support efforts to ensure that the nation has the scientific and technical workforce needed for its national security technological and industrial base?

If confirmed, I would utilize current legislative authorities and Army investment vehicles to cultivate a talented and high-quality pool of scientists, mathematicians, engineers and technicians.

How would you use science and technology programs to better reduce technical risk and therefore potentially reduce costs and schedule problems that accrue in large acquisition programs?

Science and technology programs offer the potential to reduce risk in acquisition programs by maturation of incorporated technologies. If confirmed, I would examine ways to better utilize S&T programs to mature technologies and reduce risk in Army acquisition programs.

Do you feel that the science and technology programs of the Army are too near-term in focus and have over-emphasized technology transition efforts over investing in revolutionary and innovative research programs?

I believe that Army investment decisions in science and technology must balance the Army's needed capabilities from mid-term to long term across a broad portfolio. This implies a need that spans across revolutionary and innovative research to mature technologies.

Are you satisfied that the Army has a well articulated and actionable science and technology strategic plan?

I believe that the Army has made significant strides in articulating and implementing an S&T strategic plan based on critical challenges faced in the Army. If confirmed, I would extend these efforts to continue to improve the Army's S&T strategic plan.

Do you see a need for changes in areas such as hiring authority, personnel systems, financial disclosure and ethics requirements, to ensure that the Army can recruit and retain the highest quality scientific and technical workforce possible?

I believe that the need to attract, recruit and retain the highest quality workforce remains an enduring challenge in any organization; include the Army. At this point, I do not recommend specific changes in any of these areas. If confirmed, however, I would welcome the opportunity to fully assess the impact of these processes and recommend changes as appropriate.

What is your view of the effectiveness of the Military Accessions Vital to National Interest Program to recruit non-U.S. citizens who graduate from U.S. universities

with advanced degrees in scientific and technical fields of critical national importance?

I understand that the Military Accessions Vital to National Interest Program is designed to facilitate the availability of scientific and technical expertise in each of the military services. If confirmed, I look forward to the opportunity to evaluate the effectiveness of this program in collaboration with other services and the Office of Secretary of Defense to enhance technical and scientific skills in the Army.

What steps if any would you take if confirmed to ensure the continued effectiveness of this program?

If confirmed, I would work with other services and the Office of the Secretary of Defense to ascertain the effectiveness of this program before taking any appropriate measures in this area.

Defense Laboratories

What is your view on the quality of the Army laboratories as compared to the DOE national laboratories, federal laboratories, academic laboratories and other peer institutions?

If confirmed, I will undertake a review of Army laboratory capability with a view toward enhancing their capability.

What metrics will you use, if confirmed, to evaluate the effectiveness, competitiveness, and scientific vitality of the Army laboratories?

If confirmed, I will work to identify and develop appropriate metrics to evaluate laboratory effectiveness. It is my understanding that the Army currently conducts peer reviews annually to assess the vitality of the laboratories.

What steps if any will you take, if confirmed, to increase the mission effectiveness and productivity of the Army laboratories?

If confirmed, I will work with relevant Army organizations to assess and improve mission effectiveness in those areas in need of improvement.

Do you see value in enhancing the level of technical collaboration between the Army laboratories and academic, other federal and industrial scientific organizations?

I definitely do. If confirmed, I would encourage increased collaboration by Army laboratories with other research institutions. In my view, this form of collaboration is essential to refining the Army's focus in S&T investment and complementing efforts by other leading institutions.

What steps if any will you take, if confirmed, to enhance such technical collaboration?

See response above.

Do you feel that past investments in research equipment; sustainment, repair and modernization; and facility construction at the Army laboratories have been sufficient to maintain their mission effectiveness and their standing as world class science and engineering institutions?

I believe that maintaining appropriate investments in this area is critical to the development of future capabilities for Soldiers and would work with the Army laboratories to identify and address areas of need, if confirmed.

What is your view of the funding mechanism for the research and development priorities of defense laboratory directors provided by section 219 of the National Defense Authorization Act for Fiscal Year 2009?

I support the funding mechanisms authorized under section 219 of the legislation.

What continuing impediments, if any, do you see to the full implementation of this provision?

I support the funding mechanisms authorized under section 219 of the legislation. In my view, Congress has provided Laboratory Directors the needed authority to use funding for important discretionary efforts.

Test and Evaluation

The Department has, on occasion, been criticized for failing to adequately test its major weapon systems before these systems are put into production.

What are your views about the degree of independence needed by the Director of Operational Test and Evaluation in ensuring the success of the Army's acquisition programs?

I believe it is appropriate to have an independent operational test and evaluation authority separate from the materiel developer to plan and conduct operational tests, report results, and provide evaluations on operational effectiveness, operational suitability, and survivability.

Are you concerned with the level of test and evaluation conducted by the contractors who are developing the systems to be tested?

Contractors are responsible to ensure that their system meets developmental test and evaluation criteria. The Army should provide oversight. The Army must work with the contractor to ensure it understands the government's OT&E plans and ensure that its system is able to meet all the criteria.

What is the impact of rapid fielding requirements on the standard testing process? If confirmed, how will you work to ensure that all equipment and technology that is deployed to warfighters is subject to appropriate operational testing?

I understand that rapid fielding requirements call for revised testing procedures that meet warfighter needs while ensuring that proper testing and evaluation concerns are addressed. If confirmed, I would work with the testing community to ensure that rapid acquisition efforts are responsive to warfighter requirements and that appropriate testing requirements are met.

Do you believe that the developmental testing organizations in the Army are adequate to ensure an appropriate level of developmental testing, and testing oversight, on major defense acquisition programs?

I believe that there are adequate resources in the Army to ensure appropriate level of testing and testing oversight on major acquisition defense programs. If confirmed, I will work closely with the developmental testing community to emphasize early developmental testing within acquisition programs to minimize program risks.

If not, what steps would you take, if confirmed, to address any inadequacies in such organizations?

If confirmed, I will continue to monitor the status of these organizations to ensure that they remain capable of accomplishing their mission.

As systems grow more sophisticated, networked, and software-intensive, DOD's ability to test and evaluate them becomes more difficult. Some systems-of-systems cannot be tested as a whole until they are already bought and fielded.

Are you concerned with Army's ability to test these new types of systems?

I agree that system interoperability presents increased challenges as Army equipment becomes more sophisticated, networked and software intensive. In my view, the Army has taken a pioneering approach to identifying and addressing these challenges through the development of the Network Integration Exercises (NIE) at Fort Bliss, TX. These events provide Soldiers an opportunity to evaluate and use multiple systems in an operational setting, which affords the Army a valuable opportunity to address complex systems-of-systems challenges prior to procurement and fielding. If confirmed, I would

support the ongoing use of NIE events to provide critical feedback in this area throughout the acquisition cycle.

What steps, if any, do you believe the Army should take to improve its test and evaluation facilities to ensure adequate testing of such systems?

If confirmed, I will provide support to the Army test and evaluation community and support efforts to ensure that they are properly resourced.

In your view, does the Army have sufficient capabilities to test and evaluate the cybersecurity of its new information technology systems and networks?

I do. In my view, the Army -- in partnership with other Department organizations -- has sufficient capability and methodology in place to address current and anticipated cybersecurity threats. Existing processes include robust enforcement of the information assurance requirements under DoD Directive 8500.1 and Army Regulation 25-2. These requirements serve as screening criteria for new systems, with input from the Army Cyber Command, Army Test and Evaluation Command, Army Research Lab, Army Threat Systems Management Office and the office of the ASA(ALT).

What steps if any would you propose to take, if confirmed, to enhance this capability?

If confirmed, I will work with the Army and Department's cybersecurity community to evaluate our existing processes and assess emerging threats to enhance our capabilities, as appropriate. In my view, these approaches could include enhanced use of automation and simulation to augment our testing processes.

Some have argued that testing takes too long and costs too much. Others contest this view pointing out that testing and evaluation is an essential tool to assist in the development of weapon systems and ensure that they perform as intended. The Armed Services Committee has expressed concern that problems with weapons systems have been discovered during operational testing and evaluation that should have been discovered during developmental testing and corrected during subsequent development.

Do you believe that major defense acquisition programs are helped or hurt by cutting tests budgets and reducing the time available for developmental testing?

I believe that an independent testing function is a vital part of the defense acquisition process and agree that it serves as an essential tool in discovering and addressing issues in system development. In particular, developmental testing early in the acquisition life cycle will discover design and production issues early on when it is the least costly to take corrective active. Test budget reductions may result in discovery of design or production issues much later in the program, during operational test and evaluation, when it's more expensive to modify a system design.

What steps if any will you take, if confirmed, to ensure that the program management community and the testing and evaluation community work collaboratively and effectively in a way that maximizes the likelihood that developmental testing and evaluation will detect and identify problems timely in software and hardware to provide opportunities to correct them before production and before operational testing and evaluation begins?

If confirmed, I will emphasize the importance of close collaboration between the program management community and the test and evaluation community to enable early discovery of design and production issues.

To what extent do you think that dedicated operational testing can be more efficiently integrated into developmental and live-fire testing in a way that is also sufficiently rigorous?

I believe that the Network Integration Exercise suggests a valuable model for integrating early operational testing in Army acquisition programs in novel ways. If confirmed, I would assess the potential of efforts to integrate early operational testing within developmental testing to achieve efficiencies.

The Decker-Wagner report cited unconstrained requirements, weak trade studies and an erosion of the relevant workforce as causes of many of the Army's failed acquisition programs.

To what extent do you believe that the Army can improve how it states requirements supporting its acquisition programs by using establishing more measurable and testable parameters, or by justifying such requirements on the basis of accomplishing missions in combat—rather than merely meeting technical specifications?

If confirmed, I would work with the requirements community to address unconstrained requirements with cost-informed review of potential trade space. It is critical to understand the trades between mission effectiveness and technical risk while meeting program objectives and maintain affordability.

Army Industrial Base

What is your assessment of the health and status of the key elements of the Army's industrial base?

I am concerned about the impacts of planned reductions in Army budgets on the health of the industrial base. While major defense contractors have faced downturns before and will likely explore diversification in commercial activity or foreign military sales, risks to

the viability of second and third tier suppliers impacted by the drawdown may present more challenges to the Army as it conducts future modernization efforts.

In your view, is DOD's sector-by-sector, tier-by-tier (S2T2) activity providing useful information to assist the Army in maintaining and improving key elements of its industrial base?

The assessment currently underway across the Department is a critical step toward the identification and prioritization of potential industrial base issues.

Small Business Innovation Research (SBIR) Program

What do you see as the major successes and challenges facing the Army SBIR program?

The SBIR program is designed to provide small, high-tech businesses the opportunity to propose innovative research and development solutions in response to critical Army needs. In Fiscal Year 2011, small businesses submitted over 3000 proposals, which were evaluated by the Army SBIR office and resulted in over 600 awards valued at approximately \$200M.

In my view, the Army SBIR program performs a valuable role in developing innovative capabilities through small business investment. I understand that the Army continues to explore ways to streamline the SBIR process, further increase program success rates and ultimately facilitate the transition of products that are developed under Army SBIR contracts.

What steps would you take if confirmed to ensure that the Army has access to and invests in the most innovative small businesses?

If confirmed, I would ensure that small businesses funded with SBIR dollars have stronger ties to the Army's S&T program and to emerging acquisition program needs.

What steps would you take if confirmed to ensure that successful SBIR research and development projects transition into production?

If confirmed, I would conduct regular SBIR program reviews to monitor ongoing projects. I would also work to refine the criteria for transition of SBIR funded programs to programs of record, as appropriate. Also, I would work to ensure that existing Army programs of record have resources and acquisition strategies in place to incorporate technologies developed under SBIR.

Technical Data

Do you believe that the Army has been as aggressive as it should have been in (1) securing ownership of technical data in connection with items and processes associated with major weapon systems that it procures when doing would best serve the Government's interests and (2) asserting ownership rights over this data in a manner sufficient to ensure competition for the production and maintenance of these systems over their lifecycle?

The Army has recently reviewed policies governing efforts to acquire ownership of technical data and has implemented guidance encouraging such ownership when it represents a best-value approach in the development of systems.

What steps if any will you take if confirmed to ensure that the Army obtains the technical data rights that it needs to avoid being locked into unnecessary sole-source follow-on production and sustainment to incumbents to the detriment of the taxpayer and the warfighter?

If confirmed, I would affirm current efforts to encourage the purchase of technical data rights where appropriate.

Congressional Oversight

In order to exercise its legislative and oversight responsibilities, it is important that this Committee and other appropriate committees of the Congress are able to receive testimony, briefings, and other communications of information.

Do you agree, if confirmed for this high position, to appear before this Committee and other appropriate committees of the Congress?

Yes.

Do you agree, if confirmed, to appear before this Committee, or designated members of this Committee, and provide information, subject to appropriate and necessary security protection, with respect to your responsibilities as the ASAALT?

Yes.

Do you agree to ensure that testimony, briefings and other communications of information are provided to this Committee and its staff and other appropriate Committees?

Yes.

Do you agree to provide documents, including copies of electronic forms of communication, in a timely manner when requested by a duly constituted Committee, or to consult with the Committee regarding the basis for any good faith delay or denial in providing such documents?

Yes.